

**IN THE HON'BLE NATIONAL GREEN TRIBUNAL, SOUTHERN ZONE,  
CHENNAI BENCH**

IN

**APPEAL NO. 23 OF 2023**

**IN THE MATTER OF:**

Burugula Ramchander Rao

...Appellant

**Vs.**

Union of India & Ors.

...Respondents

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R. Thirunavukarasu.

ADVOCATE, MoEFCC

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CHENNAI BENCH**

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**APPEAL NO. 23 OF 2023**

**IN THE MATTER OF:**

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...Appellant

**Vs.**

Union of India & Ors.


...Respondents

**Counter Affidavit On Behalf of Ministry of Environment,  
Forest and Climate Change (Respondent No.1)**

**IT IS MOST RESPECTFULLY SHOWETH:**

I, Sh. Tarun Kathula, S/o Shyamala Rao, aged about 46 years, resident of Hyderabad, do hereby solemnly affirm and state as under:-

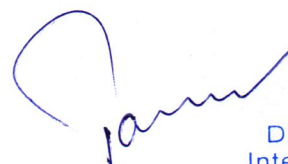
1. That I am working as Director/Scientist 'F', Ministry of Environment, Forest and Climate Change, Government of India.
2. That I am fully conversant with the facts and circumstances of the case from records maintained in the office. I have read and understood the contents of the petition thereof and as such authorized and competent to swear the present affidavit.
3. I submit that I deny all the allegations/averments mentioned in the Appeal filed by the Petitioner except those that are specially admitted in the counter affidavit filed.
4. That the Appellant herein has challenged the grant of Environment Clearance dated 05.07.2023 by the answering Respondent for Development of 4 lane access controlled New Greenfield Highway from Mancherial to Warangal Section (Total length 108.406 km) in



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the State of Telangana by the National Highways Authority of India (hereinafter referred to as the "NHAI"). The Appellant had contended that the impugned Environment Clearance was issued without application of mind and there has been a misrepresentation of facts by the respondents for obtaining the Environment Clearance.

5. That in this regard, the answering Respondent respectfully submits that under clause (v) of sub-section (2) of Section 3 of the Environment (Protection) Act, 1986, the Central Government has the power to make rules for carrying out the purposes of the said Act. While exercising the powers conferred by the Environment (Protection) Act, 1986, the answering Respondent had issued the Environment Impact Assessment (EIA) Notification vide S.O.60 (E) dated 27<sup>th</sup> January, 1994 mandating 32 categories of projects listed in Schedule- I to obtain prior Environmental Clearance based on the investment criteria (originally it was Rs 50 crores, which was enhanced to Rs 100 crores). It is further submitted that the Environmental Impact Assessment (EIA) was made a statutory requirement for certain category of construction and development activities through amendment dated 07.07.2004 in the EIA Notification, 1994.
6. It is humbly submitted that under the Environment (Protection) Act, 1986 read with Environment (Protection) Rules, 1986, the Ministry has issued a Notification number S.O. 1533(E) dated 14.09.2006 in suppression of the Notification number S.O.60(E) dated 27<sup>th</sup> January, 1994.
7. It is further submitted that under the provisions of the EIA Notification, 2006, all new projects or activities listed in the

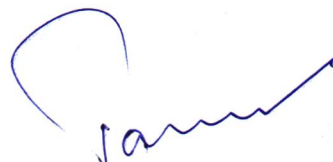


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Schedule to the EIA Notification, 2006 or the expansion or modernization of existing projects or activities listed in the said Schedule with addition of capacity beyond the limits specified for the concerned sector, that is, projects or activities which cross the threshold limits given in the Schedule, after expansion or modernization or any change in product -mix in an existing manufacturing unit included in Schedule beyond the specified range, shall be undertaken in any part of India, as applicable, only after receipt of the prior Environment Clearance from the Central Government or by the State Level Environment Impact Assessment Authority ("SEIAA"), as the case may be. It is submitted that the Central Government under sub-section (3) of Section 3 of the Environment Protection Act, 1986 in accordance with the procedure specified in the EIA Notification, 2006, duly constitutes SEIAA in the States.

8. It is most respectfully submitted that under the Schedule to the EIA Notification, 2006 relating to the list of activities requiring prior Environmental Clearance, Highways are covered under entry 7(f) of Clause (7) of the said Schedule, the relevant portion of which is reproduced below:-

	Project or Activity	Category with threshold limit		Conditions if any
		A	B	
(1)	(2)	(3)	(4)	(5)
<b>7</b>		<b>Physical Infrastructure including Environmental Services</b>		
<b>7(f)</b>	Highways	i) New National Highways; and ii) Expansion of National Highways greater than 100 km involving additional right of way or land acquisition greater than 40m on existing alignment and 60 m on	i) All New State Highways projects; ii) State Highway expansion projects in hilly terrain (above 1000 m AMSL) and/or ecologically	General Condition shall apply  <u>Note:</u> Highways include Expressways



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		re-alignment or by-passes	sensitive areas	
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9. That at an outset, it is humbly submitted that as per the provisions of the EIA Notification, 2006, as amended thereof, the proposal dated 16.06.2021, namely, *Development of 4 lane access controlled New Greenfield Highway section of Mancherial- Warangal of length 112.240 km from Ramaraopet village to Oorugonda village (Design Chainage 0.000 to 112.240) under the inter corridor route under Bharatmala Pariyojana, Phase- I in the State of Telangana* was received from the National Highways Authority of India (hereinafter referred to as the "NHAI"). The proposed project was initially considered in the 266<sup>th</sup> meeting of the Expert Appraisal Committee of Infrastructure, CRZ and other miscellaneous projects (hereinafter referred to as the "EAC") on 12.07.2021 wherein the Committee recommended the proposal for grant of Terms of Reference (ToR) for subsequently conducting the Public Hearing and preparation of the EIA Report.

10. It is humbly submitted that as a result of the recommendations of the EAC, the ToR was issued by the answering Respondent vide communication dated 26.07.2021 in order to conduct EIA Study on the basis of the project-specific ToR conditions along with standard conditions applicable to such projects. True copy of the Terms of Reference granted by the answering Respondent is herewith attached and marked as **Annexure- I**.

The relevant specific condition prescribed in the ToR letter applicable to the project for compliance of the NHAI (Project Proponent) are as follows:-

*viii. The proponent shall carry out a comprehensive socio-economic assessment and also impact on biodiversity with*

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*emphasis on impact of ongoing land acquisition on the local people living around the proposed alignment. The Social Impact Assessment should have social indicators which can reflect on impact of acquisition on fertile land. The Social Impact Assessment shall take into consideration of key parameters like people's dependency on fertile agricultural land, socio- economic spectrum, impact of the project at local and regional levels."*

11. Apart from the abovesaid specific conditions, the standard conditions prescribed in the ToR letter relevant to the question in hand, are as follows:-

*"v. Describe various alternatives considered, procedures and criteria adopted for selection of the final alternative with reasons.*

*xxxvi. The details of the social impact assessment due to the proposed construction of the road shall be submitted.*

*xl. Details of the properties, houses, business activities etc. likely to be affected by land acquisition and an estimation of their financial losses, shall be submitted.*

*xli. Detailed R&R plan with data on the existing socio-economic status of the population in the study area and broad plan for resettlement of the displaced population, site for the resettlement colony, alternative livelihood concerns/ employment and rehabilitation of the displaced people, civil and housing amenities being offered, etc and the schedule of the implementation of the specific project, shall be submitted."*

12. It is humbly submitted that the application for the grant of Environment Clearance was received by the answering Respondent and the proposal for the same was taken up in the 324<sup>th</sup> EAC meeting held on 19<sup>th</sup>-21<sup>st</sup> April, 2023. During the deliberations held at the meeting, the Project Proponent submitted that the alignment of the proposed project has been slightly reduced from the length of 112.240 km to 108.406 km. It was submitted that the




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new alignment shall start from 3.834 km to 112.240 km whereas the ToR was obtained from the design chainage of 0.000 km to 112.240 km. The Project Proponent stated that the reasoning behind the change of alignment was that for the stretch of 0.000 km to 3.834 km, the widening work was already under the progress in the proposed overlapping section and therefore, to avoid duplication of work, the link section of NH-63 from 0.000 km to 3.834 km was dropped from the project stretch. The EAC also agreed for the change of stretch, being from 3.834 km to 112.240 km and recommended the project for grant of Environment Clearance. The Minutes of the 324<sup>th</sup> EAC meeting is herewith attached and marked as **Annexure- II**.

13. It is humbly submitted that based on the recommendations of the EAC, the answering Respondent accorded the Environment Clearance vide letter dated 05.07.2023 to the NHAI for the '*Construction of 4 lane access controlled New Greenfield Highway Section of NH163G from Mancherial to Warangal from Narva village to Oorugonda village (Design Chainage 3+834 to 112+240) under Other Economic Corridor under NH(O) scheme in the State of Telangana by M/s National Highways Authority of India (Length-108.406 km)*'. True copy of the Environment Clearance letter issued by the answering Respondent is herewith attached and marked as **Annexure- III**.

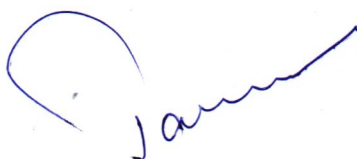
14. It is humbly submitted that while granting the Clearance, the answering Respondent imposed various specific and standard conditions for the strict compliance of the Project Proponent. The specific technical condition relevant to the instant issue is mentioned below as:



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*“11. Apart from the land compensation, the loss for crop has also to be compensated.”*

15. The Appellant has further raised the ground in the Application that there are alternatives to the proposed alignment but the authorities are going ahead without fair public hearing, alternative studies, social impact assessment, etc. In this behalf, the answering Respondent humbly submits that one of the Terms of References imposed upon the Project Proponent for conducting the EIA study was to describe various alternatives considered, procedures and criteria adopted for selection of the final alternative with reasons. As a result of the EIA study on the alternative alignments, 3 options were analyzed out of which the present alignment in question was recommended as it involved minimum number of felling of trees and the project cost was less as compared to the other two options that also involved more acquisition of land.
16. It is humbly submitted that the allegation of the Appellant that the impact on the water bodies was not considered by the EAC is incorrect. The Environment Clearance issued by the answering Respondent included all the mitigation measures for the possible adverse impacts that can be overseen during the development of this Greenfield National Highway. As far as the impact on water bodies are concerned, the EAC noted in its 324<sup>th</sup> meeting that there are 04 Nos. of rivers, 06 Nos. of ponds and 46 Nos. of streams which are crossing the proposed alignment. It further observed that there shall be no major impact on the drainage system as 01 Major Bridge at 7+800 (Pedda Vagu), 01 Major Bridge at 25+450 (Godavari River), 01 Major Bridge at 32+449 (Bokkala Vagu), 01 Major Bridge at 32+449 (Maner River) and 01 Major Bridge at



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79+602 (Chali Vagu) and also other Minor bridges where there is crossing the canals/steams ponds will be constructed. Moreover, the proposed highway will also have ROB (1), Major Bridges (5), Minor Bridges (45), Intersection (1), Vehicular underpasses (24), Pedestrian underpasses (35), LVUPs (4), SVUPs (9), Box Culverts (146), Pipe Culverts (36) and Flyovers (5).

In addition to this, the answering Respondent, while granting the Environment Clearance imposed a technical condition No. 22, which states-

*“Proponent shall keep the finish road level sufficiently elevated from ground level with provision of railing on both sides to restrict animal crossing in order to avoid the possibility of wildlife injury/death. Major water bodies have been observed in the vicinity of the proposed road alignment & may be potential human elephant conflict points, appropriate nos of animal safe passages as per the guideline framed by the Wildlife Institute of India and in consultation with Chief Wildlife Warden.”*

17. The answering Respondent humbly submits that the Environment Clearance is granted subject to the Clearance from Standing Committee for National Board of Wildlife (NBWL), as the case may be. With regard to the proposed project as well, it was noted by the EAC that project is passing through the Eco-Sensitive Zone of the Siwaram Wildlife Sanctuary over a length of 10.579 km and width of 45.00 m in Mancherial District and over a length of 13.910 km and width of 45 m in Peddapally District and therefore, the NBWL Clearance was applicable.

18. Therefore, taking into consideration the above submissions made by the answering Respondent against the various issues raised by the Appellant, it is prayed that this Hon'ble Tribunal may take on record and consider above submissions and dismiss the present appeal being devoid of merit or pass any other appropriate order,



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which the answering Respondent shall duly comply with and thus render justice.

19. The answering Respondent craves liberty to file additional information, if any, till *pendente lite*.

Dated at Hyderabad on this 5th day of March, 2024




**DEPONENT**

Director/Scientist 'F' (C)  
Integrated Regional Office,  
Ministry of Environment Forest and Climate Change  
Aranya Bhavan, Hyderabad, Telangana-500 004.

**VERIFICATION**

I, the aforementioned Deponent do hereby declare on this 5<sup>th</sup> day of March, 2024 at Hyderabad that the contents of the affidavit are true to my knowledge and belief and nothing material has been concealed therefrom.



**DEPONENT**

**Tarun Kathula**  
Director/Scientist 'F' (C)  
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Aranya Bhavan, Hyderabad, Telangana-500 004.

**Annexure – I**  
**Copy of Approved TOR**

**File No. 10/29/2021-IA.III**  
**[Proposal No. IA/TG/NCP/215100/2021]**

Government of India  
Ministry of Environment, Forest and Climate Change  
(Impact Assessment Division)

Indira Paryavaran Bhawan,  
Jor Bagh Road, Aliganj  
New Delhi - 110 003

Dated: 26<sup>th</sup> July, 2021

To

**Dr. B. Mukhopadhyay**  
General Manager  
National Highways Authority of India  
G-5 & 6, Sector-10, Dwarka, New DELHI-110 075

**Subject: Construction of 4 lane access controlled New Greenfield Highway section of Mancherial - Warangal of length 112.240 km from Ramaraopet village to Oorugonda village (Design Chainage 0+000 to 112+240) under inter corridor route under Bhatatmala Pariyojana, Phase-I in the state of Telangana by M/s NHAI – Terms of Reference**

Sir,

This has reference to your online proposal submitted to this Ministry on 16<sup>th</sup> June 2021, seeking Terms of Reference (TOR) for the aforementioned project as per the provisions of the Environment Impact Assessment (EIA) Notification, 2006 and subsequent amendments under the Environment (Protection) Act, 1986.

2. The above mentioned proposal was considered by the Expert Appraisal Committee (EAC) for Infrastructure, CRZ and other miscellaneous projects in its 266<sup>th</sup> meeting during 12<sup>th</sup> July, 2021, in the Ministry of Environment, Forest and Climate Change, New Delhi.
3. The project proponent M/s National Highways Authority of India alongwith EIA consultant M/s Enviro Infra Solutions Pvt. Ltd., GZB made a presentation through Video Conferencing and submitted the following information.
  - i. The proposed project is Construction of 4 lane Access Controlled New Greenfield Highway Section of Mancherial – Warangal (Total length of 112.240 km) from Ramaraopet village to Oorugonda village (Design Chainage 0+000 to 112+240) under inter corridor route under Bharatmala Pariyojana, Phase-I in the state of Telangana”. Alignment was approved on dated: 22.02.2019 vide reference no. NHAI/Planning/EC/Misc/2019 (office memorandum) through meeting on dated 02.01.2019 under the chairmanship of secretary, RT&H, MoRT&H. The proposed Row is 45 m except junctions where it is 60 m.
  - ii. The proposed project falls under 7(f), Category-A, Highway as per EIA notification 2006. Total investment/cost of the project is Rs 2454.95 Crores.
  - iii. The land use pattern on 10 km either side of the project highway is predominately



agriculture followed by habitation, forest and waste land.

S.No	Landuse / Landcover	Area (ha)	Percentage %	Remarks if any
1.	Private land	541.670	90.93	Agriculture Land
2.	Government land	41.459	6.96	Agriculture Land
3.	Forest land	12.558	2.11	Reserve Forest
	<b>Total</b>	<b>595.685</b>	<b>100</b>	-

- iv. The terrain of the alignment is flat to undulating in nature.
- v. Details of water bodies, impact on drainage: There are 46 Nos. of streams, 04 Nos. of rivers and 06 Nos of ponds which are crossing along the proposed alignment. There shall be no major impact on the drainage system as sufficient numbers of structures (such as culverts, minor/major bridges etc.) will be constructed.
- vi. Water requirements: Total requirement of water for the construction is estimated 28,00,047 KLD which will be met through surface water and ground water proposed to be used only for camp site for transient period after obtaining the permissions from appropriate authority.
- vii. Groundwater extraction: Ground water proposed to be used only for camp site for transient period after obtaining the permissions from appropriate authority.
- viii. Tree cutting: The alignment will require cutting of approximately 14,689 nos. of trees.
- ix. Diversion of forest land: The proposed project requires diversion of 12.558 ha of forest (RF/PF) land. The proposal for forest diversion proposal is under process.
- x. The proposed project does not fall in the protected areas of the wildlife Sanctuary and also the proposed project is approx. 300 m away from the proposed Eco sensitive zone of Sivaram Wildlife Sanctuary as per draft Notification No. SO. 2145 (E) dated 24th May 2018. Since the notification is in draft stage, therefore Wildlife Clearances is applicable.
- xi. Land acquisition and R&R issues: The Project requires approx. 595.686 ha land. Total 35 nos. of structures are coming in the proposed RoW. The land will be acquired as per procedure laid down in RFCT LARR Act, 2013.
- xii. Employment potential: During the construction of the highway project around 1000 persons would be employed temporarily for a period of 2 years. However, due to construction of toll plazas approx. 50 persons will be employed on permanent basis. Preference will be given to local people for employment.
- xiii. Benefits of the project - This project starts from Ramaraopet village in Macherial district and terminates at Oorugonda village in Warangal district in the state of Telangana. The proposed access controlled project with new alignment has been envisaged through an area which shall have the advantage of simultaneous development as well as shall result in a shorter distance to travel. The junctions with existing road will be planned in the form of interchanges and flyover to ensure uninterrupted flow of traffic. The proposed road would act as the prime artery for the economic flow to this region. It will enhance economic development, provide employment opportunities to locals, strengthen tourist development, ensure road safety, and provide better transportation facilities and other facilities such as

*AK*

way side amenities. Vehicle operating cost will also be reduced due to improved road quality. The compensatory plantation and road side plantation shall further improve the air quality of the region.

xiv. Details of Court cases- No court case is pending against the proposed project.

4. The EAC based on the information submitted and clarifications provided by the project proponent and detailed discussions held on all the issues during its 266<sup>th</sup> meeting on 12<sup>th</sup> July, 2021, recommended the project for grant of Terms of Reference (ToR) with stipulated specific conditions along with other Standard ToR Conditions.

5. The Ministry of Environment, Forest and Climate Change has considered the proposal based on the recommendations of the Expert Appraisal Committee (Infrastructure, CRZ and other Miscellaneous projects) and hereby decided to grant Terms of Reference for the "Construction of 4 lane access controlled New Greenfield Highway section of Mancherial - Warangal of length 112.240 km from Ramaraopet village to Oorugonda village (Design Chainage 0+000 to 112+240) under inter corridor route under Bhatatmala Pariyojana, Phase-I in the state of Telangana" and for preparation of EIA/EMP report with public consultations under the EIA Notification, 2006 as amended, subject to strict compliance of the following specific conditions, in addition to all standard ToR conditions applicable for such projects.

#### **SPECIFIC CONDITIONS**

- i. Provide details regarding the type of trees in Forest and Non-Forest area.
- ii. The re-alignment from chainage 6500 to 33000 shall be adopted to reduce the distance of the road and to avoid wild life, Sanctuaries and RF.
- iii. Apart from land compensation, the loss for crop has also to be compensated.
- iv. Cumulative impact assessment study should be carried out along the entire stretch including the other packages and the current stretch under consideration.
- v. The proponent shall carry out a detailed traffic flow study to assess inflow of traffic from adjoining areas like airport/urban cities. The detailed traffic planning studies shall include complete design, drawings and traffic circulation plans (taking into consideration integration with proposed alignment and other state roads etc.). Wherever required adequate connectivity in terms of VUP (vehicle underpass)/ PUP (Pedestrian underpass) needs to be included.
- vi. Provide compilation of road kill data on the wildlife on the existing roads (national and state highways) in the vicinity of the proposed project. Provide measures to avoid road kills of wildlife by the way of road kill management plan.
- vii. The alignment of road should be such that the cutting of trees is kept at bare minimum and for this the proponent shall obtain permission from the competent authorities. Alignment also should be such that it will avoid cutting old and large and heritage trees if any. All such trees should be geo-tagged, photographed and details be submitted in the EIA –EMP report.
- viii. The proponent shall carry out a comprehensive socio-economic assessment and also impact on biodiversity with emphasis on impact of ongoing land acquisition on the local

people living around the proposed alignment. The Social Impact Assessment should have social indicators which can reflect on impact of acquisition on fertile land. The Social Impact Assessment shall take into consideration of key parameters like people's dependency on fertile agricultural land, socio-economic spectrum, impact of the project at local and regional levels.

- ix. As per the Ministry's Office Memorandum F. No. 22-65/2017-IA.III dated 30th September, 2020, the project proponent, based on the commitments made during the public hearing, shall include all the activities required to be taken to fulfil these commitments in the Environment Management Plan along with cost estimates of these activities, in addition to the activities proposed as per recommendations of EIA Studies and the same shall be submitted to the Ministry as part of the EIA Report. The EMP shall be implemented at the project cost or any other funding source available with the project proponent.
- x. In pursuance of Ministry's OM no stated above the project proponent shall add one annexure in the EIA Report indicating all the commitments made by the PP to the public during public hearing and submit it to the Ministry and the EAC.
- xi. 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.
- xii. Passage for animal movement has to be detailed in the report.
- xiii. A comprehensive plan for plantation of three rows of native species, as per IRC guidelines, shall be provided. Such plantation alongside of forest stretch will be over and above the compensatory afforestation. Tree species should be same as per the forest type.
- xiv. 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.
- xv. Detailed Biodiversity assessment and conservation/mitigation plan be developed by a reputed institute or by a team of expert of national repute.
- xvi. Rain water harvesting structures to be constructed at the either sides of the road with special precaution of oil filters and de-silting chambers.

#### **GENERAL CONDITIONS**

- (i) A brief description of the project, project name, nature, size, its importance to the region/state and the country shall be submitted.
- (ii) In case the project involves diversion of forests land, guidelines under OM dated 20.03.2013 shall be followed and necessary action be taken accordingly.



- (iii) Details of any litigation(s) pending against the project and/or any directions or orders passed by any court of law/any statutory authority against the project to be detailed out.
- (iv) Detailed alignment plan, with details such as nature of terrain (plain, rolling, hilly), land use pattern, habitation, cropping pattern, forest area, environmentally sensitive areas, mangroves, notified industrial areas, sand dunes, sea, rivers, lakes, details of villages, tehsils, districts and states, latitude and longitude for important locations falling on the alignment by employing remote sensing techniques followed by “ground truthing” and also through secondary data sources shall be submitted.
- (v) Describe various alternatives considered, procedures and criteria adopted for selection of the final alternative with reasons.
- (vi) Land use map of the study area to a scale of 1: 25,000 based on recent satellite imagery delineating the crop lands (both single and double crop), agricultural plantations, fallow lands, waste lands, water bodies, built-up areas, forest area and other surface features such as railway tracks, ports, airports, roads, and major industries etc. alongwith detailed ground survey map on 1:2000 scale showing the existing features falling within the right of way namely trees, structures including archaeological & religious, monuments etc. if any, shall be submitted.
- (vii) If the proposed route is passing through any hilly area, the measures for ensuring stability of slopes and proposed measures to control soil erosion from embankment shall be examined and submitted.
- (viii) If the proposed route involves tunneling, the details of the tunnel and locations of tunneling with geological structural fraction should be provided. In case the road passes through a flood plain of a river, the details of micro-drainage, flood passages and information on flood periodicity at least of the last 50 years in the area shall be examined and submitted.
- (ix) If the project is passing through/ located within the notified ecologically sensitive zone (ESZ) around a notified National Park/Wildlife Sanctuary or in the absence of notified ESZ, within 10 km from the boundary of notified National Park/Wildlife Sanctuary, the project proponent may simultaneously apply for the clearance for the standing committee of NBWL. The EC for such project would be subject to obtaining the clearance from the standing committee of NBWL.
- (x) Study regarding the animal bypasses/underpasses etc. across the habitation areas shall be carried out. Adequate cattle passes for the movement of agriculture material shall be provided at the stretches passing through habitation areas. Underpasses shall be provided for the movement of Wild animals.
- (xi) Study regarding in line with the recent guidelines prepared by Wildlife Institute of India for linear infrastructure with strong emphasis on animal movement and identifying crossing areas and mitigation measures to avoid wildlife mortality.
- (xii) The information shall be provided about the details of the trees to be cut including their species and whether it also involves any protected or endangered species. Measures taken to reduce the number of the trees to be removed should be

explained in detail. The details of compensatory plantation shall be submitted. The possibilities of relocating the existing trees shall be explored.

- (xiii) Necessary green belt shall be provided on both sides of the highway with proper central verge and cost provision should be made for regular maintenance.
- (xiv) If the proposed route is passing through a city or town, with houses and human habitation on either side of the road, the necessity for provision of bypasses/diversions/under passes shall be examined and submitted. The proposal should also indicate the location of wayside amenities, which should include petrol stations/service centres, rest areas including public conveyance, etc.
- (xv) Details about measures taken for the pedestrian safety and construction of underpasses and foot-over bridges along with flyovers and interchanges shall be submitted.
- (xvi) The possibility that the proposed project will adversely affect road traffic in the surrounding areas (e.g. by causing increases in traffic congestion and traffic accidents) shall be addressed.
- (xvii) The details of use of fly ash in the road construction, if the project road is located within the 100 km from the Thermal Power Plant shall be examined and submitted.
- (xviii) The possibilities of utilizing debris/waste materials available in and around the project area shall be explored.
- (xix) The details on compliance with respect to Research Track Notification of Ministry of Road, Transport and Highways shall be submitted.
- (xx) The details of sand quarry and borrow area as per OM No.2-30/2012-1A-III dated 18.12.2012 on 'Rationalization of procedure for Environmental Clearance for Highway Projects involving borrow areas for soil and earth' as modified vide OM of even No. dated 19<sup>th</sup> March 2013, shall be examined and submitted.
- (xxi) Climate and meteorology (max and min temperature, relative humidity, rainfall, frequency of tropical cyclones and snow fall); the nearest IMD meteorological station from which climatological data have been obtained to be indicated.
- (xxii) The air quality monitoring shall be carried out as per the notification issued on 16<sup>th</sup> November, 2009. Input data used for Noise and Air quality modelling shall be clearly delineated.
- (xxiii) The project activities during construction and operation phases, which will affect the noise levels and the potential for increased noise resulting from this project, shall be identified. Discuss the effect of noise levels on nearby habitations during the construction and operational phases of the proposed highway. Identify noise reduction measures and traffic management strategies to be deployed for reducing the negative impact if any. Prediction of noise levels shall be done by using mathematical modelling at different representative locations.
- (xxiv) The impact during construction activities due to generation of fugitive dust from crusher units, air emissions from hot mix plants and vehicles used for transportation



of materials and prediction of impact on ambient air quality using appropriate mathematical model, description of model, input requirement and reference of derivation, distribution of major pollutants and presentation in tabular form for easy interpretation shall be examined and carried out.

- (xxv) The details about the protection to existing habitations from dust, noise, odour etc. during construction stage shall be examined and submitted.
- (xxvi) If the proposed route involves cutting of earth, the details of area to be cut, depth of cut, locations, soil type, volume and quantity of earth and other materials to be removed with location of disposal/ dump sites along with necessary permission.
- (xxvii) If the proposed route is passing through low lying areas, details of filling materials and initial and final levels after filling above MSL shall be examined and submitted.
- (xxviii) The water bodies including the seasonal ones within the corridor of impacts along with their status, volumetric capacity, quality and likely impacts on them due to the project along with the mitigation measures shall be examined and submitted.
- (xxix) The details of water quantity required and source of water including water requirement during the construction stage with supporting data and also classification of ground water based on the CGWA classification, shall be examined and submitted.
- (xxx) The details of measures taken during constructions of bridges across rivers/canals/major or minor drains keeping in view the flooding of the rivers and the life span of the existing bridges shall be examined and submitted. Provision of speed breakers, safety signals, service lanes and foot paths shall be examined at appropriate locations throughout the proposed road to avoid accidents.
- (xxxii) If there will be any change in the drainage pattern after the proposed activity, details of changes shall be examined and submitted.
- (xxxiii) Rain water harvesting pit shall be at least 3 - 5 m above the highest ground water table. Provisions shall be made for oil and grease removal from surface runoff.
- (xxxiiii) If there is a possibility that the construction/widening of road may cause an impact such as destruction of forest, poaching or reduction in wetland areas, examine the impact and submit details.
- (xxxv) The details of road safety, signage, service roads, vehicular under passes, accident prone zones and the mitigation measures, shall be submitted.
- (xxxvi) IRC guidelines shall be followed for widening & upgradation of roads.
- (xxxvii) The details of social impact assessment due to the proposed construction of the road shall be submitted.
- (xxxviii) Examine the road design standards, safety equipment specifications and Management System training to ensure that design details take account of safety concerns and submit the traffic management plan.

- (xxxviii) Accident data and geographic distribution shall be reviewed and analyzed to predict and identify trends - in case of expansion of the existing highway and provide Post accident emergency assistance and medical care to accident victims.
- (xxxix) If the proposed project involves any land reclamation, details shall be provided of the activity for which land is to be reclaimed and the area of land to be reclaimed.
- (xl) Details of the properties, houses, business activities etc likely to be effected by land acquisition and an estimation of their financial losses, shall be submitted.
- (xli) Detailed R&R plan with data on the existing socio-economic status of the population in the study area and broad plan for resettlement of the displaced population, site for the resettlement colony, alternative livelihood concerns/employment and rehabilitation of the displaced people, civil and housing amenities being offered, etc and the schedule of the implementation of the specific project, shall be submitted.
- (xlii) The environment management and monitoring plan for construction and operation phases of the project shall be submitted. A copy of your corporate policy on environment management and sustainable development shall also be submitted.
- (xliii) Estimated cost of the project including that of environment management plan (both capital and recurring) and source of funding. Also, the mode of execution of the project, viz, EPC, BOT, etc, shall be submitted.
- (xliv) A copy of your CSR policy and plan for meeting the expenditure to address the issues raised during Public Hearing shall be submitted.
- (xlv) Details of blasting if any, methodology/technique adopted, applicable regulations/permissions, timing of blasting, mitigation measures proposed keeping in view mating season of wildlife.
- (xlvi) In case of river/creek crossing, details of the proposed bridges connecting on either banks, the design and traffic circulation at this junction with simulation studies.
- (xlvii) Details to ensure free flow of water in case the alignment passes through water bodies/river/streams etc.
- (xlviii) In case of bye passes, the details of access control from the nearby habitation/habitation which may come up after the establishment of road.
- (xlix) Bridge design in eco sensitive area /mountains be examined keeping in view the rock classification hydrology etc.
- (l) Details of litigation pending against the project, if any, with direction/order passed by any Court of Law against the Project should be given.
- (li) The cost of the Project (capital cost and recurring cost) as well as the cost towards implementation of EMP should be clearly spelt out.
- (lii) Any further clarification on carrying out the above studies including anticipated impacts due to the project and mitigative measure, project proponent can refer to the model ToR available on Ministry website "<http://moef.nic.in/Manual/Highways>".



## GENERAL GUIDELINES

- (i) The EIA document shall be printed on both sides, as for as possible.
- (ii) All documents should be properly indexed, page numbered.
- (iii) Period/date of data collection should be clearly indicated.
- (iv) Authenticated English translation of all material provided in Regional languages.
- (v) The letter/application for EC should quote the MoEF&CC File No. and also attach a copy of the letter prescribing the TOR.
- (vi) The copy of the letter received from the Ministry on the TOR prescribed for the project should be attached as an annexure to the final EIA-EMP Report.
- (vii) The final EIA-EMP report submitted to the Ministry must incorporate the issues in TOR and that raised in Public Hearing. The index of the final EIA-EMP report, must indicate the specific chapter and page no. of the EIA-EMP Report where the specific TOR prescribed by Ministry and the issue raised in the P.H. have been incorporated. Questionnaire related to the project (posted on MoEF&CC website) with all sections duly filled in shall also be submitted at the time of applying for EC.
- (viii) Grant of TOR does not mean grant of EC.
- (ix) Grant of TOR/EC to the present project does not mean grant of approvals in other regulations such as the Forest (Conservation) Act 1980 or the Wildlife (Protection) Act, 1972.
- (x) Grant of EC is also subject to Circulars and Office Memorandum issued under the EIA Notification 2006 and subsequent amendments, which are available on the MoEF&CC website: [www.envfor.nic.in](http://www.envfor.nic.in).
- (xi) The status of accreditation of the EIA consultant with NABET/QCI shall be specifically mentioned. The consultant shall certify that his accreditation is for the sector for which this EIA is prepared.
- (xii) On the front page of EIA/EMP reports, the name of the consultant/consultancy firm along with their complete details including their accreditation, if any shall be indicated. The consultant while submitting the EIA/EMP report shall give an undertaking to the effect that the prescribed TOR (TOR proposed by the project proponent and additional TOR given by the MoEF) have been complied with and the data submitted is factually correct (Refer MoEF office memorandum dated 4<sup>th</sup> August, 2009).
- (xiii) While submitting the EIA/EMP reports, the name of the experts associated with/involved in the preparation of these reports and the laboratories through which the samples have been got analysed should be stated in the report. It shall clearly be indicated whether these laboratories are approved under the Environment (Protection) Act, 1986 and the rules made there under (Please refer MoEF office

memorandum dated 4<sup>th</sup> August, 2009). The project Coordinator of the EIA study shall also be mentioned.

(xiv) All the TOR points as presented before EAC shall be covered.


6. A detailed draft EIA/EMP report shall be prepared in terms of the above additional TOR and should be submitted to the State Pollution Control Board for Public Hearing. Public Hearing to be conducted for the project in accordance with the provisions of Environmental Impact Assessment Notification, 2006 and the issues raised by the public should be addressed in the Environmental Management Plan. The Public Hearing shall be conducted based on the TOR letter issued by the Ministry and not on the basis of Minutes of the Meeting available on the website.

7. The project proponent shall submit the detailed final EIA/EMP report prepared as per TOR including issues raised during Public Hearing to the Ministry for considering the proposal for environmental clearance before expiry of validity of ToR

8. The consultants involved in preparation of EIA/EMP report after accreditation with Quality Council of India/National Accreditation Board of Education and Training (QCI/NABET) would need to include a certificate in this regard in the EIA/EMP reports prepared by them and data provided by other Organization(s)/Laboratories including their status of approvals etc. vide notification of the MoEF dated 19<sup>th</sup> July, 2013.


9. The prescribed TOR would be valid for a period of four years for submission of the EIA/EMP Reports.

10. This issues with the approval of Competent Authority.

  
(Amardeep Raju)  
Scientist 'E'

Copy to:

1. Member secretary, T.S. Pollution Control Board, A-3, Industrial Estate, Sanath Nagar, Hyderabad – 500 018.
2. Addl. Principal Chief Conservator of Forests (C), Ministry of Env., Forest and Climate Change, Regional Office (SEZ), Ist and IInd Floor, Handloom Export Promotion Council, 34, Cathedral Garden Road, Nungambakkam, Chennai – 34.

  
(Amardeep Raju)  
Scientist 'E'



सत्यमेव जयते

**Government of India**  
**Ministry of Environment, Forest and Climate Change**  
**IA Division**  
**(INFRA-1)**

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**Minutes of 324th meeting of Expert Appraisal Committee to be held on 19th – 21st April, 2023 for Projects related to Infrastructure Development, All Ship breaking yards including ship breaking units 7(b); Industrial Estate/Parks/Complexes/Areas, Export Processing Zo Expert Appraisal Committee meeting INFRA-1 held from 19/04/2023 to 21/04/2023** **Date: 25/05/2023**

**MoM ID:** EC/MOM/EAC/745527/4/2023  
**Agenda ID:** EC/AGENDA/EAC/745527/4/2023  
**Meeting Venue:** N/A  
**Meeting Mode:** Virtual  
**Date & Time:**

19/04/2023	10:30 AM	05:30 PM
20/04/2023	10:30 AM	05:30 PM
21/04/2023	10:30 AM	05:30 PM

**1. Opening remarks**

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

**2. Confirmation of the minutes of previous meeting**

The Committee confirmed the Minutes of 322nd meeting during 21st-22nd March, 2023 with the following corrections. In the Agenda No. 3.13 for the proposal of “Expansion of Captive Port from 15 MTPA to 5 MTPA with Lighterage Operation and Desalination Plant of 40 MLD & Associated facilities at Kottattai village, Bhuvangiri Taluk, Cuddalore District, Tamil Nadu by M/s IL&FS Tamil Nadu Power Company Ltd. (ITPCL)”-Terms of Reference Proposal No. IA/TN/INFRA1/417541/2023 and File No. 10/5/2023-IA.III. PP applied for ToR for reduction capacity from 15 MTPA to 5 MTPA against the EC/CRZ obtained earlier and also said that project construction activity is completed about 50% for the proposed reduced capacity before covid 19 and requested exempted the Public hearing as per the MoEF&CC Notification dated 18th March 2021 as the construction activities carried out at Captive port site with respect to the present Lighterage Proposal is more than 50%. The EAC, taking into account the submission made by the project proponent has a detailed deliberation in its 322nd meeting during 21st - 22nd March, 2023 and recommended the proposal for grant of Terms of References with exemption of conduct of Public Hearing with the specific conditions, as mentioned at In the Agenda No. 3.13, in addition to all standard conditions applicable for such projects.

**3. Details of proposals considered by the committee**

Day 1 -19/04/2023

### 3.1. Agenda Item No 1:

#### 3.1.1. Details of the proposal

<b>Development of Expressways, Economic and Inter Corridors under Bharatmala Pariyojana Phase-II (Lot-11), Package –I, Gadchiroli – Durg in the state of Maharashtra and Chhattisgarh”. Proposed Length – 176.801 Km by National Highways Authority of India located at GADCHIROLI,MAHARASHTRA</b>			
<b>Proposal For</b>		Fresh ToR	
<b>Proposal No</b>	<b>File No</b>	<b>Submission Date</b>	<b>Activity (Schedule Item)</b>
IA/MH/INFRA1/425090/2023	10/20/2023-IA.III	06/04/2023	Road (7(f))

#### 3.1.2. Project Salient Features

duplicate
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#### 3.1.3. Deliberations by the EAC in previous meetings

N/A
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#### 3.1.4. Deliberations by the EAC in current meetings

duplicate
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#### 3.1.5. Recommendation of EAC

Deferred for Site Inspection
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### 3.2. Agenda Item No 2:

#### 3.2.1. Details of the proposal

<b>Development of Industrial Estate of HSIIDC at Sector 53-56, Kundli(Phase-V) by HARYANA STATE INDUSTRIAL AND INFRASTRUCTURE DEVELOPMENT CORPORATION LIMITED located at SONIPAT,HARYANA</b>			
<b>Proposal For</b>		Fresh ToR	
<b>Proposal No</b>	<b>File No</b>	<b>Submission Date</b>	<b>Activity (Schedule Item)</b>
IA/HR/INFRA1/422189/2023	10/17/2023-IA.III	15/03/2023	Industrial estates/ parks/ complexes/ areas, export processing Zones (EPZs), Special Economic Zones (7(c ))

#### 3.2.2. Project Salient Features

1. The Proposal is for Development of Industrial Estate at Sector 53-56, Kundli (Phase-V), Sonapat, Haryana by Haryana State Industrial and Infrastructure Development Corporation Limited (HSIIDC). The project was started August 2008 without obtaining prior environmental clearance. In line with the Industrial Policy announced by the Government of Haryana, HSIIDC decided to develop Phase-V of Industrial Estate at Sector 53-56, Kundli (Sonipat) over an area of 623.43 acres (252.29 ha), which would be an extension to the Phases (I to IV) already developed at Kundli and The instant proposal is covered under violation of the EIA Notification, 2006.
2. As per the schedule of the EIA Notification, 2006 and its amendment, the project is categorized as 7(c) project due to the applicability of general condition-interstate boundary (Haryana-Uttar Pradesh-Delhi) at a distance of 4.8km & 1.4km from the project site. The total cost of the project is Rs.121.55 crores.
3. Haryana Industrial and Infrastructural Development Corporation (HSIIDC) have developed an Industrial Estate at Kundli in four phases & all are functional. Recently Phase-V has been developed with all infrastructure facilities such as all weather roads, water Supply, Sewerage and Storm water drainage systems etc. Now the total land under Phase-I to V is 1243.91 Acres with the infrastructural facilities. Being just adjacent to Delhi Border, Kundli has grown into a beautiful and eco friendly industrial township and one of the most favored industrial place for entrepreneurs. Government of Haryana announced the industrial policy accordingly in line with the policy, HSIIDC decided to develop Phase-V of Industrial Estate at Sector 53-56, Kundli (Sonipat) over an area of 623.43 acres (252.29 ha), which would be an extension to the Phases (I to IV) already developed at Kundli.
4. Landuse/Landcover of the project site: Total area for development of Phase-V as per the award announced is 623.43 acres out of which area to be planned later is 45.49 acres. Hence, net area to be planned would be 577.94 acres which would be comprised of following two categories: General Industries: 479.95 acres and Electronic Hardware Technology Park : 97.99 acres.
5. Land use/Land cover of project site.

S.No.	Land use/Land cover	Area (ha)	Percentage	Remarks, if any
1.	Industrial estate	173.4	74.14	-
2.	Green area	25.08	10.72	Common greens only
3.	Road and open areas	35.40	15.14	-
	Total	233.88	100	

1. Type of industries: The product manufactured by the units in other area in Phase-V would be of general and mixed type industries. Details of plots allotted in Phase-V, Kundli are as follows:

Category	No. of Industries	Requirement of EC
Cold storage	24	Not Required
Textile	210	Not Required
Packing/printing & corrugation	100	Not Required
Dying	8	Not Required
Dairy	4	Not Required
Mechanical / auto parts	170	Not Required
Pharmaceutical	21	Required
Food	48	Not Required
Utensils	87	Not Required
footwear / rubber products	40	Not Required
plastic molding	42	Not Required
electronics hardware	28	Not Required
others like IT, Wood work or job work	177	Not Required

1. Terrain and topographical features: The proposed industrial area is plan area.
2. Details of water bodies, impact on drainage: 8 drainages are passing through industrial area towards NNE side at the distance of 1.0km, Nahar main Canal is passing towards west side at the distance of 4.4km and Yamuna

river is located at distance of 72km towards ESE side.

3. Water requirements: total water requirement is 15.17MLD out of which Fresh water requirement will be 9.0MLD and Recycled water will be 6.17MLD. Rough cost estimate amounting to Rs.1335 lacs has been prepared to provide estate water supply services to Phase-V of the industrial estate at Kundli. In order to prepare the water demand, whole area has been divided into 2 Nos. zones to have independent boosting stations with structures like UGSR, OHSR, pump chamber & machinery etc. The water supply would be based on the tube wells and there is a proposal to install 21 Nos (including 3 Nos. standby) deep bore tube wells to meet the water supply demand of phase-V. The distribution system of both the zones would be connected with each other with adequate sized pipe lines at number of points to ensure the supply of water from one zone to another in event of failure of the system in a zone. NOC yet to be obtained from the CGWA for extraction of water.
4. Diversion of Forest land: No forest land involved in the current proposal.
5. The project is not located within 10 km of Protected Areas (PA) including National Parks, Sanctuaries and Tiger Reserves and project is not located within the Eco-Sensitive Zone (ESZ) or Eco-Sensitive Area (ESA).
6. Waste management: Total waste water to the tune of 6.30 MLD will be generated from the project which will be treated in Sewage Treatment Plant. 9MLD capacity of Common Effluent Treatment Plant has been established for treatment of industrial wastewater from member units. Since the industries and commercial areas in the Industrial Area would not be setup immediately and would be done in phases, therefore these phases wise CETP is effectively handle the effluent and sewage loads. Wastewater is being/will be generated from different sources in the proposed industrial park and domestic wastewater from admin buildings. The industrial wastewater and domestic wastewater is being/will be collected through separate pipelines and treated in CETP & STP. The treated effluent from CETP shall be pumped for preparation of chemicals solution, required for chemical house of this CETP, watering the plantation in CETP premises and for industrial activities (floor washing, dust suppression and cooling etc.). A part of treated effluent may be used for construction activities, after mixing with fresh water. The industries are being/will maintain ZLD condition.
7. Land acquisition and R&R issues: No land Land acquisition and R&R issues involved in the current proposal.
8. Employment potential: The proposal shall generate employment of 24,000 no's.
9. Benefits of the project : The project aims at development of Industrial Estate at Phase-V, Kundli, which would help in creation state-of-the-art industrial infrastructure in the district. The proposed project will facilitate in creation of employment opportunities both direct and indirect for local population. The detailed benefits of the project will be elaborated during the EIA Stage.
10. Details of Court case: No court case involved.

### 3.2.3. Deliberations by the EAC in previous meetings

N/A

### 3.2.4. Deliberations by the EAC in current meetings

EAC deliberated on the information submitted and observed the following:

1. Haryana Industrial and Infrastructural Development Corporation (HSIIDC) have developed an Industrial Estate at Kundli in four phases & all are functional. Recently Phase-V has been developed with all infrastructure facilities such as all weather roads, water Supply, Sewerage and Storm water drainage systems etc. Now the total land under Phase-I to V is 1243.91 Acres with the infrastructural facilities. Being just adjacent to Delhi Border, Kundli has grown into a beautiful and eco-friendly industrial township and one of the most favored industrial place for entrepreneurs. In line with the Industrial Policy announced by the Government of Haryana, HSIIDC decided to develop Phase-V of Industrial Estate at Sector 53-56, Kundli (Sonipat) over an area of 623.43 acres (252.29 ha), which would be an extension to the Phases (I to IV) already developed at Kundli.
2. The Proposal is for Development of Industrial Estate at Sector 53-56, Kundli (Phase-V), Sonapat, Haryana by Haryana State Industrial and Infrastructure Development Corporation Limited (HSIIDC). The project was started August 2008 without obtaining prior environmental clearance over an area of 623.43 acres (252.29 ha), which would be an extension to the Phases (I to IV) already developed at Kundli and the EAC, and confirmed as violation case under EIA Notification 2006.
3. To deal the violation cases Ministry issued Standard Operating Procedure of MoEF&CC dated 07.07.2021 and subsequent OM dated 28.07.2022 and PP shall comply with it.

### 3.2.5. Recommendation of EAC

Recommended
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### 3.2.6. Details of Terms of Reference

#### 3.2.6.1. Specific

<b>Technical Conditions</b>	
1.	<ol style="list-style-type: none"> <li>1. PP shall comply standard operating procedure of MoEF&amp;CC dated 07.07.2021 and direction of MoEF&amp;CC dated 28.07.2022.</li> <li>2. Detailed status of Court case filed by the SPCB against the PP under the Environment (Protection) Act, 1986 for violation of EIA Notification 2006, shall be submitted.</li> <li>3. The project proponent shall be required to submit a bank guarantee equivalent to the amount of remediation plan and natural and community resource augmentation plan with the SPCB prior to the grant of EC. The quantum shall be recommended by the EAC and finalized by the regulatory authority. The bank guarantee shall be released after successful implementation of the EMP, followed by recommendations of the EAC and approval of the regulatory authority.</li> <li>4. Assessment of ecological damage with respect to air, water, land and other environmental attributes. The collection and analysis of data shall be done by an environmental laboratory duly notified under the Environment (Protection) Act, 1986, or an environmental laboratory accredited by NABL, or a laboratory of a Council of Scientific and Industrial Research (CSIR) institution working in the field of environment.</li> <li>iv. Preparation of EMP comprising remediation plan and natural and community resource augmentation plan corresponding to the ecological damage assessed and economic benefits derived due to violation.</li> <li>5. The remediation plan and the natural and community resource augmentation plan to be prepared as an independent chapter in the EIA report by the accredited consultants vi. One season fresh base line data shall be collected for preparation of EIA/EMP reports.</li> <li>6. A plan for implementation of ZLD to be submitted.</li> <li>7. Layout plan earmarking space for development of peripheral green belt.</li> <li>8. Transportation details to be submitted in the EIA/MEP report.</li> <li>9. Details of any Court Case pending against the project proponent.</li> <li>10. The nature of the industrial units which are already setup in the industrial estate for all V phases and EC obtained by the units which have been already established in all five phases.</li> <li>11. The details of units which are already setup/established in the industrial estate which have not obtained EC for all five phases.</li> <li>12. Extent of constructions depicted in the entire industrial estate along with the layout map.</li> <li>13. Infrastructure already developed in the estate Area along with the layout for all phases.</li> <li>14. Area developed under Greenbelt in the industrial area and also shall be demarcate in the KML file.</li> </ol>

#### 3.2.6.2. Standard

7(c) )	<b>Industrial estates/ parks/ complexes/ areas, export processing Zones (EPZs), Special Economic Zones</b>
<b>Project details</b>	
1.	Reasons for selecting the site with details of alternate sites examined/rejected/selected on merit with comparative statement and reason/basis for selection. The examination should justify site suitability in terms of environmental damage, resources sustainability associated with selected site as compared to rejected sites.
2.	The analysis should include parameters considered along with weightage criteria for shortlisting selected site.
3.	Zoning of the area in terms of 'type of industries' coming-up in the industrial area based on the resource requirement along with likely pollutants with quantity from the various industries.

4.	Submit Roles and responsibility of the developer etc for compliance of environmental regulations under the provisions of EP Act.
5.	Examine the details of National Highways/State Highways/ expressways falling along the corridor and the impact of the development on them.
6.	Submit the details of the infrastructure to be developed.
7.	Justification of the parameters, frequency and locations shall be discussed in the EIA.
<b>Environment Status/Baseline Data Methodology</b>	
1.	Examine baseline environmental quality along with projected incremental load due to the project taking into account of the existing developments nearby. (ii) Environmental data to be considered in relation to the project development would be (a) land, (b) groundwater, (c) surface water, (d) air, (e) bio-diversity, (f) noise and vibrations, (g) socio economic and health.
2.	Site justification of the identified industry sectors from environmental angle and the details of the studies conducted if any.
3.	Identify, predict and assess the environmental and sociological impacts on account of the project.
<b>Remote Sensing/ GIS</b>	
1.	Analysis should be made based on latest satellite imagery for land use with raw images.
2.	Check on flood plain of any river.
<b>Land Use, Land Acquisition, R&amp;R</b>	
1.	Submit the details of the land use break-up for the proposed project. Details of land use around 10 km radius of the project site.
2.	Submit details of environmentally sensitive places, land acquisition status, rehabilitation of communities/villages and present status of such activities.
3.	Examine the impact of proposed project on the nearest settlements.
4.	Submit details regarding R&R involved in the project
5.	The project boundary area and study area for which the base line data is generated should be indicated through a suitable map.
<b>ESZ, CRZ Details</b>	
1.	Details regarding project boundary passing through any eco- sensitive area and within 10 km from eco- sensitive area.
<b>Forest and Wildlife Related Details</b>	
1.	An overall green area of at-least 33% of the Industrial Area should be developed with native species. The green area shall be 40% in case of critically polluted area. Green buffer in the form of green belt to a width of 15 meters should be provided all along the periphery of the industrial area.
2.	Submit the details of the trees to be felled for the project.

3.	Submit the present land use and permission required for any conversion such as forest, agriculture etc.
<b>Court/ Litigation Related</b>	
1.	Submit Legal frame work for the implementation of Environmental Clearance conditions - to be clearly spelt out in the EIA report.
2.	Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project should be given.
<b>Water Environment/Quality/Hydrology</b>	
1.	Ground water classification as per the Central Ground Water Authority
2.	Submit the source of water, requirement vis-à-vis waste water to be generated along with treatment facilities, use of treated waste water along with water balance chart taking into account all forms of water use and management.
<b>Rain Water Harvesting</b>	
1.	Rain water harvesting proposals should be made with due safeguards for ground water quality
2.	Maximize recycling of water and utilization of rain water. Examine details.
3.	Examine soil characteristics and depth of ground water table for rainwater harvesting.
<b>Waste Management, Drainage and STPs Details</b>	
1.	Submit a copy of the contour plan with slopes, drainage pattern of the site and surrounding area, and any obstruction of the same by the project.
2.	Examine details of solid waste generation treatment and its disposal.
<b>Energy and Resources</b>	
1.	Examine and submit details of use of solar energy and alternative source of energy to reduce the fossil energy consumption.
<b>Air Environment</b>	
1.	In case DG sets are likely to be used during construction and operational phase of the project. emissions from DG sets must be taken into consideration while estimating the impacts on air environment. Examine and submit details.
<b>Road/Transport Safety and Traffic Aspects</b>	
1.	Examine road/rail connectivity to the project site and impact on the traffic due to the proposed project.
2.	Present and future traffic and transport facilities for the region should be analysed with measures for preventing traffic congestion and providing faster trouble free system to reach different destinations in the city.
3.	A detailed traffic and transportation study should be made for existing and projected passenger and cargo traffic.
4.	Examine the details of transport of materials for construction which should include source and availability.

<b>Noise Environment</b>	
1.	Examine noise levels - present and future with noise abatement measures.
<b>Environmental Management Plans and Mitigative Measures</b>	
1.	Examine separately the details for construction and operation phases both for Environmental Management Plan and Environmental Monitoring Plan with cost and parameters.
2.	Submit details of a comprehensive Disaster Management Plan including emergency evacuation during natural and man-made disaster.
3.	Any further clarification on carrying out the above studies including anticipated impacts due to the project and mitigative measure, project proponent can refer to the model ToR available on Ministry.

### 3.3. Agenda Item No 3:

#### 3.3.1. Details of the proposal

<b>Construction of 4 lane Access Controlled New Greenfield Highway Section (Mancherial-Warangal) of length 108.406 km from Narva village to Oorugonda village (Design Chainage 3+834 to 112+240) under Other Economic Corridor (NHO) under NH(O) program on Hybrid Annuity mode in the state of Telangana. by National Highways Authority of India located at MANCHERIAL,TELANGANA</b>			
<b>Proposal For</b>		Fresh EC	
<b>Proposal No</b>	<b>File No</b>	<b>Submission Date</b>	<b>Activity (Schedule Item)</b>
IA/TG/INFRA1/421775/2023	10/29/2021-IA.III	16/03/2023	Road (7(f))

#### 3.3.2. Project Salient Features

<p>1. The proposal is for Construction of 4 lane Access Controlled New Greenfield Highway Section (Mancherial-Warangal) of length 108.406 km from Narva village to Oorugonda village (Design Chainage 3+834 to 112+240) under Other Economic Corridor (NHO) under NH(O) program on Hybrid Annuity mode in the state of Telangana.</p> <p>2. The proposed project highway starts from Narva village (Chainage 3+834) (Latitude: 18°50'33.55" N Longitude: 79°33'19.12" E) in Mancherial district and terminates at Oorugonda village (Chainage 112+240) (Latitude: 18° 2'36.76" N Longitude: 79°41'7.41" E) in Hanamkonda (Warangal Rural) district in the state of Telangana.</p> <p>3. The proposed project falls under 7(f) - Highway, Category-A, as per EIA notification 2006. Total investment/cost of the project is Rs 4058.63 Crores.</p> <p>4. ToR details: The Terms of Reference (ToR) was considered in 266<sup>th</sup> EAC meeting during 12<sup>th</sup> July, 2021, in the Ministry of Environment, Forest and Climate Change, New Delhi. TOR was granted on 26<sup>th</sup> July, 2021.</p> <p>5. Public hearing: Public Hearing was conducted by Uttar Pradesh &amp; Bihar Pollution Control Board (SPCB) as follows.</p>				
S.No	Date	Venue	District	Chaired by
1	07/03/2022	Puttapaka Village site, Near Highway construction, Manthani Mandal	Peddapalli	Additional District Magistrate
2	15/03/2022	Mahatma Jyothiba Phule BC welfare Residential School Complex(Boys), Mogullapally(V and M),	Ayashankar Bhupalapally	Joint Collector
3	23/03/2022	Z.P High school, Gatlakaniparti	Hanumakonda	Additional District

		village, sayam peta mandalam		Collector
4	30/03/2022	Open Place Shetpally Gram Panchayath, Shetpally, village Jaipur Mandal,	Mancherial	Additional Collector

1. Land use/ Land cover of the project site.

Land use/ Land cover	Area (ha.)	Percentage
Water Body	447.542811	3.962867881
Road built up	127.285896	1.127081425
vegetation cover	650.713908	5.761891785
built up settlement	109.788656	0.972148201
Crop Land	9957.45104	88.17047651
Barren Land	0.625	0.005534202
Total area	11293.40731	100

1. Terrain and Topographical Features: The topography of the proposed National Highway is mainly flat to undulating in nature. The elevation of the project varies from 116 m msl to 306 m msl.
2. Details of water bodies, impact on drainage: There are 04 Nos. of rivers, 06 Nos. of ponds and 46 Nos of streams which are crossing the proposed alignment. There shall be no major impact on the drainage system as 01 Major Bridge at 7+800 (Pedda Vagu), 01 Major Bridge at 25+450 (Godavari River), 01 Major Bridge at 32+449 (Bokkala Vagu), 01 Major Bridge at 32+449 (Maner River) and 01 Major Bridge at 79+602 (Chali Vagu) and also other Minor bridges where there is crossing the canals/streams ponds will be constructed. The proposed highway will also have ROB - (1), Major Bridges - (5), Minor Bridges - (45), Intersection - (1), Vehicular underpasses - (24), Pedestrian underpasses - (35), LVUPs - (4), SVUPs - (9), Box Culverts - (146), Pipe Culverts - (36) and Flyovers - (5).
3. Water requirements: Total requirement of water for the construction is estimated 28,00,047 KLD which will be met through surface water and ground water proposed to be used only for camp site for transient period after obtaining the permissions from appropriate authority. Ground water proposed to be used only for camp site for transient period after obtaining the permissions from appropriate authority.
4. Tree cutting: The alignment will involve cutting of approx. 14,689 no of trees. The avenue plantation will be carried out as per IRC SP-21 and National Green Highway policy 2015 within the available ROW. About 44,067 no's trees has been proposed to be planted as compensatory plantation trees.
5. Diversion of forest land: The proposed project requires diversion of 12.558 ha of forest (RF/PF) land. The proposal for forest diversion proposal is under process.
6. The Proposed project alignment passes through the ESZ of Sivaram Wildlife Sanctuary over a length of 10.579 km and width of 45.00 m in Mancherial District and over a length of 13.910 km and width of 45 m in Peddapally District. Draft Eco sensitive zone of Sivaram Wildlife Sanctuary Notification No. SO. 2145 (E) dated 24th May 2018 is yet to be finalize. Since the notification is in draft stage, therefore NBWL Clearances is applicable.
7. As per the primary survey a total 90 birds species were recorded, among them schedule - I species are Brahminy Kite Crested Serpent Eagle, Grey Hornbill, Indian Peafowl, Indian Pied Hornbill, Shikra, Spotted Owllet (Table - 13). In mammals, a total 28 mammals species were recorded, schedule - I species are Blackbuck, Chinkara, Wild Dog, Four Horned Antelope, Gaur, Grey Wolf, Indian Pangolin, Leopard, Leopard Cat, Ratel /Honey Badger, Sloth Bear, Tiger. In reptiles, a total 19 reptiles found in project area, schedule - I are Yellow Monitor Lizard, Python, Indian Black Turtle, Mugger. In amphibians, a total 12 species were found in the project area. Similarly, 51 fishes species found in project area.
8. Waste Management: 500 gram/head/day (approx.) during construction phase and 50 kg/day (approx.) during operation phase at tolls and from wayside amenities area within ROW may be generated. Bio degradable waste shall be disposed through bio composting and other waste through landfill site.
9. Details of Rain Water Harvesting: Rainwater harvesting structures have been provided at the interval of 500 m on either sides of carriageway as per availability of RoW and depending on the water table of first aquifer (Approx. 216 nos. of structures shall be constructed). The total cost of the rainwater harvesting structures

including its maintenance is Rs.1,22,50,000 and this cost has been covered in the EMP cost.

10. The Project requires approx. 566.01 ha. of land. Approx. 35 nos. of structures are coming in the proposed RoW. The land will be acquired as per procedure laid down in RFCT LARR Act, 2013. Estimated cost for Land and Rehabilitation & Resettlement including land acquisition has been worked out to Rs. **316.10 Crores.**
11. Employment potential: During the construction of the highway project around 800 persons would be employed temporarily for a period of 2 years. However due to construction of toll plazas approx. 40 persons will be employed on permanent basis. Preference will be given to local people for employment.
12. Benefits of the project - This project starts from Ramaraopet village in Macherial district and terminates at Oorugonda village in Warangal district in the state of Telangana. The proposed access controlled project with new alignment has been envisaged through an area which shall have the advantage of simultaneous development as well as shall result in a shorter distance to travel. The junctions with existing road will be planned in the form of interchanges and flyover to ensure uninterrupted flow of traffic. The proposed road would act as the prime artery for the economic flow to this region. It will enhance economic development, provide employment opportunities to locals, strengthen tourist development, ensure road safety, and provide better transportation facilities and other facilities such as way side amenities. Vehicle operating cost will also be reduced due to improved road quality. The compensatory plantation and road side plantation shall further improve the air quality of the region.
13. Details of Court cases- No court case is pending against the proposed project.

### 3.3.3. Deliberations by the EAC in previous meetings

N/A

### 3.3.4. Deliberations by the EAC in current meetings

During the deliberation, EAC observed the following:

1. *The re-alignment shall reduce the total length of the road. Accordingly, PP submitted that the alignment is slightly reduced the length from 112.240km to 108.406km the alignment that starts from Design Chainage 3+834 to 112+240 whereas ToR obtained from Design Chainage 0+000 to 112+240. In this regard PP mentioned that during Joint Measurement Survey for Land Acquisition it was observed that the stretch from km. 0.000 to km. 3.834 widening work is under progress in the proposed overlapping section. On enquiry from Executive Engineer NH R&B, Mancherial, confirmed that the NH R&B(MoRT&H) is developing the NH -63 from existing two lane road to four lane with divided carriageway under COS for the overlapping stretch. Due to duplication of works the link section of NH63 from km. 0.000 to 3.834 was dropped from project stretch. Therefore, the length of Mancherial-Warangal section of NH163G is decreased from 112.240km to 108.406km. The final stretch remains from km. 3.834 to km. 112.240. The Committee is agreed for reduction of the length.*
2. *Biodiversity Assessment and Conservation/Mitigation Plan has been prepared and the State Forest Department is authorized the same. It is mentioned that the proposed road project passes through the ESZ of Siwaram Wildlife Sanctuary over a length of 10.579 km and width of 45.00Mts in Mancherial and over a length of 13.910 Km and width of 45.00Mts in Peddapally Districts. No notified Wildlife Sanctuary area or forest area is involved in the proposed project. Hence there will be no significant negative impact on Wildlife or Wildlife habitat. However, due to widening of the road, there is likelihood increase in vehicular traffic which will disturb the movement of wild animals across the road. The vehicular traffic will also result in higher level of noise and air pollution. The negative impacts can be overcome by implementing wildlife mitigation plan prepared by Forest Department with funding from user agency and also providing animal passages at designated locations as per the design and prescribed by WII Dehradun.*

### 3.3.5. Recommendation of EAC

Recommended

### 3.3.6. Details of Environment Conditions

### 3.3.6.1. Specific

<b>Afforestation</b>	
1.	Afforestation using compensatory plantation in the ratio of 1:10 shall be carried out. Native tree species shall be provided as per the IRC Guidelines on Landscaping and Tree Plantation (IRC: SP:21-2009). Effort should be made to plant native trees and Ficus species on both sides of the alignment. Special attention shall be given for protecting giant trees, and locally important trees (having cultural importance) and should be identified chainage wise. The work will be done by state forest department as a deposit work and not by private contractors.
<b>Animal Crossing</b>	
1.	Proponent shall keep the finish road level sufficiently elevated from ground level with provision of railing on both sides to restrict animal crossing in order to avoid the possibility of wildlife injury/death. Major water bodies have been observed in the vicinity of the proposed road alignment & may be potential human elephant conflict points, appropriate nos of animal safe passages as per the guideline framed by the Wildlife Institute of India and in consultation with Chief Wildlife Warden.
<b>Borrow Pits</b>	
1.	In borrow pits, the depth of the pit shall be regulated such that the sides of the excavation will have a slope not steeper than 1:2, from the edge of the final section of bank. Soil erosion checking measures shall be carried out. Details for Borrow area operation and rehabilitation given in EIA report shall be followed.
<b>Bridges/Culverts</b>	
1.	All the major, minor bridges and culverts should not affect the drainage systems. Flood plains of the rivers/ drainage systems are not to be disturbed.
<b>CER Commitment</b>	
1.	As per the Ministry's Office Memorandum F. No. 22-65/2017-IA.III dated 30th September, 2020, the project proponent shall abide by all the commitments made by them to address the concerns raised during the public consultation. The project proponent shall initiate the activities proposed by them, based on the commitment made in the public hearing, and incorporate in the Environmental Management Plan and submit to the Ministry. All other activities including pollution control, environmental protection and conservation, R&R, wildlife and forest conservation/protection measures including the NPV, Compensatory afforestation etc., either proposed by the project proponent based on the social impact assessment and R&R action plan carried out during the preparation of EIA report or prescribed by EAC, shall also become part of EMP and shall be implemented.
<b>Green Belt</b>	
1.	Green belt development (tree plantation) in lieu of the trees being felled in non-forest land should be carried out by the State forest department as deposit work and not by the private contractor. Green belt must be developed using exclusively native species. No exotic species to be used for the same.
<b>Ground Water</b>	
1.	No Ground water shall be extracted and used. Approval/permission of concerned authority shall be obtained before drawing surface water from canal or any other sources.
<b>Landscaping Planning</b>	
1.	The landscape planning should include plantation of native species only. The species with heavy foliage, broad leaves and wide canopy cover such as Ficus trees are desirable. Water intensive and/or invasive species should not be used for landscaping.

<b>Noise Pollution</b>	
1.	In all the construction sites within 150 m of the nearest habitation, noisy construction work such as crushing, concrete mixing will be stopped during the night time between 10.00 pm to 6.00 am. No noisy construction activities will be permitted around educational institutions/health centres (silence zones) up to a distance of 100 m from the sensitive receptors. All plants and equipment used in construction shall strictly conform to the CPCB/SPCB noise standards.
<b>Other Clearance Requirements</b>	
1.	The environmental clearance is subject to obtaining prior clearance from the wildlife angle, including clearance from the Standing Committee of the National Board for Wildlife, as applicable, Grant of environmental clearance does not necessarily imply that Wildlife Clearance and other clearances shall be granted to the project and that their proposal for Wildlife Clearance and other clearances will be considered by the respective authorities on its merit and decision taken.
<b>Project Alignment</b>	
1.	Project alignment should be managed in such a way to save the Heritage/old trees supposed to be affected by the proposed alignment.
<b>Project Specific</b>	
1.	The habitat improvement should also include the creation of waterholes in few sites, plantation of local species of shrubs, herbs and trees in the 2 km radius of the Chainage no. 379+500 to 379+600, 375+100 to 375+200, 244+900 to 245+000, 179+400 to 179+500, 155+300 to 155+400, 143+300 to 140+400. The aim is to ensure water and food availability for the wildlife species in the landscape because linear structures results in fragmentation and degradation of habitat. The required funds for the same to be deposited to respective state forest departments within 3 three months from the grant of EC.
2.	Habitat improvement in selected segment of the proposed alignment: The alignment segment from Chainage no. 71+800 to 72+200, 107+000 to 107+200 and 377+500 to 378+500 are identified as an important area in terms of possible wildlife movement. In the study landscape Parbati river with 60 km stretch of Parbati river and 435 km stretch of Chambal River found to be important breeding/nesting/basking sites for both Gharial and Mugger species. Both the species prefer sand banks and hard soil and rocks for basking for long hours. The required funds for the same to be deposited to respective state forest departments within 3 three months from the grant of EC.
<b>Project Specific</b>	
1.	All the recommendations made by the Zoological Survey of India (ZSI) in the Bio-diversity Impact Assessment study of the proposed alignment including conservation/mitigation plan shall be implemented. ZSI should also monitor the impacts and suggest additional measures during the entire construction phase of the project. The required funds for the same to be deposited with ZSI within 3 three months from the grant of EC.
2.	PP shall construct the elevated bridge to avoiding the floodporne area from chainage 6100 to 6325.
3.	The alignment segment from Chainage no. 71+800 to 72+200, 107+000 to 107+200 and 377+500 to 378+500 are identified as an important area in terms of possible wildlife movement. In the study landscape Parbati river with 60 km stretch of Parbati river and 435 km stretch of Chambal River found to be important breeding/nesting/basking sites for both Gharial and Mugger species. Both the species prefer sand banks and hard soil and rocks for basking for long hours. The user agency shall provide culvert at chainage 140+400, 143+300 and 155+300 to 155+400, Elevated structure shall provide from chainage 179+400 to 179+500 and 244+900 to 245+000 and underpass shall provide 375+100 to 375+200 and 379+500 to 379+600.
4.	As committed by the PP, the user agency shall provide an elevated Wildlife Suspension bridge without disturbing the basking /breeding ground for Critically Endangered species in chainage no. 71+800 to 72+200, and chainage no. 377+500 to 378+500 thus provide safe ravine habitat. Further sound barriers should be made to minimize disturbance along with the minimum 3 mts tall net structure on both the side of the bridge to prevent dumping of

	waste material in the river from the bridge should also be installed in all the mentioned structure.
5.	Apart from land compensation, the loss for crop has also to be compensated.
6.	Further precautionary management strategies such as improvement of habitat for these species should be taken up by the National Highway Authority with the active support of the local Forest.
7.	Conservation Action Plan for Schedule-I species found in the study area: Construction of various intervention structures in the following Chainage no. in the study area as suggested by state forest departments. The required funds for the same to be deposited to respective state forest departments within 3 three months from the grant of EC
<b>Quarry areas</b>	
1.	Quarry areas shall be barricaded during mining operations. The abandoned quarry shall be developed as water reservoirs with proper fencing around quarry area. Details for Quarry area operation and rehabilitation given the EIA report shall be followed.
<b>Rain Water Harvesting</b>	
1.	Rain water harvesting pit shall be at least 3 - 5 m above the highest ground water table.
<b>Road Safety</b>	
1.	Traffic Control Devices/Road Safety Devices/ Roadside Furniture including various types of cautionary, informatory, regulatory as mandatory signboards, road markers, studs, etc. shall be provided at appropriate locations all along the project stretch in accordance with the specifications laid down in Manual of Specifications and Standards for Expressways (IRC: SP:99-2013) and IRC:8, IRC:25, IRC:26, IRC:35, IRC:67, IRC:79, IRC:103 and Section 800 of MORTH Specifications.
<b>Technical</b>	
1.	<ol style="list-style-type: none"> <li>1. The environmental clearance is subject to obtaining prior clearance from the wildlife angle, including clearance from the Standing Committee of the National Board for Wildlife, as applicable, Grant of environmental clearance does not necessarily imply that Wildlife Clearance and other clearances shall be granted to the project and that their proposal for Wildlife Clearance and other clearances will be considered by the respective authorities on its merit and decision taken.</li> <li>2. The user agency shall take up construction of underpasses, eco-bridge / elevated road at 2 locations as indicated by the DFO, Pedapally at Adavi Srirampur and Ramaiahpally with minimum 100 m in length and as per the designs and dimensions prescribed by WII, Dehradun to provide safe passage for wild animals and to avoid accidents.</li> <li>3. The user agency shall take up construction of animal underpasses at locations indicated by DFO, Mancherial/State Forest Department with minimum 100 m in length and as per the design and specifications of WII, Dehradun to facilitate safe movement across the proposed NH and to avoid accidents.</li> <li>4. All commitments made in the Wildlife Management &amp; Conservation Plan submitted to the Ministry shall be implemented in letter and spirit. The status of implementation of Wildlife Management &amp; Conservation Plan shall be submitted to the Regional Office of the Ministry along with 6 monthly compliance report. Zoological Survey of India will oversee the same in coordination with forest department and PP will provide necessary funds to ZSI within 3 months from the issue of EC.</li> <li>5. Wildlife movement during the construction be monitored by forest department and if found necessary additional over/underpasses be developed. Provision for the same be made in the project budget. The budget should be provided to respective state forest departments within 3 months of grant of EC.</li> <li>6. PP shall undertake the all structures proposed along the proposed alignment as proposed at table no. Table 2.13 (a): Details of the major bridges and Table 2.13 (b): Details of Minor bridges EIA/EMP report.</li> <li>7. The proponent shall obtain Forest Clearance for diversion of forest land as per Forest (Conservation) Act, 1980.</li> </ol>

8. Commencement of work in non-forest land will not confer any right to NHAI for granting approval under the Forest (Conservation) Act, 1980.
9. Forest category should be differentiated into forest land and Non-forest land for the tree cutting.
10. No tree can be felled/transplant unless exigencies demand. Where absolutely necessary, tree felling shall be with prior permission from the concern Authority. Old, large and heritage value trees should be retained based on girth and age regulations as may be prescribed by the Forest Department. Where the trees need to be cut/transplanted with prior permission from the concerned local Authority, compensatory plantation in the ratio of 1:10 (i.e. planting of 10 trees for every 1 tree that is cut/ non-survival of any transplanted tree) shall be done and maintained. Plantations to be ensured species (cut) to species (planted). All the plantation will be done by state forest department as deposit work and not by private contractors.
11. Trees with heronry (breeding ground for herons, egrets, etc), pelicanary or community nesting of birds like Painted Storks, Ibis, Egrets, Pelican, etc will not be allowed to fell. In case of presence of such, alignment will be required to be changed to save such trees.
12. Green belt development (tree plantation) in lieu of the trees being felled in non forest land should be carried out by the respective State forest departments as deposit work and not by the private contractor. Green belt must be developed using exclusively native species. No exotic species to be used for the same.
13. Apart from land compensation, the loss for crop has also to be compensated.
14. Road side tree plantation of local fruit bearing species or in nearby village in collaboration with Gram Panchayats.
15. Besides all the structures proposed, an additional adequate number of Culverts shall be provided for water supply to the agricultural land. All the Culverts proposed in the project shall be distinguished into water supply for the people and water supply for the agricultural land.
16. Quarry areas shall be barricaded during mining operations. The abandoned quarry shall be developed as water reservoirs with proper fencing around quarry area. Details for Quarry area operation and rehabilitation given the EIA report shall be followed.
17. In all the construction sites within 150 m of the nearest habitation, noisy construction work such as crushing, concrete mixing will be stopped during the night time between 10.00 pm to 6.00 am. No noisy construction activities will be permitted around educational institutions/health centres (silence zones) up to a distance of 100 m from the sensitive receptors. All plants and equipments used in construction shall strictly conform to the CPCB/SPCB noise standards.
18. Traffic Control Devices/Road Safety Devices/ Roadside Furniture including various types of cautionary, informatory, regulatory as mandatory signboards, road markers, studs, etc. shall be provided at appropriate locations all along the project stretch in accordance with the specifications laid down in Manual of Specifications and Standards for Expressways (IRC: SP:99-2013) and IRC:8, IRC:25, IRC:26, IRC:35, IRC:67, IRC:79, IRC:103 and Section 800 of MORTH Specifications.
19. Prepare the traffic prediction report for complete project (including all packages of this project) considering the cumulative impact of the traffic on the environment and submit to the Ministry and concerned Regional Office within 3 months.
20. All the major, minor bridges and culverts should not affect the drainage systems. Flood plains of the rivers/ drainage systems are not to be disturbed.
21. No Ground water shall be extracted and used. Approval/permission of concerned authority shall be obtained before drawing surface water from canal or any other sources.
22. Rain water harvesting pit shall be at least 3 - 5 m above the highest ground water table.
23. In borrow pits, the depth of the pit shall be regulated such that the sides of the excavation will have a slope not steeper than 1:2, from the edge of the final section of bank. Soil erosion checking measures shall be carried out. Details for Borrow area operation and rehabilitation given in EIA report shall be followed.
24. Proponent shall keep the finish road level sufficiently elevated from ground level with provision of railing on both sides to restrict animal crossing in order to avoid the possibility of wildlife injury/death. Major water bodies have been observed in the vicinity of the proposed road alignment & may be potential human elephant conflict points, appropriate nos of animal safe passages as per the guideline framed by the Wildlife Institute of India and in consultation with Chief Wildlife Warden.
25. As per the Ministry's Office Memorandum F. No. 22-65/2017-IA.III dated 30th September, 2020, the project proponent shall abide by all the commitments made by them to address the concerns raised during the Public Hearing. The project proponent shall initiate the activities proposed by them, based on the commitment made in the Public Hearing, and incorporate in the Environmental Management Plan and submit to the Ministry. All other activities including pollution control, environmental protection and conservation, R&R, wildlife and forest conservation/protection measures including the NPV, Compensatory afforestation etc., either proposed by the project proponent based on the social impact assessment and R&R action plan carried out during the preparation of EIA report or prescribed by EAC, shall also become part of EMP and shall be implemented.

<b>Traffic Report</b>	
1.	Prepare the traffic prediction report for complete project (including all packages of this project) considering the cumulative impact of the traffic on the environment and submit to the Ministry and concerned Regional Office within 3 months.
<b>Tree Cutting</b>	
1.	No tree can be felled/transplant unless exigencies demand. Where absolutely necessary, tree felling shall be with prior permission from the concern Authority. Old, large and heritage value trees should be retained based on girth and age regulations as may be prescribed by the Forest Department. Where the trees need to be cut/transplanted with prior permission from the concerned local Authority, compensatory plantation in the ratio of 1:10 (i.e. planting of 10 trees for every 1 tree that is cut/ non-survival of any transplanted tree) shall be done and maintained. Plantations to be ensured species (cut) to species (planted).
2.	1. Trees with heronry (breeding ground for herons, egrets etc), pelicanary or community nesting of birds like Painted Storks, Ibis, Egrets, Pelican, etc will not be allowed to fell. In case of presence of such, alignment will be required to be changed to save such trees. NOC from the state forest department in this regard be sought and submitted to the regional office of MoEFCC.
<b>Tree Plantation</b>	
1.	Road side tree plantation of local fruit bearing species or in nearby village in collaboration with Gram Panchayats.
<b>Wildlife Conservation Action Plan</b>	
1.	The wildlife conservation action plan, in the present study aims to provide remedies or strategies for the long-term viability of wildlife species. These strategies should be implemented with the active support and supervision of the Divisional Forest Officer of the area. The required funds for the same to be deposited to respective state forest departments within 3 three months from the grant of EC.
<b>Wildlife Management &amp; Conservation Plan</b>	
1.	All commitments made in the Wildlife Management & Conservation Plan submitted to the Ministry shall be implemented in letter and spirit. The status of implementation of Wildlife Management & Conservation Plan shall be submitted to the Regional Office of the Ministry along with 6 monthly compliance report. The required funds for the same to be deposited to respective state forest departments within 3 three months from the grant of EC.
<b>Wildlife Movement</b>	
1.	Wildlife movement during the construction be monitored by forest department and if found necessary additional over/underpasses be developed. Provision for the same be made in the project budget. The required funds for the same to be deposited to respective state forest departments within 3 three months from the grant of EC

### 3.3.6.2. Standard

7(f)	<b>Road</b>
<b>null</b>	
1.	Cut and fill works shall be carried out strictly in accordance with the design drawings proposed at the time of appraisal of the project.
2.	Sidewalk shall be provided along the bridges.

3.	The drain shall be at least 1m away from the toe of the embankment of the road adopting IRC guidelines. Longitudinal drains shall be provided all along the project road to ensure proper drainage of the area. In addition, adequate number of under passes and culverts to act as cross drainage structures shall also be provided.
4.	Blasting shall be carried out during fixed hours (preferably during mid-day) or as permitted by the concerned authority. The timing shall be made known to all the people within 1000m (200m for pre-splitting) from the blasting site in all directions.
5.	Rain water harvesting including oil and grease trap shall be provided as prescribed by CGWB guidelines. Water harvesting structures shall be located at every 500m along the road. Vertical drain type rainwater harvesting structures shall be set up to minimize surface runoff losses of rainwater.
6.	The embankments/slopes and the slopes left after cutting shall be provided with vegetative growth to avoid soil erosion.
7.	Construction spoils including bituminous material and other hazardous materials must not be allowed to contaminate water courses and the dump sites for such materials must be secured so that they shall not leach into the ground water. The non-usable bitumen spoils shall be disposed off in a deep trench providing clay lining at the bottom and filled with soil at the top (for at least 0.5m)
8.	Construction camps shall be proposed 500 m away from the nearest settlements to avoid conflicts and stress over the infrastructure facilities with the local community. Location for stockyards for construction materials shall be identified at least 1000m from water sources. Garbage tanks and sanitation facilities will be provided at camps.
<b>Compliance Reporting</b>	
1.	The project proponent shall submit online six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change and also upload the same, including results of monitored data, on their company website.
2.	For compliance of conditions during operation phase, PP shall either itself undertake the responsibility of compliance or ensure setting up institutional mechanism for compliance of conditions under intimation on the website of the Ministry of Environment, Forest and Climate Change.
3.	The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
4.	The Ministry reserves the right to stipulate additional conditions, if found necessary.
5.	Beside fulfilling obligations under Corporate Social Responsibilities as per Company's Act, 2013, the proponent has to adhere to the followings Environment Responsibilities: i.The Company shall have a well laid down Environment Policy approved by the Board of Directors. ii.The Environment Policy shall prescribe for standard operating process/ procedures to bring into focus any infringements/ deviation/violation of the environmental or forest norms/ conditions. iii.The hierarchical system or Administrative Order of the company to deal with environmental issues and for ensuring compliance with the environmental clearance conditions shall be furnished. iv.To have proper checks and balances, the company shall have a well laid down system of reporting of non-compliances/ violations of environmental norms to the Board of Directors of the company and/or shareholders or stakeholders at large.
<b>Note</b>	
1.	The above conditions shall be enforced in a time bound manner
2.	The Environmental Clearance to the aforementioned project is under provisions of EIA Notification, 2006. It does not tantamount to approvals/consent/permissions etc. required to be obtained under any other Act/Rule/regulation. The Project Proponent is under obligation to obtain approvals /clearances under any other Acts/ Regulations or Statutes, as applicable, to the project.

3.	The PP is under obligation to implement commitments made in the to the issues raised during public hearing Conceptual Plan/ Environment Management Plan, which forms the part of this EC.
4.	Further attention of project proponent is drawn towards the following Acts/ Regulations/ Statutes/ Guidelines issued from time to time: (a)All the Indian Road Congress (IRC) guidelines wherever applicable may be followed. (b)Provisions related to tree cutting as contained in the Forest (Conservation) Act, 1980 and related rules of the respective state. (c)Dust Mitigation Measures stipulated for Construction and Demolition Activities as provided in the amendment Notification GSR 94(E) dated 25.01.2018 of MoEF&CC. (d)Provisions for use of Fly ash as building material in the construction as per stipulated under Fly Ash Notification of September, 1999 and amended as on 27th August, 2003 and 25th January, 2016. (e)Provisions for management of construction and demolition activities related thereto as contained in Construction and Demolition Waste Management Rules, 2016.
<b>General Instructions (Part A)</b>	
1.	Approval/permission of concerned authority shall be obtained before drawing surface water from canal or any other sources.
2.	The proponent shall obtain permission from the competent authorities for tree felling along the proposed alignment.
3.	As per MoEF&CC's circular no. J-11013/41/2006-IA.II (I) dated 22.09.2008, provision shall be made for supply of kerosene or cooking gas and pressure cooker to the labourers, mobile toilets, mobile STP, safe drinking water, medical health care, Crèche and temporary structures for living during construction phase.
4.	The funds earmarked for environmental protection measures shall be kept in separate account and shall not be diverted for other purpose. Year-wise expenditure shall be reported to MoEF&CC and its concerned Regional Office.
<b>General Instructions (Part B)</b>	
1.	The project proponent shall prominently advertise it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days indicating that the project has been accorded environment clearance and the details of MoEF&CC/SEIAA website where it is displayed.
2.	The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
3.	The project proponent shall have a well laid down environmental policy duly approved by the Board of Directors (in case of Company) or competent authority, duly prescribing standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions.
4.	Action plan for implementing EMP and environmental conditions along with responsibility matrix of the project proponent (during construction phase) and authorized entity mandated with compliance of conditions (during operational phase) shall be prepared. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Six monthly progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six-Monthly Compliance Report.
5.	Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
6.	The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.

Specific Conditions	
1.	Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. In case of the treated effluent to be utilized for irrigation/gardening, real time monitoring system shall be installed at the ETP outlet.

### 3.4. Agenda Item No 4:

#### 3.4.1. Details of the proposal

Development of Expressways, Economic and Inter Corridors under Bharatmala Pariyojana Phase-II (Lot-11), Package –I, Gadchiroli – Durg in the state of Maharashtra and Chhattisgarh”. Proposed Length – 176.801 Km by National Highways Authority of India located at GADCHIROLI,MAHARASHTRA			
Proposal For		Fresh ToR	
Proposal No	File No	Submission Date	Activity (Schedule Item)
IA/MH/INFRA1/425090/2023	10/20/2023-IA.III	06/04/2023	Road (7(f))

#### 3.4.2. Project Salient Features

- The project proponent along with DPR consultant M/s. Theme Engineering Services Pvt. Ltd and EIA consult M/s P&M Solution, made a presentation through Video Conferencing and provided the following information:-
- The proposal is for development of Expressways, Economic and Inter Corridors under Bharatmala Pariyojana Phase-II (Lot-11), Package –I, Gadchiroli – Durg in the state of Maharashtra and Chhattisgarh. Proposed Length – 176.801 Km.
- The proposed highway starts at near Village/City Gadchiroli of Gadchiroli District and ends near Village-Anjora of Durg District, in the state of Maharashtra and Chhattisgarh. CH: 0+000 to 176+801. The Latitude and Longitude of start point is 20°12'0.92"N, 80° 0'32.89"E and end point is 21°8'28.16"N, 81°13'3.23"E respectively.
- Land use/ Land cover of the project site:

S.No.	Land use/Land cover	Area (ha)	Percentage %	Remarks if any
1.	Private land/ Government land	852.56	72.79	Agriculture/Barren Land
2.	Forest land	318.6	27.21	Agriculture/Barren Land
Total		1171.165	100	-

- Right of Way (RoW): The Proposed Right of Way is 70 m in non-forest area and 60 m in forest area as per the requirement keeping in view the fully access controlled Highway with 4 lane dual carriage way configuration.
- Terrain and Topographical features: The project area is located in the state of Maharashtra and Chhattisgarh. The topography in the proposed project area is mainly plain and rolling area. The areas have an elevation ranging of 423.9768 m (1391 ft).
- Details of water bodies, impact on drainage: There are Rivers –5 Nos. Nalags/ Canals– 6 Nos. Reservoir- 1 no. Mongra Reservoir. Total –12 Nos. falling along the alignment. There shall be no major impact on the drainage system as 249 nos. numbers of structures (such as culverts, minor bridges, major bridges etc.) will be constructed.
- Water requirements: The total requirement of water for construction is estimated to 1506820 KL. Water will be extracted from surface sources. The ground water will be abstracted for camp site after obtaining the permission from appropriate authority. The ground water will be abstracted for camp site after obtaining the permission

from ground water board.

5. Tree cutting: The alignment will require cutting of approximately 125000 nos. of trees falls in proposed ROW. However, bare minimum no. of trees to be felled for construction of four lane road. Detailed tree inventories will be provided after joint enumeration with the appropriate authority in EIA.
6. Diversion of forest land: Approx. 318.6 ha land under RF & PF forest along the roads and canals. The forest proposal shall be prepared after consultation with concerned forest officer if it attracts FC under section 2, 1980.
7. The proposed alignment does not pass through any National Parks, Wildlife Sanctuary, and Tiger Reserve of any other notified eco-sensitive areas and does not fall in 10 Km radius of any protected areas.
8. Land acquisition and R&R issues involved: About 1171.165 ha land likely to be acquired as per NH Act 1956; compensation will be given as per RFCT LARR Act, 2013.
9. Employment potential, No. of people to be employed: - During the construction of the road project around 1000 persons would be employed temporarily for a period of 3 years. However due to construction of toll plazas approx.500 persons will be employed on permanent basis. The total manpower requirement for the project is 1500. Preference will be given to local people for employment. The Project will enhance economic development in the area through industrial growth, agricultural, and commercial development and consequent employment generation, savings in travel time & shall provide easy access to social infrastructure.
10. Benefits of the project - This highway starts at Gadchiroli District in Maharashtra and terminates at Durg District (Chhattisgarh). From Ch 0+000 in the state of Maharashtra to 176+801 in the state of Chhattisgarh. The approx. length of proposed alignment is 176.801 Km under Bharatmala Pariyojana Phase-II (Lot-11), Package –I by the Government of India. The proposed access controlled project with new alignment has been envisaged through an area which shall have the advantage of simultaneous development as well as shall result in a shorter distance to travel. The project will enhance economic development in the area through industrial areas Agriculture (Market access), commercial development and consequent employment. The junctions with existing road will be planned in the form of interchanges and flyover to ensure uninterrupted flow of traffic. The proposed road would act as the prime artery for the economic flow to this region. It will enhance opportunities to locals, strengthen tourist development, ensure road safety, and provide better transportation facilities and other facilities such as way side amenities. Vehicle operating cost will also be reduced due to improved road quality. The compensatory plantation and road side plantation shall further improve the air quality of the region.
11. Details of Court cases- No Court case involved in the current proposal.

### 3.4.3. Deliberations by the EAC in previous meetings

N/A

### 3.4.4. Deliberations by the EAC in current meetings

duplicate

### 3.4.5. Recommendation of EAC

Deferred for Site Inspection

## 3.5. Agenda Item No 5:

### 3.5.1. Details of the proposal

<b>Proposed Floating Storage and Regasification Unit (FSRU) based LNG terminal and Jetty at Gopalpur Port, Odisha by M/s. Petronet LNG Limited. by PETRONET LNG LIMITED (PLL) located at GANJAM,ODISHA</b>			
<b>Proposal For</b>		Fresh ToR	
<b>Proposal No</b>	<b>File No</b>	<b>Submission Date</b>	<b>Activity (Schedule Item)</b>

IA/OR/INFRA1/424189/2023	10/21/2023-IA.III	31/03/2023	Ports, harbors, breakwaters, dredging (7(e))
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### 3.5.2. Project Salient Features

- The project proponent along with the EIA Consultant M/s.Vimta Labs Limited made a presentation through Video Conferencing and provided the following information:
- The project is LNG Regassification terminal is initially proposed as FSRU based with a capacity of 4 MMTPA (under Phase-I) & subsequently will be converted to a land based terminal of 5 MMTPA capacity (in Phase –II). Petronet LNG Limited (PLL) proposes to setup High Pressure Natural Gas (HPNG) Receiving and Transfer Facilities with Truck Loading Facility-TLF (FSRU Based Regasification) at Gopalpur, Distt. Ganjam, Odisha (Phase-1) at Gopalpur Port, Odisha of 4.0 MMTPA capacity with a scope of further expansion to 5 MMTPA LNG Receipt & Land based Regasification terminal at later Stage (Phase-2). The proposed location for the facilities will be at Gopalpur in Odisha. The Geo coordinates of the location is 19°18'13.44"N and 84°57'52.72"E respectively.
- The facilities will supply the HPNG to pipeline grid by providing connectivity through 30" dia. X 36 km (approx.) natural gas pipeline Tap-in Point at Hinjili on IP-3 terminal of upcoming Srikakulam-Angul pipeline of M/s GAIL (India) Ltd). in the state along with LNG by trucks to the customers not connected with pipeline. The proposed terminal shall be utilized Initially for FSRU based onshore Facilities/Jetty operations and subsequently standalone Land based LNG Storage & Regasification Terminal with LNG receipt from LNGC. The identification of facilities required for Phase-1 operation, which could further be utilized for Phase-2 operation will be carried out.
- Proposed LNG terminal at Gopalpur Port, Odisha will have the following installation:**
- Phase-I (FSRU based LNG Terminal with capacity of 4 MMTPA)**
- Approx. 1.6 km long approach trestle for jetty with following marine structures
- Unloading Platform
- Berthing Dolphins & Mooring Dolphins
- Jetty Control Room
- Steel Catwalk Structures
- FSRU
- HP NG transfer arms
- LNG Storage Vessels
- Pipeline transfer facilities
- Truck Loading Facilities
- Associated Pipelines
- Fire fighting system
- Utilities and distribution network
- The proposed projects are under Category A, Schedule of the EIA Notification, 2006 with category 7(e)-Ports, harbours. The total cost of the project is approximately Rs. 2306 Crores. (Phase-1).
- Landuse/ Land cover of project site.

Sr.no	Land Use/Land cover	Area (ha)	Remarks
1	Non-Forest Land	40.46	.
2	Forest land	0	-
Total		40.46	-

- Terrain and topographical features: The project is located in Gopalpur port representing flat terrain and coastal conditions.
- Details of water bodies, impact on drainage: There are no water bodies as the proposed project is in the Bay of Bengal Sea. No major drainage channels/ waterbodies are being blocked/ impacted by proposed development. All major water channels/ nalas/drains are being conserved and are part of green landuse within the proposed landuse plan.
- Water requirements: During construction phase total fresh water demand is 50KLD which will be sourced through tankers and during operational phase total fresh water demand is 30KLD which will be transported through pipeline. Requisition to GPL shall be raised as per agreement with Gopalpur Ports Limited for water supply.

4. Diversion of forest land: No forest land involved in the proposed project.
5. The project is located is not located within 10 km of Protected Areas (PA) including National Parks, Sanctuaries and Tiger Reserves etc and ESZ area.
6. Details of CRZ: CRZ studies were carried out by Institute of Remote Sensing (IRS), Anna University.
7. Waste Management: There will be IETP, with a capacity of 15KLD. It is expected that the capacity of 30 -40 KLD shall be considered during Phase-II operations, the assessment shall be done during FEED Studies.
8. The project proposal envisages Floating Storage Regasification Unit (FSRU) based LNG Terminal and Jetty at Gopalpur Port.
9. No change in shore line
10. Navigation Channel and breakwater is already constructed by Gopalpur Port. No capital dredging is envisaged by project proponent.
11. LNG will be unloaded from vessel through unloading arms and R-LNG/LNG will be transported onshore through pipelines. The flange connection in the process piping are minimized to avoid any spill/leakages.
12. There is no fishing activity in the vicinity as jetty is within the breakwaters which is a protected area.
13. Land acquisition and R&R issues: no Land acquisition and R&R issues involved in the project area.
14. Employment potential: Generation of employment for around 1000 nos people during peak construction phase and around 150nos direct (permanent) and 300nos indirect (contractual) during operation phase (Phase-II).
15. Benefits of the project: Growth in Local Economy due to direct & indirect impact of the project. Supporting industrial developments in the area. Contribution to state and central exchequer in the Form of VAT, Custom duty & GST.
16. Details of Court cases: No court case is involved in the proposal.

### 3.5.3. Deliberations by the EAC in previous meetings

N/A

### 3.5.4. Deliberations by the EAC in current meetings

The EAC, taking into account the submission made by the project proponent has a detailed deliberation in its 324<sup>th</sup> meeting during 19<sup>th</sup>-21<sup>st</sup> April, 2023 and **recommended** the proposal for grant of Terms of References with exemption of conduct of Public Hearing with the specific conditions, as mentioned below, in addition to all standard conditions applicable for such projects:

### 3.5.5. Recommendation of EAC

Recommended

### 3.5.6. Details of Terms of Reference

#### 3.5.6.1. Specific

N/A

#### 3.5.6.2. Standard

6(a)	<b>Pipelines</b>
<b>Executive Summary</b>	
1.	Executive Summary
<b>Introduction</b>	

1.	Details of the EIA Consultant including NABET accreditation
2.	Information about the project proponent
<b>Project Description</b>	
1.	Cost of project and time of completion.
2.	Products with capacities for the proposed project.If expansion project, details of existing products with capacities and whether adequate land is available for expansion, reference of earlier EC if any.
3.	List of raw materials required and their source along with mode of transportation.
4.	Other chemicals and materials required with quantities and storage capacities
5.	Details of Emission, effluents, hazardous waste generation and their management. Requirement of water, power, with source of supply, status of approval, water balance diagram, man-power requirement (regular and contract)
6.	Process description along with major equipments and machineries, process flow sheet (quantitative) from raw material to products to be provided.
7.	Hazard identification and details of proposed safety systems.
8.	<p>Expansion/modernization proposals:</p> <p>a. Copy of all the Environmental Clearance(s) including Amendments thereto obtained for the project from MOEF/SEIAA shall be attached as an Annexure. A certified copy of the latest Monitoring Report of the Regional Office of the Ministry of Environment and Forests as per circular dated 08th June, 2022 on the status of compliance of conditions stipulated in all the existing environmental clearances including Amendments shall be provided. In addition, status of compliance of Consent to Operate for the ongoing /existing operation of the project from SPCB shall be attached with the EIA-EMP report.</p> <p>b. In case the existing project has not obtained environmental clearance, reasons for not taking EC under the provisions of the EIA Notification 1994 and/or EIA Notification 2006 shall be provided. Copies of Consent to Establish/No Objection Certificate and Consent to Operate (in case of units operating prior to EIA Notification 2006, CTE and CTO of FY 2005-2006) obtained from the SPCB shall be submitted. Further, compliance report to the conditions of consents from the SPCB shall be submitted.</p>
<b>Site Details</b>	
1.	Location of the project site covering village, Taluka/Tehsil, District and State, Justification for selecting the site, whether other sites were considered.
2.	A toposheet of the study area of radius of 10 km and site location on 1:50,000/1:25,000 scale on an A3/A2 sheet. (including all eco-sensitive areas and environmentally sensitive places)
3.	Co-ordinates (lat-long) of all four corners of the site. Google map-Earth downloaded of the project site. Layout maps indicating existing unit as well as proposed unit indicating storage area, plant area, greenbelt area, utilities etc. If located within an Industrial area/Estate/Complex, layout of Industrial Area indicating location of unit within the Industrial area/Estate.
4.	Photographs of the proposed and existing (if applicable) plant site. If existing, show photographs of plantation/greenbelt, in particular.
5.	Land use break-up of total land of the project site (identified and acquired), government/ private - agricultural, forest, wasteland, water bodies, settlements, etc shall be included. (not required for industrial area).

6.	A list of major industries with name and type within study area (10km radius) shall be incorporated.
7.	Details of Drainage of the project up to 5km radius of study area. If the site is within 1 km radius of any major river, peak and lean season river discharge as well as flood occurrence frequency based on peak rainfall data of the past 30 years. Details of Flood Level of the project site and maximum Flood Level of the river shall also be provided. (mega green field projects).
8.	Status of acquisition of land. If acquisition is not complete, stage of the acquisition process and expected time of complete possession of the land.
9.	R&R details in respect of land in line with state Government policy.
<b>Forest and wildlife related issues (if applicable):</b>	
1.	Permission and approval for the use of forest land (forestry clearance), if any, and recommendations of the State Forest Department. (if applicable)
2.	Land use map based on High resolution satellite imagery (GPS) of the proposed site delineating the forestland (in case of projects involving forest land more than 40 ha).
3.	Status of Application submitted for obtaining the stage I forestry clearance along with latest status shall be submitted.
4.	The projects to be located within 10 km of the National Parks, Sanctuaries, Biosphere Reserves, Migratory Corridors of Wild Animals, the project proponent shall submit the map duly authenticated by Chief Wildlife Warden showing these features vis-à-vis the project location and the recommendations or comments of the Chief Wildlife Warden-thereon
5.	Wildlife Conservation Plan duly authenticated by the Chief Wildlife Warden of the State Government for conservation of Schedule I fauna, if any exists in the study area
6.	Copy of application submitted for clearance under the Wildlife (Protection) Act, 1972, to the Standing Committee of the National Board for Wildlife.
<b>Environmental Status</b>	
1.	Determination of atmospheric inversion level at the project site and site-specific micrometeorological data using temperature, relative humidity, hourly wind speed and direction and rainfall.
2.	AAQ data (except monsoon) at 8 locations for PM10, PM2.5, SO2, NOX, CO and other parameters relevant to the project shall be collected. The monitoring stations shall be based CPCB guidelines and take into account the pre-dominant wind direction, population zone and sensitive receptors including reserved forests.
3.	Raw data of all AAQ measurement for 12 weeks of all stations as per frequency given in the NAQQM Notification of Nov. 2009 along with - min., max., average and 98% values for each of the AAQ parameters from data of all AAQ stations should be provided as an annexure to the EIA Report.
4.	Surface water quality of nearby River (100m upstream and downstream of discharge point) and other surface drains at eight locations as per CPCB/MoEF&CC guidelines.
5.	Whether the site falls near to polluted stretch of river identified by the CPCB/MoEF&CC, if yes give details.
6.	Ground water monitoring at minimum at 8 locations shall be included.
7.	Noise levels monitoring at 8 locations within the study area.

8.	Soil Characteristic as per CPCB guidelines.
9.	Traffic study of the area, type of vehicles, frequency of vehicles for transportation of materials, additional traffic due to proposed project, parking arrangement etc.
10.	Detailed description of flora and fauna (terrestrial and aquatic) existing in the study area shall be given with special reference to rare, endemic and endangered species. If Schedule- I fauna are found within the study area, a Wildlife Conservation Plan shall be prepared and furnished.
11.	Socio-economic status of the study area.
<b>Impact and Environment Management Plan</b>	
1.	Assessment of ground level concentration of pollutants from the stack emission based on site specific meteorological features. In case the project is located on a hilly terrain, the AQIP Modeling shall be done using inputs of the specific terrain characteristics for determining the potential impacts of the project on the AAQ. Cumulative impact of all sources of emissions (including transportation) on the AAQ of the area shall be assessed. Details of the model used and the input data used for modeling shall also be provided. The air quality contours shall be plotted on a location map showing the location of project site, habitation nearby, sensitive receptors, if any.
2.	Water Quality modeling - in case of discharge in water body
3.	Impact of the transport of the raw materials and end products on the surrounding environment shall be assessed and provided. In this regard, options for transport of raw materials and finished products and wastes (large quantities) by rail or rail-cum road transport or conveyor cum- rail transport shall be examined.
4.	A note on treatment of wastewater from different plant operations, extent recycled and reused for different purposes shall be included. Complete scheme of effluent treatment. Characteristics of untreated and treated effluent to meet the prescribed standards of discharge under E(P) Rules.
5.	Details of stack emission and action plan for control of emissions to meet standards.
6.	Measures for fugitive emission control
7.	Details of hazardous waste generation and their storage, utilization and management. Copies of MOU regarding utilization of solid and hazardous waste in cement plant shall also be included. EMP shall include the concept of waste-minimization, recycle/reuse/recover techniques, Energy conservation, and natural resource conservation.
8.	Proper utilization of fly ash shall be ensured as per Fly Ash Notification, 2009. A detailed plan of action shall be provided.
9.	Action plan for the green belt development plan in 33 % area i.e. land with not less than 1,500 trees per ha. Giving details of species, width of plantation, planning schedule etc. shall be included. The green belt shall be around the project boundary and a scheme for greening of the roads used for the project shall also be incorporated.
10.	Action plan for rainwater harvesting measures at plant site shall be submitted to harvest rainwater from the roof tops and storm water drains to recharge the ground water and also to use for the various activities at the project site to conserve fresh water and reduce the water requirement from other sources.
<b>Occupational health</b>	
1.	Plan and fund allocation to ensure the occupational health & safety of all contract and casual workers.
2.	Details of exposure specific health status evaluation of worker. If the workers' health is being evaluated by pre designed format, chest x rays, Audiometry, Spirometry, Vision testing (Far & Near vision, colour vision and any

	other ocular defect) ECG, during pre placement and periodical examinations give the details of the same. Details regarding last month analyzed data of above mentioned parameters as per age, sex, duration of exposure and department wise.
3.	Details of existing Occupational & Safety Hazards. What are the exposure levels of hazards and whether they are within Permissible Exposure level (PEL). If these are not within PEL, what measures the company has adopted to keep them within PEL so that health of the workers can be preserved.
4.	Annual report of health status of workers with special reference to Occupational Health and Safety.
<b>Corporate Environment Policy</b>	
1.	Does the company have a well laid down Environment Policy approved by its Board of Directors? If so, it may be detailed in the EIA report.
2.	Does the Environment Policy prescribe for standard operating process / procedures to bring into focus any infringement / deviation / violation of the environmental or forest norms / conditions? If so, it may be detailed in the EIA.
3.	What is the hierarchical system or Administrative order of the company to deal with the environmental issues and for ensuring compliance with the environmental clearance conditions? Details of this system may be given.
4.	Does the company have system of reporting of non compliances / violations of environmental norms to the Board of Directors of the company and / or shareholders or stakeholders at large? This reporting mechanism shall be detailed in the EIA report.
<b>Details regarding infrastructure facilities such as sanitation, fuel, restroom etc. to be provided to the labour force during construction as well as to the casual workers including truck drivers during operation phase.</b>	
1.	null
<b>Enterprise Social Commitment (ESC)</b>	
1.	Adequate funds (at least 2.5 % of the project cost) shall be ear marked towards the Enterprise Social Commitment based on Public Hearing issues and item-wise details along with time bound action plan shall be included. Socio-economic development activities need to be elaborated upon.
2.	Any litigation pending against the project and/or any direction/order passed by any Court of Law against the project, if so, details thereof shall also be included. Has the unit received any notice under the Section 5 of Environment (Protection) Act, 1986 or relevant Sections of Air and Water Acts? If so, details there of and compliance/ATR to the notice(s) and present status of the case.
3.	A tabular chart with index for point wise compliance of above TOR.
<b>Specific Terms</b>	
1.	Justification of the project
2.	Route map indicating project location.
3.	Details of land to be acquired. Details of projects vis-à-vis Ecological Sensitive Areas and approvals thereof.
4.	Project location along with map of 1 km area (500 meters on either side of the pipeline from centerline) and site details providing various industries, surface water bodies, forests etc.
5.	Analysis of alternative sites and Technology.

6.	Location of National Park/Wild life sanctuary/Reserve Forest within 10 km radius of the project.
7.	Status of clearance from NBWL for pipeline passing through wildlife sanctuary/ Eco-logical sensitive area
8.	Recommendation of SCZMA /CRZ clearance for the proposed pipeline ( if applicable) .
9.	Present land use based on satellite imagery for the study area of 10 km radius.
10.	Details of applications filed for forest clearance to be obtained for the project for the forest land involved in the project along with details of the compensatory afforestation.
11.	Process Description along with Process Flow Diagram.
12.	Details of associated facilities/utilities to be installed.
13.	Details of water consumption and source of water supply, waste water generation, treatment and effluent disposal.
14.	Detailed solid & Hazardous waste generation, collection, segregation, its recycling and reuse, treatment and disposal.
15.	Total cost of the project along with total capital cost and recurring cost/annum for environmental pollution control measures.
16.	Site-specific micro-meteorological data for temperature, relative humidity, hourly wind speed and direction and rainfall for one season at one location.

### 3.6. Agenda Item No 6:

#### 3.6.1. Details of the proposal

<b>Proposed Haraginadoni Industrial Area(Kuduthini Phase -3) by KARNATAKA INDUSTRIAL AREAS DEVELOPMENT BOARD (KIADB) located at BALLARI,KARNATAKA</b>			
<b>Proposal For</b>		Fresh ToR	
<b>Proposal No</b>	<b>File No</b>	<b>Submission Date</b>	<b>Activity (Schedule Item)</b>
IA/KA/INFRA1/423445/2023	10/19/2023-IA.III	28/03/2023	Industrial estates/ parks/ complexes/ areas, export processing Zones (EPZs), Special Economic Zones (7(c ))

#### 3.6.2. Project Salient Features

<ol style="list-style-type: none"> <li>1. The project proponent along with the EIA Consultant M/s Ecomen Laboratories Pvt. Ltd., made a presentation through Video Conferencing and provided the following information:</li> <li>2. The proposal is for Development of Haraginadoni Industrial Area (Kuduthini Phase-3) at Kudithini Village, Ballari Taluk &amp; District, Karnataka over an extant of 271.5197 Ha by M/s Karnataka Industrial Areas Development Board (KIADB).</li> </ol>
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#### 3.6.3. Deliberations by the EAC in previous meetings

N/A

### 3.6.4. Deliberations by the EAC in current meetings

1. The EAC noted that the documents/Information provided to the Committee are different than those on the Parivesh Portal including the presentation and therefore the Committee **returned the proposal in present form** and advise the PP to revise the Form-I with correct information and ask the PP circulate the correct information/documents for further consideration of the proposal.
2. The EAC also warned the EIA Consultant M/s Ecomen Laboratories Pvt. Ltd. for submitting different versions and advised to check correctness of the same before circulating the same to the Committee.

### 3.6.5. Recommendation of EAC

Returned in present form

### 3.7. Agenda Item No 7:

#### 3.7.1. Details of the proposal

<b>Establishment of Integrated Industrial Facility by GHARDA CHEMICALS LIMITED located at BHARUCH, GUJARAT</b>			
<b>Proposal For</b>		<b>Fresh ToR</b>	
<b>Proposal No</b>	<b>File No</b>	<b>Submission Date</b>	<b>Activity (Schedule Item)</b>
IA/GJ/INFRA1/423297/2023	10/16/2023-IA.III	27/03/2023	Industrial estates/ parks/ complexes/ areas, export processing Zones (EPZs), Special Economic Zones (7(c))

#### 3.7.2. Project Salient Features

1. The project proponent along with the EIA Consultant M/s. Perfect Enviro Solutions Pvt. Ltd., made a presentation through Video Conferencing and provided the following information:
2. The proposal is for Establishment of Integrated Industrial Facility at Plot No. D-II/4, Dahej-II GIDC Industrial Estate over an area of 54.595717 ha (545957.17 sqm), Village Suva, Taluka Vagra, District Bharuch, Gujarat by M/s Gharda Chemicals Limited. State Highway No.6 is 2.00 Km in E direction, Dahej Railway station is at 7.09 Km, NW and Bhavnagar Airport is at 63.10 Km in SE direction from the project boundary.
3. The proposed project is located at GIDC Dahej-II industrial estate which is a Notified Industrial Area declared as per the Gujarat Government Gazette (at S. No. 29 of notification Taluka Vagra, Village Suva is mentioned) dated 18<sup>th</sup> June 2009. 'Development of Petroleum, Chemical and Petro-chemical Investment Region (PCPIR)' at Dahej, Vagra, District Bharuch (Gujarat) by M/s Gujarat Industrial Development Corporation - Environmental and CRZ Clearance for an area of 44445.18 ha after excluding forest land (45298.59 ha of total proposed land-853.41ha of forest land) vide letter no. 21-49/2010-IA-III dated 14.09.2017 and Public Hearing for the aforementioned EC was done on 30<sup>th</sup> July 2014.
4. As per the schedule under the EIA Notification, 2006 and its amendments, the project is categorized as 7(c) project and as the proposed project falls under Category A projects are appraised at Central level.
5. Landuse/Landcover of project site:

S. No.	Land Use/Land Cover	Area (in ha)	% Area	Remarks
1	Production/Manufacturing area	8.5317	15.6	None
2	TSD Facility	5.2297	9.6	
3	Cogen Power Plant	3.0713	5.6	
4	Desalination Plant including pond area	1.0021	1.8	
5	Common Green Area	11.6250	21.3	
6	Road and open area	17.2963	31.7	
7	Common Parking area	5.4979	10.1	
8	Combined ETP, STP, RO & MEE Area	2.3417	4.3	
	<b>Total area</b>	<b>54.5957</b>	<b>100.0</b>	

1. List to industries to be housed with the proposed project site, only for projects covered under 7(c) category of EIA Notification, 2006:

S.no	Name of the Industry	Category of the Industry
1	Pesticides industry	(5b)
2	Synthetic Organic Chemical Industry	(5f)
3	Chlor-alkali industry	(4d)
4	Petrochemical products and petrochemical based processing Industry	(5e)
5	Common hazardous waste treatment, storage and disposal facilities	(7d)
6	Captive Cogen Power Plant	(1d)

1. Terrain and topographical features: The site is at an elevation of 28 m. Lakhigam Reserved Forest is at 9.84 Km in W direction, nearest river Narmada River is at 0.38 Km in S direction and nearest habitation is Suva at 0.14 km in SW directions.
2. Details of water bodies, impact on drainage: Water bodies existing in the 10 km area from the project site are listed below:-

### Water Bodies

<b>Nala near Project Area</b>	<b>0.03 Km</b>	<b>E</b>
<b>Pond near Suwa</b>	<b>0.19 Km</b>	<b>SW</b>
<b>Narmada River</b>	<b>0.38 Km</b>	<b>S</b>
<b>Pond near Rahiyad</b>	<b>1.01 Km</b>	<b>NE</b>
<b>Pond near Jolwa</b>	<b>2.15 Km</b>	<b>NW</b>
<b>Drain near Jolwa</b>	<b>2.64 Km</b>	<b>NW</b>
<b>Pond near Galenda</b>	<b>4.68 Km</b>	<b>NNE</b>
<b>Drain near Samatpur</b>	<b>5.80 Km</b>	<b>NNE</b>
<b>Drain near Akhol</b>	<b>7.60 Km</b>	<b>NE</b>

Nearest HFL is at 0.38 kms. A proper drainage system will be provided within the estate, stormwater will be channelised to the rainwater pond to maximum extent for reuse and the rest of the water will be channelized into the storm water drain of the area.

1. Water requirements: During the construction phase 100 KLD of water for domestic as well as construction activities will be supplied by GIDC and during Operation phase fresh water of 27,175 KLD will be supplied partially by GIDC and partially via Narmada Creek (Desalination plant of 5 MLD has been proposed in the Industrial Estate). Permission from GIDC is yet to be obtained. No ground water will be extracted.
2. Tree cutting: No trees will be cut.
3. Diversion of Forest: No forest land is involved in the instant proposal and there are no National Parks, Sanctuaries and Tiger Reserves etc. in the 10 km vicinity from the project. There is no Eco-Sensitive Zone (ESZ) or Eco-Sensitive Area (ESA) notified by the MoEF&CC.
4. Waste management: Waste water generated from Industrial Estate will be treated in ETP, RO MEE. Treated effluent generated from ETP shall be partially used in Industrial Process Water & Washing, Cooling tower makeup and Gardening. 7.272 MLD of treated effluent shall be given to CETP of Dahej Industrial Estate II which is of 40 MLD capacity. The CETP is based on Primary treatment, Biological Treatment and Tertiary Treatment Facility. It has a treatment system for removal of Ammoniacal Nitrogen and Fenton's Reagent for removal of refractory COD. The Present load on the facility (excluding the proposed project) is 3 MLD. **STP:** Provide details of treatment and usage of treated sewage with STP's capacity: 102 KLD of waste water generated from domestic activities will be treated in STP of capacity 120 KLD based on Conventional ASP and filtration technology. Treated water of 98 KLD shall be used for gardening purposes.
5. Land acquisition and R&R issues involved: Land has been acquired in the name of Gharda Chemicals Limited with office order dated 15/07/2022. An additional plot (D2/4) for plantation of green has also been acquired by Gharda Chemicals Limited. No R&R will be involved.
6. Employment potential: During Construction phase, permanent employment of 100 no. and temporary employment of 500 no. will be hired, During Operational phase, permanent employment of 1000 no. and temporary employment of 1500 no. will be hired.
7. Benefits of the project: As the demand for agrochemicals, synthetic organic chemicals, and the chlor-alkali manufacturing industry are increasing, we are proposing these industries. To meet internal demand of electricity CPP is proposed and to facilitate sustainable development STP, ETP & TSDF will be there within the project site. The proposed project will enhance the existing physical infrastructures like roads, water supply, electricity distribution lines, greenery, etc. The people around will likely get significant socio-economic development through infrastructures and direct and indirect employment. Revenue will also be generated. Increased demand

for chemicals thereby generating valuable foreign exchange.  
8. Details of Court cases: No court cases is involved in the instant proposal.

### 3.7.3. Deliberations by the EAC in previous meetings

N/A

### 3.7.4. Deliberations by the EAC in current meetings

The EAC observed the following:

1. The proposed project is located at GIDC Dahej-II industrial estate which is a Notified Industrial Area declared as per the Gujarat Government Gazette (at S. No. 29 of notification Taluka Vagra, Village Suva is mentioned) dated 18<sup>th</sup> June 2009. EC and CRZ clearance was obtained for 'Development of Petroleum, Chemical and Petrochemical Investment Region (PCPIR)' at Dahej, Vagra, District Bharuch (Gujarat) by M/s Gujarat Industrial Development Corporation for an area of 44445.18 ha after excluding forest land (45298.59 ha of total proposed land - 853.41 ha of forest land) vide letter no. F.No. 21-49/2010-IA-III dated 14.09.2017 and Public Hearing for the aforementioned EC was done on 30<sup>th</sup> July 2014 and the instant proposal is overlapping the existing industrial area and PP and Consultant did not provide any information why the instant proposal is not covered under the provisions of CRZ notification, 2011.
2. PP/Consultant requested for exemption of Public hearing for the proposed project as per clause 7 (i) (iii) of EIA notification 2006 (as per OM J-11011/321/2016-IA.II(I) dated 27th April 2018). The Committee noted as per the Ministry's OM dated 27<sup>th</sup> April, 2018 is provided the clarification for the requirement of PH for certain categories located within industrial estates/parks and the instant proposal proposed to establishment of Captive Cogen Power Plant which covers under 1(d) of the EIA notification, 2006. thus Public Hearing shall not exempted.
3. Greenbelt proposed outside the industrial area which will not satisfy the purpose of 33% of the green belt.
4. The boundary of the project is adjacent to village Suva. Considering extremely hazardous nature of the project, EAC is concerned about the distance between the industry and the residential areas of the village.

The EAC, taking into account the submission made by the project proponent has a detailed deliberation in its 324<sup>th</sup> meeting during 19<sup>th</sup>-21<sup>st</sup> April, 2023 and **deferred** the proposal for want of following information.

1. The instant proposal appears to be overlapping the existing industrial area that covers under CRZ area, however, PP and Consultant shall provide the justification why the instant proposal is not covered under the CRZ notification, 2011.
2. Greenbelt proposed outside the industrial area which will not satisfy the purpose of 33% of the green belt. PP shall allocate the greenbelt inside the proposed industrial estate only and accordingly the lay out has to be revised.
3. Location of the power plant shall be demarcated in the layout, the power plant location shall not be planed near to the River.
4. For the Pesticides industry, waste management and effluent treatment plan shall be submitted.
5. PP also proposed Petrochemical products and petrochemical based processing industry; in this regard PP shall bring out the clear details of Petrochemical products and petrochemical to be handle, manufacturing, type of industry etc.
6. The boundary of the project is adjacent to village Suva. Considering extremely hazardous nature of the project, the PP should provide the health hazard risk assessment (for fugitive emissions, water contamination, fires, explosions, and other accidents involving hazardous chemicals, etc) and clearly marking high, medium and low risk zones within 10 km radius from a reputed institute, management and mitigation plan of hazardous products, fugitive emissions, water contamination etc. A comprehensive plan for the same to be provided in EIA-EMP.

### 3.7.5. Recommendation of EAC

Deferred for ADS

### 3.8. Agenda Item No 8:

#### 3.8.1. Details of the proposal

<b>Bellampalle on NH-363 (Mancherial – Chandrapur Hwy ) in Telangana state and terminating at Gadchiroli on NH-353C on (Gadchiroli- Nagpur Hwy) in Maharashtra state (150 km) Section which is further sub divided into following sections: • Section-2: MH/TL Border - Gadchiroli in Maharashtra state (86 km). Passing through two no of districts namely Chandrapur and Gadchiroli by National Highways Authority of India PIU Chandrapur located at CHANDRAPUR,MAHARASHTRA</b>			
<b>Proposal For</b>		Fresh ToR	
<b>Proposal No</b>	<b>File No</b>	<b>Submission Date</b>	<b>Activity (Schedule Item)</b>
IA/MH/INFRA1/421705/2023	10/14/2023-IA.III	17/03/2023	Road (7(f))

#### 3.8.2. Project Salient Features

1. The project proponent along with the DPR consultant M/s RITES Ltd made a presentation through Video Conferencing and provided the following information:-
2. The proposal is for development of 4 lane Greenfield Access controlled highway starting from Bellampalle on NH-363(Mancherial – Chandrapur Highway) in Telangana state and terminating at Gadchiroli on NH-353C on (Gadchiroli-Nagpur Highway) in Maharashtra state (150 km) Section which is further sub divided into Section-2: MH/TL Border - Gadchiroli in Maharashtra state passing through districts namely Chandrapur and Gadchiroli (Total length - 86 km) M/s National Highway Authority of India.
3. The proposed highway section-1 starts from Bellampalle on NH-363 towards Gadchiroli. The Geo Coordinates of the project site start at 19°35'310"N and 79°40'075"E and ends at 20°12'03.11"N and 80°00'42.85"E respectively.
4. The proposed project falls under 7(f) - Highway, Category-A, as per EIA notification 2006. Total investment/cost of the project is Rs 3078.84 Crores.
5. The land use/land cover around 1 km of the proposed alignment is majority agricultural/private land followed by government/barren & forest land.
6. Right of Way (RoW): 70m in Plain & Rolling Terrain including at VUP/LVUP/SVUP locations with Slip/Service Road and 60m in Forest Area.
7. Terrain and Topographical Features: The project area is located in the state of Maharashtra. The topography in the proposed project area is mainly plain and undulating area. The areas have an elevation ranging of 398.3736 m (1307 ft).
8. Details of water bodies, impact on drainage: There is Rivers –2 Nos. Canal-1 Nos. Total –3 Nos. falling along the alignment. There shall be no major impact on the drainage system as 474 nos. numbers of structures (such as culverts, minor bridges, major bridges etc.) will be constructed.
9. Water requirements: The total requirement of water for construction is estimated to 100000 KLD. Water will be extracted from surface sources. The ground water will be abstracted for camp site after obtaining the permission from appropriate authority. The ground water will be abstracted for camp site after obtaining the permission from ground water board.
10. Tree cutting: The alignment will require cutting of approximately 1500 nos. of trees falls in proposed ROW. However, bare minimum no. of trees to be felled for construction of four lane road. Detailed tree inventories will be provided after joint enumeration with the appropriate authority in EIA.
11. Diversion of forest land: Approx. 30 ha land under RF land along the roads and canals. The forest proposal shall be prepared after consultation with concerned forest officer if it attracts FC under section 2, 1980.
12. The proposed alignment passes at a distance of 5.26 km from the boundary of proposed but not notified in State/ Central Gazette, Kanhargaon Wildlife Sanctuary, to the North East to South East side.
13. Land acquisition and R&R issues involved: About 650 ha land likely to be acquired as per NH Act 1956; compensation will be given as per RFCT LARR Act, 2013.

14. Employment potential: During the construction of the road project around 500 persons would be employed temporarily for a period of 2 years. However due to construction of toll plazas approx. 250 persons will be employed on permanent basis. The total manpower requirement for the project is 750. Preference will be given to local people for employment. The Project will enhance economic development in the area through industrial growth, agricultural, and commercial development and consequent employment generation, savings in travel time & shall provide easy access to social infrastructure.
15. Benefits of the project: The proposed access controlled project with new alignment has been envisaged through an area which shall have the advantage of simultaneous development as well as shall result in a shorter distance to travel. The project will enhance economic development in the area through industrial areas Agriculture (Market access), commercial development and consequent employment. The junctions with existing road will be planned in the form of interchanges and flyover to ensure uninterrupted flow of traffic. The proposed road would act as the prime artery for the economic flow to this region. It will enhance opportunities to locals, strengthen tourist development, ensure road safety, and provide better transportation facilities and other facilities such as way side amenities. Vehicle operating cost will also be reduced due to improved road quality. The compensatory plantation and road side plantation shall further improve the air quality of the region.
16. Details of Court cases: No court case is pending against the proposal.

### 3.8.3. Deliberations by the EAC in previous meetings

N/A

### 3.8.4. Deliberations by the EAC in current meetings

1. As mentioned by PP the alignment of Bellampalle-Gadchiroli passing through ESZ of Kanhargaon Wildlife Sanctuary in Maharashtra. However, the proposed alignments are passing through the wildlife corridor of Tadoba Andhari Tiger Reserve, Kanhargaon Wildlife Sanctuary, Navegaon Nagzira Tiger Reserve, Chaprala Wildlife Sanctuary, Bhamargarh Wildlife Sanctuary in Maharashtra and Indravati National Park, Bhiramgarh Wildlife Sanctuary, Sitanadi Wildlife Sanctuary, Udanti Wildlife Sanctuary in Chhattisgarh.
2. The EAC, after examining the documents submitted by the project proponent and detailed deliberations in its 324<sup>th</sup> meeting on 19<sup>th</sup> – 21<sup>st</sup> April, 2023, *deferred* the project for grant of Terms of Reference (ToR) for the want of following documents/information:
3. The alignment of Bellampalle-Gadchiroli passing through ESZ of Kanhargaon Wildlife Sanctuary in Maharashtra. however the proposed alignments are passing through the wildlife corridor of Tadoba Andhari Tiger Reserve, Kanhargaon Wildlife Sanctuary, Navegaon Nagzira Tiger Reserve, Chaprala Wildlife Sanctuary, Bhamargarh Wildlife Sanctuary in Maharashtra and Indravati National Park, Bhiramgarh Wildlife Sanctuary, Sitanadi Wildlife Sanctuary, Udanti Wildlife Sanctuary in Chhattisgarh Considering the sensitive nature of the alignment a sub-committee will make a site visit before considering the proposal further for ToR. Sub-Committee will comprise of representatives of EAC, NTCA, WII, ZSI, PCCF (Wildlife) or its representative of respective states and Mr. Nitin Kakodkar, former PCCF, Govt of Maharashtra as a special invitee. The Committee will visit the sites in the month of June 2023.

### 3.8.5. Recommendation of EAC

Deferred for ADS

## 3.9. Agenda Item No 9:

### 3.9.1. Details of the proposal

**Kuduthini Industrial Area Phase -2 by KARNATAKA INDUSTRIAL AREAS DEVELOPMENT BOARD (KIADB) located at BALLARI,KARNATAKA**

**Proposal For**

Fresh ToR

Proposal No	File No	Submission Date	Activity (Schedule Item)
IA/KA/INFRA1/423741/2023	10/18/2023-IA.III	28/03/2023	Industrial estates/ parks/ complexes/ areas, export processing Zones (EPZs), Special Economic Zones (7(c))

### 3.9.2. Project Salient Features

1. The project proponent along with the EIA Consultant M/s Ecomen Laboratories Pvt. Ltd., made a presentation through Video Conferencing and provided the following information:
2. The proposal is for Development of Kuduthini Phase-2 Industrial Area (Area 217.899 Ha) at Kudithini Village, Ballari Taluk & District, Karanataka by M/s Karnataka Industrial Areas Development Board (KIADB).

### 3.9.3. Deliberations by the EAC in previous meetings

N/A

### 3.9.4. Deliberations by the EAC in current meetings

The EAC noted that the documents/Information provided to the Committee are different than those on the Parivesh Portal including the presentation and therefore the Committee returned the proposal in present form and advise the PP to revise the Form-I with correct information and ask the PP circulate the correct information/documents for further consideration of the proposal.

The EAC also warned the EIA Consultant M/s Ecomen Laboratories Pvt. Ltd. for submitting different versions and advised to check correctness of the same before circulating the same to the Committee.

### 3.9.5. Recommendation of EAC

Returned in present form

### 3.10. Agenda Item No 10:

#### 3.10.1. Details of the proposal

**Construction of four lane highway from Areraj to Bettiah section of NH-139W (From km 0.000 to km 41.882) in the State of Bihar under Bharatmala Pariyojana. by National Highways Authority of India located at PURBI CHAMPARAN, BIHAR**

**Proposal For**

Fresh ToR

**Proposal No**

**File No**

**Submission Date**

**Activity (Schedule Item)**

IA/BR/INFRA1/420748/2023

10/15/2023-IA.III

17/03/2023

Road (7(f))

### 3.10.2. Project Salient Features

1. The project proponent along with the DPR consultant M/s Lea Associate South Asia Pvt Ltd. made a presentation through Video Conferencing and provided the following information:-
2. Construction of 4 lane Areraj to Bettiah Section of NH-139W: Starts from Areraj town (Design Ch. 0.000) in district East Champaran and ends after Bettiah town merge into SH-727 (Design Ch.41.882) in district West Champaran in the state of Bihar”. The total length of the project alignment is approx. 41.882 Km. (Total Project length= 41.882 km).
3. The proposed project starts from SH-54 near Areraj in district of [East Champaran \(Motihari\)](#) with design Ch. 0.000 and terminates at NH-727 after Bettiah at chainage (Km 41.882) in district of [West Champaran](#) (Bettiah) in the state of Bihar. The alignment falls in 02 districts i.e., “East Champaran and West Champaran” in the state of Bihar. The Latitude and Longitude of start point is 26°33'52"N, 84°40'12"E and end point is 26°51'27"N, 84°27'59"E respectively.
4. Land use/ Land cover details of the project site:

S. No.	Land use/Land cover	Area (ha)	Percentage %	Remarks if any
1.	Private land	179.8313	94.07	Agriculture Land
2.	Government land	10.8609	5.68	Agriculture / Barren / other Land
3.	Forest land	0.480	0.25	Protected Forest land (Vacant land of crossing of link roads and river.
	Total	191.1722	100	-

1. Right of Way (RoW): The proposed Right of Way of the project is 45m.
2. Terrain and topographical features: The terrain of the alignment is basically plain.
3. Details of water bodies, impact on drainage: The proposed alignment is crossing through 1 nos. of canal. The balancing culverts shall be provided to ensure no water logging in the area and all storm water shall be channelized systematically to the nearest natural stream.
4. Water requirements: Approx. 1322 KLD Water will be extracted from suitable surface sources (river/canals) or ground water after obtaining necessary permissions from the competent authority. Ground water proposed to be used only for camp site for transient period after obtaining the permissions from appropriate authority.
5. Tree cutting: About 2231 trees are likely to be affected due to proposed RoW of 45 m out of which approx. 23 nos. of trees fall in protected forest land (vacant space on both sides of existing Trihut Canal has been notified as Protected Forest) and remaining 2208 falls in the private agriculture field. The actual no. of trees proposed to be cut will be provided in the EIA after joint enumeration with appropriate authorities of respective State Government. Efforts will be made to minimize the trees loss by restricting trees cutting within formation width/toe lane. Avenue plantation shall be carried out as IRC: SP: 21:2009 “Guidelines on Landscaping and Tree Plantation” on available RoW apart from statutory requirements.
6. Diversion of forest land: The proposed project highway will require diversion of 0.480 ha. of Protected Forest land in district West Champaran in the state of Bihar. The forest proposal shall be prepared after consultation with concerned forest officer.
7. The proposed project is 300 meters far away from the notified Eco-sensitive zone boundary of Udaipur Wildlife sanctuary.
8. Land acquisition and R&R issues involved: The Project requires approx. 190.6922 ha of land except of 0.480 ha. Forest land. About 288 nos. of structures (Pucca Building, temporary sheds, huts etc.) will be affected due to proposed highway. Compensation shall be paid as per NH Act, 1956 and RFCTLARR Act, 2013.
9. Employment potential, No. of people to be employed: During the construction of the road project around 120 persons/day would be employed temporarily for a period of 2.5 years. However due to construction of toll plazas approx. 10 persons will be employed on permanent basis and 50 nos. of employees on temporary basis. The Preference will be given to local people for employment.
10. Benefits of the project - The Areraj-Bettiah section is a part of SH-54 and nearly 37 km length in existing road (Adalwari-Manikpur). The existing road SH-54 is passing through various town and villages such as Areraj, Lauriya, Radhiya, English, Manguraha, Bishunpura Matiarwa, Paharpur, Jagdishpur, Bishambharpur, Kathaiya, Barwat sena, and Bettiah comes in major habitation. To avoid the major habitation along the existing road SH-54 (Areraj-Bettiah), the project road has proposed from Areraj (before of Areraj). Accordingly, the proposed project will decongest the growing traffic from Areraj, Radhiya, Paharpur, English, Jagdishpur, Bishambharpur, Bishunpura and Bettiah towns and hence will reduce the carbon footprint and fuel consumption. The plantation will enhance the micro-climate of area. Besides, it will augment better connectivity and will lead to the easy accessibility of the local people to essential socio-economic services such as health care, education,

administrative services and trade centre's enhancing the general quality of life.  
 11. Details of Court cases- No Court case involved.

**3.10.3. Deliberations by the EAC in previous meetings**

N/A

**3.10.4. Deliberations by the EAC in current meetings**

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**3.10.5. Recommendation of EAC**

Recommended

**3.10.6. Details of Terms of Reference**

**3.10.6.1. Specific**

**Specific Conditions of EAC**

- |    |   |
|----|---|
| 1. | <ol style="list-style-type: none"> <li>1. Proponent will design the alignment with least curvature having with necessary structural provisions for safe passage of wildlife and re-alignment for saving of forest patch.</li> <li>2. The proponent shall carry out a detailed traffic flow study to assess inflow of traffic from adjoining areas like airport/urban cities. The detailed traffic planning studies shall include complete design, drawings and traffic circulation plans (taking into consideration integration with proposed alignment and other state roads etc.). Wherever required adequate connectivity in terms of VUP (vehicle underpass)/ PUP (Pedestrian underpass) needs to be included.</li> <li>3. Road safety audit (along with accident/black spots analysis) by any third-party competent organization at all stages namely at detailed design stage, construction stage and pre-opening stage to ensure that the project road has been constructed considering all the elements of road safety.</li> <li>4. Provide compilation of road kill data on the wildlife on the existing roads (national and state highways) in the vicinity of the proposed project. Provide measures to avoid road kills of wildlife by the way of road kill management plan.</li> <li>5. The alignment of road should be such that the cutting of trees is kept at bare minimum and for this the proponent shall obtain permission from the competent authorities. Alignment also should be such that it will avoid cutting old and large and heritage trees if any. All such trees should be geo-tagged, photographed and details be submitted in the EIA –EMP report. PP should explore possibility of reducing RoW considering very large number of tree cutting involved.</li> <li>6. Trees if any with heronries, pelicanaries etc will be identified by state forest department (chainage wise) and alignment will be changed to protect such trees. Details of the same to be provided in the wildlife management plan in the EIA-EMP</li> <li>7. The proponent shall carry out a comprehensive socio-economic assessment and also impact on biodiversity with emphasis on impact of ongoing land acquisition on the local people living around the proposed alignment. The Social Impact Assessment should have social indicators which can reflect on impact of acquisition on fertile land.</li> <li>8. The Social Impact Assessment shall take into consideration of key parameters like people's dependency on fertile agricultural land, socio-economic spectrum, impact of the project at local and regional levels.</li> </ol> |
|----|---|

	<p>9. As per the Ministry's Office Memorandum F. No. 22-65/2017-IA.III dated 30th September, 2020, the project proponent, based on the commitments made during the public hearing, shall include all the activities required to be taken to fulfil these commitments in the Environment Management Plan along with cost estimates of these activities, in addition to the activities proposed as per recommendations of EIA Studies and the same shall be submitted to the ministry as part of the EIA Report. The EMP shall be implemented at the project cost or any other funding source available with the project proponent.</p> <p>10. In pursuance of Ministry's OM no stated above the project proponent shall add one annexure in the EIA Report indicating all the commitments made by the PP to the public during public hearing and submit it to the Ministry and the EAC.</p> <p>11. The Action Plan on the compliance of the recommendations of the CAG as per.</p>
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### 3.10.6.2. Standard

7(f)	<b>Road</b>
<b>Project Details</b>	
1.	Examine and submit a brief description of the project, project name, nature, size, its importance to the region/state and the country.
2.	Submit detailed alignment plan, with details such as nature of terrain (plain, rolling, hilly), land use pattern, habitation, cropping pattern, forest area, environmentally sensitive places, mangroves, notified industrial areas, sand dunes, sea, river, lake, details of villages, teshils, districts and states, latitude and longitude for important locations falling on the alignment by employing remote sensing techniques followed by ground truthing and also through secondary data sources.
3.	Describe various alternatives considered, procedures and criteria adopted for selection of the final alternative with reasons.
4.	If the proposed route is passing through a city or town, with houses and human habitation on the either side of the road, the necessity for provision of bypasses/diversions/under passes shall be examined and submitted. The proposal should also indicate the location of wayside amenities, which should include petrol station/service centre, rest areas including public conveyance, etc. Noise reduction measures should also be indicated.
5.	Submit details about measures taken for the pedestrian safety and construction of underpasses and foot-over bridges along with flyovers and interchanges. If any.
6.	Assess whether there is a possibility that the proposed project will adversely affect road traffic in the surrounding areas (e.g. by causing increases in traffic congestion and traffic accidents). Specific care be also taken to ensure that by passes have a sufficient buffer to prevent unwanted obstructions defying the purpose of the by pass
7.	If the proposed route involves cutting of earth, the details of area to be cut, depth of cut, locations, soil type, volume and quantity of earth and other materials to be removed with location of disposal/ dump site along with necessary permission.
8.	If the proposed route is passing through low lying areas, details of fill materials and initial and final levels after filling above MSL, should be examined and submit.
9.	Examine and submit the water bodies including the seasonal ones within the corridor of impacts along with their status, volumetric capacity, quality likely impacts on them due to the project.
10.	Examine and submit the details of use of fly ash in the road construction, if the project road is located within the 100 km from the Thermal Power Plant.

11.	Explore the possibilities of utilizing the debris/ waste materials available in and around the project area.
<b>Forest</b>	
1.	In case the project involves diversion of forests land, guidelines under OM dated 20.03.2013 may be followed and necessary action taken accordingly.
2.	The information should be provided about the details of the trees to be cut including their species and whether it also involves any protected or endangered species. Measures taken to reduce the number of the trees to be removed should be explained in detail. Submit the details of compensatory plantation.
3.	Necessary green belt shall be provided on both sides of the highway with proper central verge and cost provision should be made for regular maintenance
4.	If there is a possibility that the construction/widening of road will cause impact such as destruction of forest, poaching, reductions in wetland areas, if so, examine the impact and submit details.
<b>Court Matters</b>	
1.	Details of any litigation(s) pending against the project and/or any directions or orders passed by any court of law/any statutory authority against the project to be detailed out.
<b>Land Environment</b>	
1.	Submit Land use map of the study area to a scale of 1: 25,000 based on recent satellite imagery delineating the crop lands (both single and double crop), agricultural plantations, fallow lands, waste lands, water bodies, built-up areas, forest area and other surface features such as railway tracks, ports, airports, roads, and major industries etc.
2.	submit a detailed ground surveyed map on 1:2000 scale showing the existing features falling within the right of way namely trees, structures including Archeological& religious, monuments etc. if any.
3.	If the proposed route is passing through any hilly area, examine and submit the stability of slopes, if the proposed road is to pass through cutting or embankment / control of soil erosion from embankment. Landslide, rock fall protection measures to be indicated.
<b>Wildlife</b>	
1.	The projects is located within 10km. of the sanctuary a map duly authenticated by Chief Wildlife Warden showing these features vis-à-vis the project location and the recommendations or comments of the Chief Wildlife Warden thereon should be furnished at the stage of EC.
2.	Details of blasting if any, methodology/technique adopted, applicable regulations/permissions, timing of blasting, mitigation measures proposed.keeping in view mating season of wild life.
3.	Explore the possibilities of relocating the existing trees. Animal and wild life crossings to be provided in areas inhabited by wild life.
4.	Study regarding the Animal bypasses / underpasses etc. across the habitation areas shall be carried out. Adequate cattle passes for the movement of agriculture material shall be provided at the stretches passing through habitation areas.
5.	Provide compilation of road kill data on the wildlife on the existing roads (national and state highways) in the vicinity of the proposed project. Provide measures to avoid road kills of wildlife by the way of road kill management plan.

<b>Soil Quality Analysis</b>	
1.	Submit the details on compliance with respect to Research Track Notification of MoRTH 20) Examine and submit the details of sand quarry and borrow area as per OM no.2-30/2012-IA-III dated 18.12.2012 on 'Rationalization of procedure for Environmental Clearance for Highway Projects involving borrow areas for soil and earth as modified vide OM of even no. dated March 19, 2013.
<b>Climate and Meteorology</b>	
1.	Climate and meteorology (max and min temperature, relative humidity, rainfall, frequency of tropical cyclone and snow fall); the nearest IMD meteorological station from which climatological data have been obtained to be indicated.
<b>Air Environment</b>	
1.	The air quality monitoring should be carried out as per the new notification issued on 16th November, 2009.
2.	Examine the impact during construction activities due to generation of fugitive dust from crusher units, air emissions from hot mix plants and vehicles used for transportation of materials and prediction of impact on ambient air quality using appropriate mathematical model.
3.	Description of model, input requirement and reference of derivation, distribution of major pollutants and presentation in tabular form for easy interpretation shall be carried out.
<b>Noise Environment</b>	
1.	Identify project activities during construction and operation phases, which will affect the noise levels and the potential for increased noise resulting from this project.
2.	Discuss the effect of noise levels on near by habitation during the construction and operational phases of the proposed highway
3.	Identify noise reduction measures and traffic management strategies to be deployed for reducing the negative impact if any.
4.	Prediction of noise levels should be done by using mathematical modeling at different representative locations.
5.	Also examine and submit the details about the protection to existing habitations from dust, noise, odour etc. during construction stage.
<b>Water Environment</b>	
1.	Examine and submit details of water quantity required and source of water including water requirement during the construction stage with supporting data and also categorization of ground water based on the CGWB classification
2.	Examine and submit the details of measures taken during constructions of bridges across river/ canal/major or minor drains keeping in view the flooding of the rivers and the life span of the existing bridges.
3.	In case of river/ creek crossing, details of the proposed bridges connecting on either banks, the design and traffic circulation at this junction with simulation studies.
4.	Details to ensure free flow of water in case the alignment passes through water bodies/river/ streams etc.
<b>Drainage</b>	

1.	If there will be any change in the drainage pattern after the proposed activity, details of changes shall be examined and submitted.
2.	If the proposed route involves tunneling, the details of the tunnel and locations of tunneling with geological structural fraction should be provided. In case the road passes through a flood plain of the river, the details of micro drainage, flood passages and information on high levels flood periodicity at least of last 50 years in the area should be examined.
<b>Rain Water Harvesting</b>	
1.	Rain water harvesting pit should be at least 3 - 5 m. above the highest ground water table.
2.	Provision shall be made for oil and grease removal from surface runoff
<b>Road and Traffic</b>	
1.	Submit the details of road safety, signage, service roads, vehicular under passes, accident prone zone and the mitigation measures.
2.	IRC guidelines shall be followed for widening &upgradation of road.
3.	IRC guidelines to be followed for traffic safety while passing through the habitat.
4.	Provision of speed breakers, safety signals, service lanes and foot paths should be examined at appropriate locations throughout the proposed road to avoid the accidents.
5.	In case of bye passes, the details of access control from the nearby habitation/habitation which may come up after the establishment of road.
6.	Submit details of social impact assessment due to the proposed construction of road.
7.	Examine road design standards, safety equipment specifications and Management System training to ensure that design details take account of safety concerns and submit the traffic management plan.
8.	Accident data and geographic distribution should be reviewed and analyzed to predict and identify trends - incase of expansion of the existing highway and provide Post accident emergency assistance and medical care to accident victims.
9.	The proponent shall carry out a detailed traffic flow study to assess inflow of traffic from adjoining areas like airport/urban cities. The detailed traffic planning studies shall include complete design, drawings and traffic circulation plans (taking into consideration integration with proposed alignment and other state roads etc.). Wherever required, adequate connectivity in terms of VUP (vehicle underpass)/ PUP (Pedestrian underpass) needs to be included.
<b>Land Acquisition and R&amp;R</b>	
1.	Details of the properties, houses, businesses religious and social placesetc. activities likely to be effected by land acquisition and their financial loses annually.
2.	Detailed R&R plan with data on the existing socio-economic status of the population in the study area and broad plan for resettlement of the displaced population, site for the resettlement colony, alternative livelihood concerns/employment and rehabilitation of the displaced people, civil and housing amenities being offered, etc and the schedule of the implementation of the project specific.
3.	whether governmental or on the basis of BOT etc and provide details of budget provisions (capital & recurring) for the project specific R&R Plan.

4.	Examine and submit the details of sand quarry, borrow area and rehabilitation
5.	If the proposed project involves any land reclamation, details to be provided for which activity land to reclaim and the area of land to be reclaimed.
<b>Socio-Economic Environment</b>	
1.	The proponent shall carry out a comprehensive socio-economic assessment and also impact on biodiversity with emphasis on impact of ongoing land acquisition on the local people living around the proposed alignment. The Social Impact Assessment should have social indicators which can reflect on impact of acquisition on fertile land. The Social Impact Assessment shall take into consideration of key parameters like people's dependency on fertile agricultural land, socio-economics spectrum, impact of the project at local and regional levels.
2.	As per the Ministry's Office Memorandum F.No.22-65/2017-IA.III dated 30th September, 2020, the project proponent, based on the commitments made during the public hearing, shall include all the activities required to be taken to fulfil these commitments in the Environment Management Plan along with cost estimates of these activities in addition to the activities proposed as per recommendations of EIA Studies and the same shall be submitted to the ministry as part of the EIA Report. The EMP shall be implemented at the project cost or any other funding source available with the project proponent.
<b>Environmental Monitoring and Management</b>	
1.	Estimated cost of the project including environmental monitoring cost and funding agencies. Submit environmental management and monitoring plan for all phases of the project viz. construction and operation.
2.	The cost of the Project (capital cost and recurring cost) as well as the cost towards implementation of EMP should be clearly spelt out.
3.	Any further clarification on carrying out the above studies including anticipated impacts due to the project and mitigative measure.
<b>Alignment, ESZ &amp; CRZ</b>	
1.	In case of alignment passing through coastal zones
2.	HTL/LTL map prepared by authorized agencies superimposed with alignment and recommendation of Coastal Zone Management Authority
3.	Details of CRZ-I areas, mangroves required to be removed for the project along with the compensatory afforestation, area and location with budget
4.	Details of road on stilt in CRZ-I areas, design details to ensure free tidal flow
<b>Employment</b>	
1.	Details of Labour camps, machinery location.
<b>Miscellaneous</b>	
1.	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.

### 3.11. Agenda Item No 11:

### 3.11.1. Details of the proposal

<b>Industrial Model Township (IMT) (Phase-II, III &amp; IV) (Under Violation Category) by Haryana State Industrial &amp; Infrastructure Development Co. Ltd. located at REWARI, HARYANA</b>			
<b>Proposal For</b>		Fresh EC	
<b>Proposal No</b>	<b>File No</b>	<b>Submission Date</b>	<b>Activity (Schedule Item)</b>
IA/HR/INFRA1/422611/2023	21-57/2012-IA.III	18/03/2023	Industrial estates/ parks/ complexes/ areas, export processing Zones (EPZs), Special Economic Zones (7(c))

### 3.11.2. Project Salient Features

- The project proponent along with the EIA Consultant M/s Grass Roots Research & Creation India (P) Ltd., Noida, made a presentation through Video Conferencing and provided the following information:
- The proposed project is for development of Industrial Estate at Bawal, District Rewari, Haryana by M/s Haryana State Industrial & Development Corporation (HSIIDC) on a land measuring 868.568 ha to be developed in phase II, III and IV. Phase I was already developed in 1992 before EIA Notification 1994 and EC was not applicable at that time.
- As per the schedule under the EIA Notification, 2006 and its amendments, the project is categorized as 7(c) project and General condition is applicable as Haryana-Rajasthan interstate boundary is at 3.0 km in East direction. Hence the project is 'A' category needs to appraise at Ministry. The total cost of the project is 1012.57 Cr.
- ToR Details: The Terms of Reference (ToR) was considered in 45th EAC (Violation) meeting during 7th-8th March, 2021 in the Ministry of Environment, Forest and Climate Change, New Delhi. TOR was granted on 14<sup>th</sup> June, 2022 under MoEF&CC notification S.O.804 (E) dated 14.03.2017 as a violation proposal.
- Public hearing: Public Hearing was conducted by Haryana State Pollution Control Board (SPCB) as follows:

S.No	Date	Venue	District	Chaired by
1	12.06.2015	At site of HSIIDC Bawal	Rewari	Deputy Commissioner

- HSIIDC Phase -I of IMT was already developed in 1992 before EIA Notification 1994, at that time EC was not applicable. Out of 868.568 ha (Phase-II, III & IV), the area 598.42 ha is already developed and 270.14 ha is to be developed after getting Environment Clearance. The development of Phase-II, III & IV of the Industrial Estate, Bawal, Rewari, Haryana without a prior EC. The development of project started in 2013 and has been carried out in phase-wise manner (upto 60%) till 2018. The operation phase of project started in 2015.

Area	Already Developed Area (Ha)	To be developed Area (Ha)	Total
Area under Phase-II	348.13	62.66	410.79
Area under Phase-III	120.01	62.77	182.78
Area under Phase-IV	130.28	144.71	274.99
Total Area Phase-II, III & IV, Bawal	598.42	270.14	868.568

- Landuse/Landcover of the project site:

S. No.	Description of Land Use	Phase-II	Phase-III	Phase-IV	Existing	Proposed	Total	Area

					Area (ha)	Area (ha)	(ha)
1	Area under Industrial Plots	304.651	79.528	87.286	313.562	157.904	471.466
2	Area under Green belts, Open Spaces, Parking & Road etc.	77.319	75.813	108.156	261.289	0.00	261.289
3	Area Reserved for R&R Residential Plots	0.570	10.906	10.307	0.00	21.74	21.784
4	Area Reserved for Commercial/Institutional Use	16.130	8.882	8.008	0.00	33.022	33.022
5	Area Reserved for Go down Site	0.00	0.00	3.302	0.00	3.302	3.302
6	Area Reserved for CNG Filling Cum Service Station	0.00	0.00	0.809	0.00	0.809	0.809
7	Area under Utilities, CETP, Water Works and Religious Site	3.982	2.039	41.524	13.953	33.592	47.546
8	Area under Sub-station	1.456	0.00	5.438	6.895	0.00	6.895
9	Area Reserved for Primary School/High School/Creche	0.238	1.331	0.619	0.00	2.189	2.189
10	Area under Public Building	0.00	0.00	1.849	0.00	1.849	1.849
11	Area under Cremation Ground	0.339	0.00	1.537	0.00	1.877	1.877
12	Area under Multi Specialty Hospital/ESIC Dispensary	0.558	2.844	0.149	0.00	3.553	3.553
13	Area under Fuel Filling Cum Service Station	0.00	0.910	1.015	0.910	1.015	1.926
14	Area Reserved for Housing Board	3.322	0.00	0.00	0.00	3.322	3.322
15	Area under Labour Welfare Centre	0.453	0.00	0.00	0.00	0.453	0.453
16	Area under Bus Stand	0.918	0.00	0.00	0.918	0.00	0.918
17	Area under Fire Station	0.841	0.00	0.00	0.841	0.00	0.841
18	Area under Informal Sector	0.00	0.250	0.00	0.00	0.250	0.250

19	Area Reserved for Police Post	0.00	0.218	0.00	0.00	0.218	0.218
20	Area under Garbage Collection Centres	0.00	0.056	0.00	0.056	0.00	0.056
21	To be planned later	0.00	0.00	4.823	0.00	4.823	4.823
	Total	410.777	182.777	274.822	598.42	270.14	868.568

1. List to industries to be housed with the proposed project site, only for projects covered under 7(c) category of EIA Notification, 2006:
2. CETP (Category B as per EIA Notfn., 2006 and amendments thereto)
3. Commercial, Institutional, Hospital Buildings (Category B as per EIA Notfn., 2006 and amendments thereto)
4. Synthetic Organic Chemical - Drugs/Pharmaceutical (Category B as per EIA Notfn., 2006 and amendments thereto)
5. Food Processing
6. Printing and Packaging
7. Textile and Garments
8. Automobile manufacturing
9. Plastic
10. Electrical & Electronics
11. IT & ITES
12. Footwear designing
13. General Engineering

1. Terrain and topographical features: The district broadly forms part of Indo-Gangetic alluvial plain of Yamuna sub basin. It has vast alluvial and sandy tracts and is interspersed strike ridges which are occasionally covered with blown sand. The Sand dunes attain a height of 30m but on an average they have height of 7 m with respect to surroundings. Some of the dunes support light vegetation where as others are of shifting nature depending upon the direction of wind. The hill ranges are part of great Aravalli chain and contain valuable mineral deposits and natural meadows. The elevation of land in the area varies from 232 m in the north to 262 m above mean sea level in south. The master slope of the area is towards the north. Due to arid climate, the soils are light coloured and moreover. Due to excessive evaporation, soils are calcareous and have lime nodules in the subsurface horizon. Tropical arid brown soils (Ustochcept, haplustarp and sales thids) exist in the Eastern part of the district: most of the soils are of medium texture. Loamy sand is the average textured in all blocks. The organic content of the soil rages sand upto 0.40%. The available phosphorus in the soils ranges ground 21.5 kg/hectare. Soils have moderate salinity hazards, high salinity and moderate alkalinity hazard in the major part of the area.
2. Details of water bodies, impact on drainage: Sahibi River : 9.58 km (East) side of the project location.
3. Water requirement of the project:

Phase wise details	Fresh Water requirement @ 4000 gallon/acre	Recycled Water generated @50% of fresh water (MLD)	Total Water Requirement (MLD)
Phase-II	18.43	9.22	27.51
Phase-III	8.20	4.10	12.30
Phase-IV	12.33	6.17	18.50
Total	38.96	19.49	58.31

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1. HSIIDC had applied for Ground water permission and it is in progress for 58.312 MLD
  2. Diversion of Forest land: No forest land involved in the current proposal.
  3. The project is not located within 10 km of Protected Areas (PA) including National Parks, Sanctuaries and Tiger Reserves and project is not located within the Eco-Sensitive Zone (ESZ) or Eco-Sensitive Area (ESA).
  4. Waste Management: At present, the individual industrial plot/units in IMT Bawal are having arrangement with M/s GEPIL (Gujarat Enviro Protection and Infrastructure (Haryana) Pvt. Ltd. as nodal agency of the Government of Haryana for development and operation of a Hazardous waste Management (HWM) Facility at Village-Pali near Pali-Mohabatabad Stone Crusher Zone, Faridabad, Haryana on the leasehold land as per Lease Agreement executed between HEMS and Municipal Corporation Faridabad (MCF) on 19th April, 2005.
  5. The IMT, Bawal will not generate hazardous waste from their office and administration building, there are 33 persons working as staff and approx.100 persons are as visitors on daily basis. Only domestic waste i.e 23 kg/day is being generated which is being disposed of as per MSW rules 2016.
  6. CETP details: 58 MLD
  7. STP details: Only CETP of 58 MLD is proposed for the treatment.

1. Energy conservation measures with estimated saving: Use of solar photovoltaic systems for street lighting, Maximum use of sunlight, All lighting systems (interiors, external building features such as facades, illuminated roofs, architectural features, and building grounds) will be in conformance to the ECBC Code, To replace all the incandescent lamps and 40W tube lights with conventional choke with CFL & T5-28W tube lights respectively, To replace all the old tube light street light fixtures with energy efficient fixtures and the use of solar water heating systems will be mandatory.
2. Details of Rain Water Harvesting: The HSIIDC has been already constructed 46 rainwater harvesting structure for the recharging of the collected rain water from the premises.
3. Land acquisition and R&R issues involved: An area of 21.79 ha, under R&R Policy has been developed. The R&R Policy of the State Govt. is being followed for the ex-land owners, which involves annuity for 33 years and allotment of plots for residential or industry. As per policy 2% (1% for skill & 1 % for development works) of the total land cost will be used under village development scheme.
4. Employment potential: The proposed project will generate the employment during construction around 3000 and during the operational phase 40000 workers.
5. Benefits of the project: Constructing Industrial Estates encourages local investors and foreign companies to invest in this country. The extension of these plants is hardly possible because there is no additional area or because of the high cost for the extension. Constructing Industrial Estates that have their own common effluent treatment plant decrease the load for the city's sewage treatment plant and ease the operation. As factories and workshops in developing countries usually don't have pre-treatment plants, oils and lubricants used for repair and maintenance of transportation vehicles, industrial waste water complicates the operation of CETP. Each tenant at the Industrial Estate is required to pre-treat his industrial waste water to agreed standards prior to conveying it to the Industrial Estate's common effluent treatment plant. Treated waste water can then more easily meet standards for reuse.

### 3.11.3. Deliberations by the EAC in previous meetings

N/A

### 3.11.4. Deliberations by the EAC in current meetings

The EAC, taking into account the submission made by the project proponent had a detailed deliberation in its 324<sup>th</sup> meeting during 19<sup>th</sup> – 21<sup>st</sup> April, 2023 and *deferred* the proposal observing that the instant proposal is a violation proposal and to appraise the proposal further the following information is required:

1. Status of the Action taken by the State Govt/SPCB for the violation under the EP(A), 1986
2. The detailed justification with capex details under different heads for the total project cost and as well for 60%

constructed and operated from 2013,2018 respectively.

3. The list of industries operating from then and their status of EC/CTE/CTO compliances.
4. The commissioning year of CETP 30 MLD capacity and the no. of years either construction /or operation of the units without CETP.
5. The details and the calculations wrt surface water precipitation should be revised and accordingly the required no of RWH structures shall be reworked and the deficiency shall be considered under cost saved i.e damage cost.
6. Damage cost assessment during construction: 5 +years.
7. Air pollution: Apart from total excavation of about 29 lac cum the qty handled for construction materials including transportation shall be considered for emission assessment and accordingly the damage needs to be calculated and the presented assessment does not cover the total quantity .
8. The EU 28 damage rates needs (2015) to be revised for 2023 apart from the basic rates.
9. Other damages pertaining to water pollution (consumption of GW/SW for construction and by the workers at the per. Capita rates shall be worked and damage considered ) as per the CGWA notification for abstraction as well as restoration)
10. Damages/cost saved by avoidance. Method needs to be calculated for Sewage, solid waste(domestic), OHS, Land environment (soil and top soil), Noise, etc needs to be assessed and submitted separately for the construction/development period.
11. Ecology and Biodiversity: The rate of Rs:10 per sapling shall be revised considering the cost of sapling, planting and maintenance for three years.
12. The total cost saved due to non approval of WLC&M plan which shall consist of capital and recurring cost per year for the total period.
13. Likewise the damage cost shall be worked out for all the environmental attributes as mentioned above apart from cost saved due to non/partial compliance of Disaster management and risk assessment in the operating industries and energy conservation measures.
14. Cost saved in EMP for the total period @10% per year shall be assessed for Damage assessment.
15. 3% of economic benefit accrued during violation period shall also be considered and added to Damage assessment
16. The budgetary provision of Rs 471.0 Lacs (exact figure may be mentioned) for compliance of grievances in the public hearing shall be spent in 3 years.
17. All the budgetary provisions under Remediation, NRAP and CRAP shall be spent within 3 years and specific and monitarable.
18. The nature of the industrial units which are already setup in the estate and EC obtained by the units which have been already established.
19. The details of units which are already setup/established in the industrial estate which have not obtained EC.
20. Extent of constructions depicted in the entire industrial estate along with the layout map.
21. Infrastructure already developed in the estate Area.
22. Area developed under Greenbelt in the industrial area and also shall be demarcate in the KML file.

### 3.11.5. Recommendation of EAC

Deferred for ADS

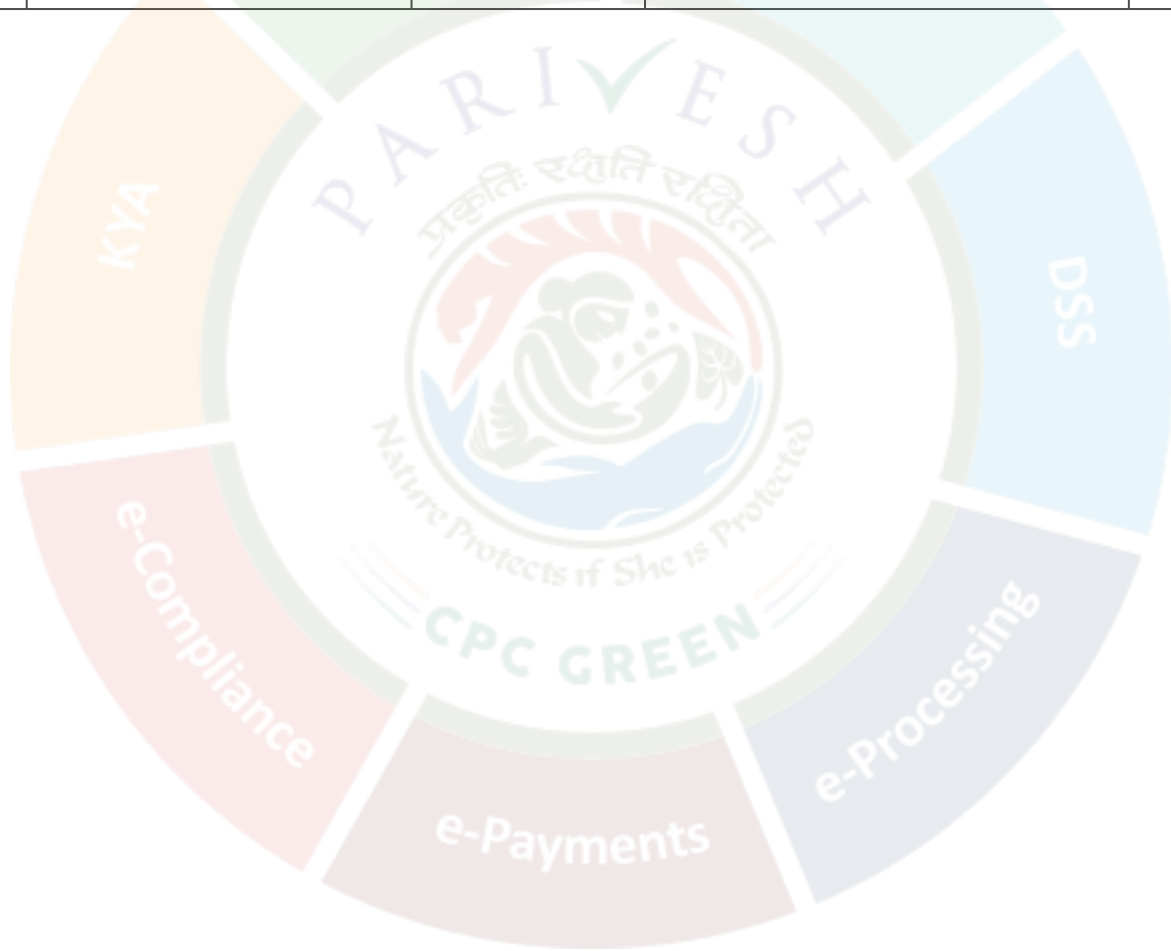
### 4. Any Other Item(s)

N/A

### 5. List of Attendees

Sr. No.	Name	Designation	Email ID	Remarks
1	Dr Amardeep Raju	Scientist E	ad.raju@nic.in	Present
2	Dr Deepak Arun Apte	Chairman, EC	spiderconch@gmail.com	Present
3	Shri Nirmaledu Kumar	Member (EAC)	nirmalendu soi@gov.in	Present

4	Dr V K Jain	Member (EAC)	drvkjain_1@hotmail.com	Present
5	Dr M V Ramana Murthy	Member (EAC)	ramana2865@gmail.com	Present
6	Shri S Jeyakrishnan	Member (EAC)	sukumaranjeyakrishnan@gmail.com	Present
7	Shri Manmohan Singh Negi	Member (EAC)	negims84@hotmail.com	Present
8	Prof Mukesh Khare	Member (EAC)	kharemukesh@yahoo.co.in	Present
9	Prof Ashok Kumar Pachauri	Member (EAC)	pachauri1945@yahoo.com	Present
10	Dr Manoranjan Hota	Member (EAC)	hota.manoranjan@gmail.com	Present
11	Shri Sham Wagh	Member (EAC)	sham.wagh@gmail.com	Present
12	Dr Niraj Sharma	Member (EAC)	neeraj.ccri@nic.in	Present





सत्यमेव जयते

**File No: 10/29/2021-IA.III**  
**Government of India**  
**Ministry of Environment, Forest and Climate Change**  
**IA Division**  
**\*\*\***



Date **05/07/2023**



To,

Dr Biswajit Mukhopadhyay  
National Highways Authority of India  
G-5 & 6, Sector-10, Dwarka, New DELhi-110075 G-5 & 6, Sector-10, Dwarka, New DELhi-110075,  
Mancherial District: 14 villages Peddapalli District:- 16 villages Jayashankar Bhupalpally District:- 14  
villages Hanamkonda District (Warangal Rural) : 10 villages Total: 54 villages, MANCHERIAL,  
TELANGANA, G-5 & 6, Sec-10, 110075  
biswajit@nhai.org

**Subject:** Grant of prior Environmental Clearance (EC) to the proposed project under the provision of the EIA Notification 2006 -regarding.

**Sir/Madam,**

This is in reference to your application submitted to MoEF&CC vide proposal number IA/TG/INFRA1/421775/2023 dated for grant of prior Environmental Clearance (EC) to the proposed project under the provision of the EIA Notification 2006 and as amended thereof.

2. The particulars of the proposal are as below :

<b>(i) EC Identification No.</b>	EC23A3601TG5902616N
<b>(ii) File No.</b>	10/29/2021-IA.III
<b>(iii) Clearance Type</b>	Fresh EC
<b>(iv) Category</b>	A
<b>(v) Project/Activity Included Schedule No.</b>	7(f) Road
<b>(vi) Sector</b>	INFRA-1 Construction of 4 lane Access Controlled New Greenfield Highway Section (Mancherial-Warangal) of length 108.406 km from Narva village to Oorugonda village (Design Chainage 3+834 to 112+240) under Other Economic Corridor (NHO) under NH(O) program on Hybrid Annuity mode in the state of Telangana.
<b>(vii) Name of Project</b>	
<b>(viii) Name of Company/Organization</b>	National Highways Authority of India
<b>(ix) Location of Project (District, State)</b>	MANCHERIAL, TELANGANA
<b>(x) Issuing Authority</b>	MoEF&CC

(xi) Applicability of General Conditions as per EIA Notification, 2006

No

(xii) Validity of EC

05/07/2033

1. The proposal is for Construction of 4 lane Access Controlled New Greenfield Highway Section (Mancherial-Warangal) of length 108.406 km from Narva village to Oorugonda village (Design Chainage 3+834 to 112+240) under Other Economic Corridor (NHO) under NH(O) program on Hybrid Annuity mode in the state of Telangana. The proposed project highway starts from Narva village (Chainage 3+834) (Latitude: 18°50'33.55" N Longitude: 79°33'19.12" E) in Mancherial district and terminates at Oorugonda village (Chainage 112+240) (Latitude: 18° 2'36.76" N Longitude: 79°41'7.41" E) in Hanamkonda (Warangal Rural) district in the state of Telangana.
2. The proposed project falls under 7(f) - Highway, Category-A, as per EIA notification 2006. Total investment/cost of the project is Rs 4058.63 Crores.
3. ToR details: The Terms of Reference (ToR) was considered in 266th EAC meeting during 12th July, 2021, in the Ministry of Environment, Forest and Climate Change, New Delhi. TOR was granted on 26th July, 2021.
4. Public hearing: Public Hearing was conducted by Telangana State Pollution Control Board (TPCB) as follows. - Refer table - 1

1. Land use/ Land cover of the project site. - Refer Table - 2

1. Terrain and Topographical Features: The topography of the proposed National Highway is mainly flat to undulating in nature. The elevation of the project varies from 116 m msl to 306 m msl.
2. Details of water bodies, impact on drainage: There are 04 Nos. of rivers, 06 Nos. of ponds and 46 Nos of streams which are crossing the proposed alignment. There shall be no major impact on the drainage system as 01 Major Bridge at 7+800 (Pedda Vagu), 01 Major Bridge at 25+450 (Godavari River), 01 Major Bridge at 32+449 (Bokkala Vagu), 01 Major Bridge at 32+449 (Maner River) and 01 Major Bridge at 79+602 (Chali Vagu) and also other Minor bridges where there is crossing the canals/streams ponds will be constructed. The proposed highway will also have ROB - (1), Major Bridges - (5), Minor Bridges - (45), Intersection - (1), Vehicular underpasses - (24), Pedestrian underpasses - (35), LVUPs - (4), SVUPs - (9), Box Culverts - (146), Pipe Culverts - (36) and Flyovers - (5).
3. Water requirements: Total requirement of water for the construction is estimated 28,00,047 KLD which will be met through surface water and ground water proposed to be used only for camp site for transient period after obtaining the permissions from appropriate authority. Ground water proposed to be used only for camp site for transient period after obtaining the permissions from appropriate authority.
4. Tree cutting: The alignment will involve cutting of approx. 14,689 no of trees. The avenue plantation will be carried out as per IRC SP-21 and National Green Highway policy 2015 within the available ROW. About 44,067 no's trees has been proposed to be planted as compensatory plantation trees.
5. Diversion of forest land: The proposed project doesn't require diversion of forest land as the revised alignment does not falls under forest land.
6. The Proposed project alignment passes through the ESZ of Siwaram Wildlife Sanctuary over a length of 10.579 km and width of 45.00 m in Mancherial District and over a length of 13.910 km and width of 45 m in Peddapally District. Draft Eco sensitive zone of Sivaram Wildlife Sanctuary Notification No. SO. 2145 (E) dated 24th May 2018 is yet to be finalize. Since the notification is in draft stage, therefore NBWL Clearances is applicable.
7. As per the primary survey a total 90 birds species were recorded, among them schedule - I species are Brahminy Kite Crested Serpent Eagle, Grey Hornbill, Indian Peafowl, Indian Pied Hornbill, Shikra, Spotted Owllet (Table - 13). In mammals, a total 28 mammals species were recorded, schedule - I species are Blackbuck, Chinkara, Wild Dog, Four Horned Antelope, Gaur, Grey Wolf, Indian Pangolin, Leopard, Leopard Cat, Ratel /Honey Badger, Sloth Bear, Tiger. In reptiles, a total 19 reptiles found in project area, schedule - I are Yellow Monitor Lizard, Python, Indian Black Turtle, Mugger. In amphibians, a total 12

- species were found in the project area. Similarly, 51 fishes species found in project area.
8. Waste Management: 500 gram/head/day (approx.) during construction phase and 50 kg/day (approx.) during operation phase at tolls and from wayside amenities area within ROW may be generated. Bio degradable waste shall be disposed through bio composting and other waste through landfill site.
  9. Details of Rain Water Harvesting: Rainwater harvesting structures have been provided at the interval of 500 m on either sides of carriageway as per availability of RoW and depending on the water table of first aquifer (Approx. 216 nos. of structures shall be constructed). The total cost of the rainwater harvesting structures including its maintenance is Rs.1,22,50,000 and this cost has been covered in the EMP cost.
  10. The Project requires approx. 566.01 ha. of land. Approx. 35 nos. of structures are coming in the proposed RoW. The land will be acquired as per procedure laid down in RFCT LARR Act, 2013. Estimated cost for Land and Rehabilitation & Resettlement including land acquisition has been worked out to Rs. 316.10 Crores.
  11. Employment potential: During the construction of the highway project around 800 persons would be employed temporarily for a period of 2 years. However due to construction of toll plazas approx. 40 persons will be employed on permanent basis. Preference will be given to local people for employment.
  12. Benefits of the project: This project starts from Ramaraopet village in Macherial district and terminates at Oorugonda village in Warangal district in the state of Telangana. The proposed access controlled project with new alignment has been envisaged through an area which shall have the advantage of simultaneous development as well as shall result in a shorter distance to travel. The junctions with existing road will be planned in the form of interchanges and flyover to ensure uninterrupted flow of traffic. The proposed road would act as the prime artery for the economic flow to this region. It will enhance economic development, provide employment opportunities to locals, strengthen tourist development, ensure road safety, and provide better transportation facilities and other facilities such as way side amenities. Vehicle operating cost will also be reduced due to improved road quality. The compensatory plantation and road side plantation shall further improve the air quality of the region.
  13. Details of Court cases- No court case is pending against the proposed project.
  14. based on the information submitted and clarification provided by the project proponent and detailed discussions held on all the issues during 324<sup>th</sup> meeting of Expert Appraisal Committee held on 19<sup>th</sup>- 21<sup>st</sup> April, 2023 recommended the project for grant of Environmental Clearance with stipulated specific conditions along with other Standard EC Conditions.
  15. The Ministry of Environment, Forest and Climate Change has considered the proposal based on the recommendations of the Expert Appraisal Committee (Infrastructure, CRZ and other Miscellaneous projects) and hereby decided to grant Environmental Clearance for the 'Construction of 4 lane access controlled New Greenfield Highway Section of NH163G from Mancherial to Warangal from Narva village to Oorugonda village (Design Chainage 3+834 to 112+240) under Other Economic Corridor under NH(O) scheme in the State of Telangana M/s National Highways Authority of India (Length-108.406 km)' under the EIA Notification, 2006 as amended, subject to strict compliance of the following specific conditions, in addition to all standard conditions applicable for such projects.

S.No	Date	Venue	District	Table-1 Chaired by
1	07/03/2022	Puttapaka Village site, Near Highway construction, Manthani Mandal.	Peddapalli	Additional District Magistrate
2	15/03/2022	Mahatma Jyothiba Phule BC welfare Residential School Complex(Boys), Mogullapally(V and M),	Ayashankar Bhupalapally	Joint Collector
3	23/03/2022	Z.P High school, Gatlakaniparti village, sayam peta mandalam	Hanumakonda	Additional District Collector
4	30/03/2022	Open Place Shetpally Gram Panchayath, Shetpally, village Jaipur Mandal,	Mancherial	Additional Collector

Table - 2

Land use/ Area (ha.)	Percentage
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Land cover		
Water Body	447.542811	3.962867881
Road built up	127.285896	1.127081425
vegetation cover	650.713908	5.761891785
built up settlement	109.788656	0.972148201
Crop Land	9957.45104	88.17047651
Barren Land	0.625	0.005534202
Total area	11293.40731	100

## Annexure 1

### Specific EC Conditions for (Road)

#### 1. Technical

Sr. No	EC Conditions
1.1	<ol style="list-style-type: none"> <li>1. The environmental clearance is subject to obtaining prior clearance from the wildlife angle, including clearance from the Standing Committee of the National Board for Wildlife, as applicable, Grant of environmental clearance does not necessarily imply that Wildlife Clearance and other clearances shall be granted to the project and that their proposal for Wildlife Clearance and other clearances will be considered by the respective authorities on its merit and decision taken.</li> <li>2. The user agency shall take up construction of underpasses, eco-bridge / elevated road at 2 locations as indicated by the DFO, Pedapally at Adavi Srirampur and Ramaiahpally with minimum 100 m in length and as per the designs and dimensions prescribed by WII, Dehradun to provide safe passage for wild animals and to avoid accidents.</li> <li>3. The user agency shall take up construction of animal underpasses at locations indicated by DFO, Mancheril/State Forest Department with minimum 100 m in length and as per the design and specifications of WII, Dehradun to facilitate safe movement across the proposed NH and to avoid accidents.</li> <li>4. All commitments made in the Wildlife Management &amp; Conservation Plan submitted to the Ministry shall be implemented in letter and spirit. The status of implementation of Wildlife Management &amp; Conservation Plan shall be submitted to the Regional Office of the Ministry along with 6 monthly compliance report. Zoological Survey of India will oversee the same in coordination with forest department and PP will provide necessary funds to ZSI within 3 months from the issue of EC.</li> <li>5. Wildlife movement during the construction be monitored by forest department and if found necessary additional over/underpasses be developed. Provision for the same be made in the project budget. The budget should be provided to respective state forest departments within 3 months of grant of EC.</li> <li>6. PP shall undertake the all structures proposed along the proposed alignment as proposed at table no. Table 2.13 (a): Details of the major bridges and Table 2.13 (b): Details of Minor bridges EIA/EMP report.</li> <li>7. Forest category should be differentiated into forest land and Non-forest land for the tree cutting.</li> <li>8. No tree can be felled/transplant unless exigencies demand. Where absolutely necessary, tree felling shall be with prior permission from the concern Authority. Old, large and heritage value trees should be retained based on girth and age regulations as may be prescribed by the Forest</li> </ol>

Sr. No	EC Conditions
	<p>Department. Where the trees need to be cut/transplanted with prior permission from the concerned local Authority, compensatory plantation in the ratio of 1:10 (i.e. planting of 10 trees for every 1 tree that is cut/ non-survival of any transplanted tree) shall be done and maintained. Plantations to be ensured species (cut) to species (planted). All the plantation will be done by state forest department as deposit work and not by private contractors.</p> <ol style="list-style-type: none"> <li>9. Trees with heronry (breeding ground for herons, egrets, etc), pelicanary or community nesting of birds like Painted Storks, Ibis, Egrets, Pelican, etc will not be allowed to fell. In case of presence of such, alignment will be required to be changed to save such trees.</li> <li>10. Green belt development (tree plantation) in lieu of the trees being felled in non forest land should be carried out by the respective State forest departments as deposit work and not by the private contractor. Green belt must be developed using exclusively native species. No exotic species to be used for the same.</li> <li>11. Apart from land compensation, the loss for crop has also to be compensated.</li> <li>12. Road side tree plantation of local fruit bearing species or in nearby village in collaboration with Gram Panchayats.</li> <li>13. Besides all the structures proposed, an additional adequate number of Culverts shall be provided for water supply to the agricultural land. All the Culverts proposed in the project shall be distinguished into water supply for the people and water supply for the agricultural land.</li> <li>14. Quarry areas shall be barricaded during mining operations. The abandoned quarry shall be developed as water reservoirs with proper fencing around quarry area. Details for Quarry area operation and rehabilitation given the EIA report shall be followed.</li> <li>15. In all the construction sites within 150 m of the nearest habitation, noisy construction work such as crushing, concrete mixing will be stopped during the night time between 10.00 pm to 6.00 am. No noisy construction activities will be permitted around educational institutions/health centres (silence zones) up to a distance of 100 m from the sensitive receptors. All plants and equipments used in construction shall strictly conform to the CPCB/SPCB noise standards.</li> <li>16. Traffic Control Devices/Road Safety Devices/ Roadside Furniture including various types of cautionary, inforatory, regulatory as mandatory signboards, road markers, studs, etc. shall be provided at appropriate locations all along the project stretch in accordance with the specifications laid down in Manual of Specifications and Standards for Expressways (IRC: SP:99-2013) and IRC:8, IRC:25, IRC:26, IRC:35, IRC:67, IRC:79, IRC:103 and Section 800 of MORTH Specifications.</li> <li>17. Prepare the traffic prediction report for complete project (including all packages of this project) considering the cumulative impact of the traffic on the environment and submit to the Ministry and concerned Regional Office within 3 months.</li> <li>18. All the major, minor bridges and culverts should not affect the drainage systems. Flood plains of the rivers/ drainage systems are not to be disturbed.</li> <li>19. No Ground water shall be extracted and used. Approval/permission of concerned authority shall be obtained before drawing surface water from canal or any other sources.</li> <li>20. Rain water harvesting pit shall be at least 3 - 5 m above the highest ground water table.</li> <li>21. In borrow pits, the depth of the pit shall be regulated such that the sides of the excavation will have a slope not steeper than 1:2, from the edge of the final section of bank. Soil erosion checking measures shall be carried out. Details for Borrow area operation and rehabilitation given in EIA report shall be followed.</li> <li>22. Proponent shall keep the finish road level sufficiently elevated from ground level with provision of railing on both sides to restrict animal crossing in order to avoid the possibility of wildlife injury/death. Major water bodies have been observed in the vicinity of the proposed road alignment &amp; may be potential human elephant conflict points, appropriate nos of animal safe passages as per the guideline framed by the Wildlife Institute of India and in consultation with Chief Wildlife Warden.</li> </ol>

Sr. No	EC Conditions
	<p>23. As per the Ministry's Office Memorandum F. No. 22-65/2017-IA.III dated 30th September, 2020, the project proponent shall abide by all the commitments made by them to address the concerns raised during the Public Hearing. The project proponent shall initiate the activities proposed by them, based on the commitment made in the Public Hearing, and incorporate in the Environmental Management Plan and submit to the Ministry. All other activities including pollution control, environmental protection and conservation, R&amp;R, wildlife and forest conservation/protection measures including the NPV, Compensatory afforestation etc., either proposed by the project proponent based on the social impact assessment and R&amp;R action plan carried out during the preparation of EIA report or prescribed by EAC, shall also become part of EMP and shall be implemented.</p>

**Standard EC Conditions for (Road)**

**1**

Sr. No	EC Conditions
1.1	Cut and fill works shall be carried out strictly in accordance with the design drawings proposed at the time of appraisal of the project.
1.2	Sidewalk shall be provided along the bridges.
1.3	The drain shall be at least 1m away from the toe of the embankment of the road adopting IRC guidelines. Longitudinal drains shall be provided all along the project road to ensure proper drainage of the area. In addition, adequate number of under passes and culverts to act as cross drainage structures shall also be provided.
1.4	Blasting shall be carried out during fixed hours (preferably during mid-day) or as permitted by the concerned authority. The timing shall be made known to all the people within 1000m (200m for pre-splitting) from the blasting site in all directions.
1.5	Rain water harvesting including oil and grease trap shall be provided as prescribed by CGWB guidelines. Water harvesting structures shall be located at every 500m along the road. Vertical drain type rainwater harvesting structures shall be set up to minimize surface runoff losses of rainwater.
1.6	The embankments/slopes and the slopes left after cutting shall be provided with vegetative growth to avoid soil erosion.
1.7	Construction spoils including bituminous material and other hazardous materials must not be allowed to contaminate water courses and the dump sites for such materials must be secured so that they shall not leach into the ground water. The non-usable bitumen spoils shall be disposed off in a deep trench providing clay lining at the bottom and filled with soil at the top (for at least 0.5m)
1.8	Construction camps shall be proposed 500 m away from the nearest settlements to avoid conflicts and stress over the infrastructure facilities with the local community. Location for stockyards for construction materials shall be identified at least 1000m from water sources. Garbage tanks and sanitation facilities will be provided at camps.

## 2 Compliance Reporting

Sr. No	EC Conditions
2.1	The project proponent shall submit online six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change and also upload the same, including results of monitored data, on their company website.
2.2	For compliance of conditions during operation phase, PP shall either itself undertake the responsibility of compliance or ensure setting up institutional mechanism for compliance of conditions under intimation on the website of the Ministry of Environment, Forest and Climate Change.
2.3	The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
2.4	The Ministry reserves the right to stipulate additional conditions, if found necessary.
2.5	Beside fulfilling obligations under Corporate Social Responsibilities as per Company's Act, 2013, the proponent has to adhere to the followings Environment Responsibilities: i.The Company shall have a well laid down Environment Policy approved by the Board of Directors. ii.The Environment Policy shall prescribe for standard operating process/ procedures to bring into focus any infringements/ deviation/violation of the environmental or forest norms/ conditions. iii.The hierarchical system or Administrative Order of the company to deal with environmental issues and for ensuring compliance with the environmental clearance conditions shall be furnished. iv.To have proper checks and balances, the company shall have a well laid down system of reporting of non-compliances/ violations of environmental norms to the Board of Directors of the company and/or shareholders or stakeholders at large.

## 3 Note

Sr. No	EC Conditions
3.1	The above conditions shall be enforced in a time bound manner
3.2	The Environmental Clearance to the aforementioned project is under provisions of EIA Notification, 2006. It does not tantamount to approvals/consent/permissions etc. required to be obtained under any other Act/Rule/regulation. The Project Proponent is under obligation to obtain approvals /clearances under any other Acts/ Regulations or Statutes, as applicable, to the project.
3.3	The PP is under obligation to implement commitments made in the to the issues raised during public hearing Conceptual Plan/ Environment Management Plan, which forms the part of this EC.
3.4	Further attention of project proponent is drawn towards the following Acts/ Regulations/ Statutes/ Guidelines issued from time to time: (a)All the Indian Road Congress (IRC) guidelines wherever applicable may be followed. (b)Provisions related to tree cutting as contained in the Forest (Conservation) Act, 1980 and related rules of the respective state. (c)Dust Mitigation Measures stipulated for Construction and Demolition Activities as provided in the amendment Notification GSR 94(E) dated 25.01.2018 of MoEF&CC. (d)Provisions for use of Fly ash as building material in the construction as per stipulated under Fly Ash Notification of September, 1999 and amended as on

Sr. No	EC Conditions
	27th August, 2003 and 25th January, 2016. (e)Provisions for management of construction and demolition activities related thereto as contained in Construction and Demolition Waste Management Rules, 2016.

#### 4 General Instructions (Part A)

Sr. No	EC Conditions
4.1	Approval/permission of concerned authority shall be obtained before drawing surface water from canal or any other sources.
4.2	The proponent shall obtain permission from the competent authorities for tree felling along the proposed alignment.
4.3	As per MoEF&CC's circular no. J-11013/41/2006-IA.II (I) dated 22.09.2008, provision shall be made for supply of kerosene or cooking gas and pressure cooker to the labourers, mobile toilets, mobile STP, safe drinking water, medical health care, Crèche and temporary structures for living during construction phase.
4.4	The funds earmarked for environmental protection measures shall be kept in separate account and shall not be diverted for other purpose. Year-wise expenditure shall be reported to MoEF&CC and its concerned Regional Office.

#### 5 General Instructions (Part B)

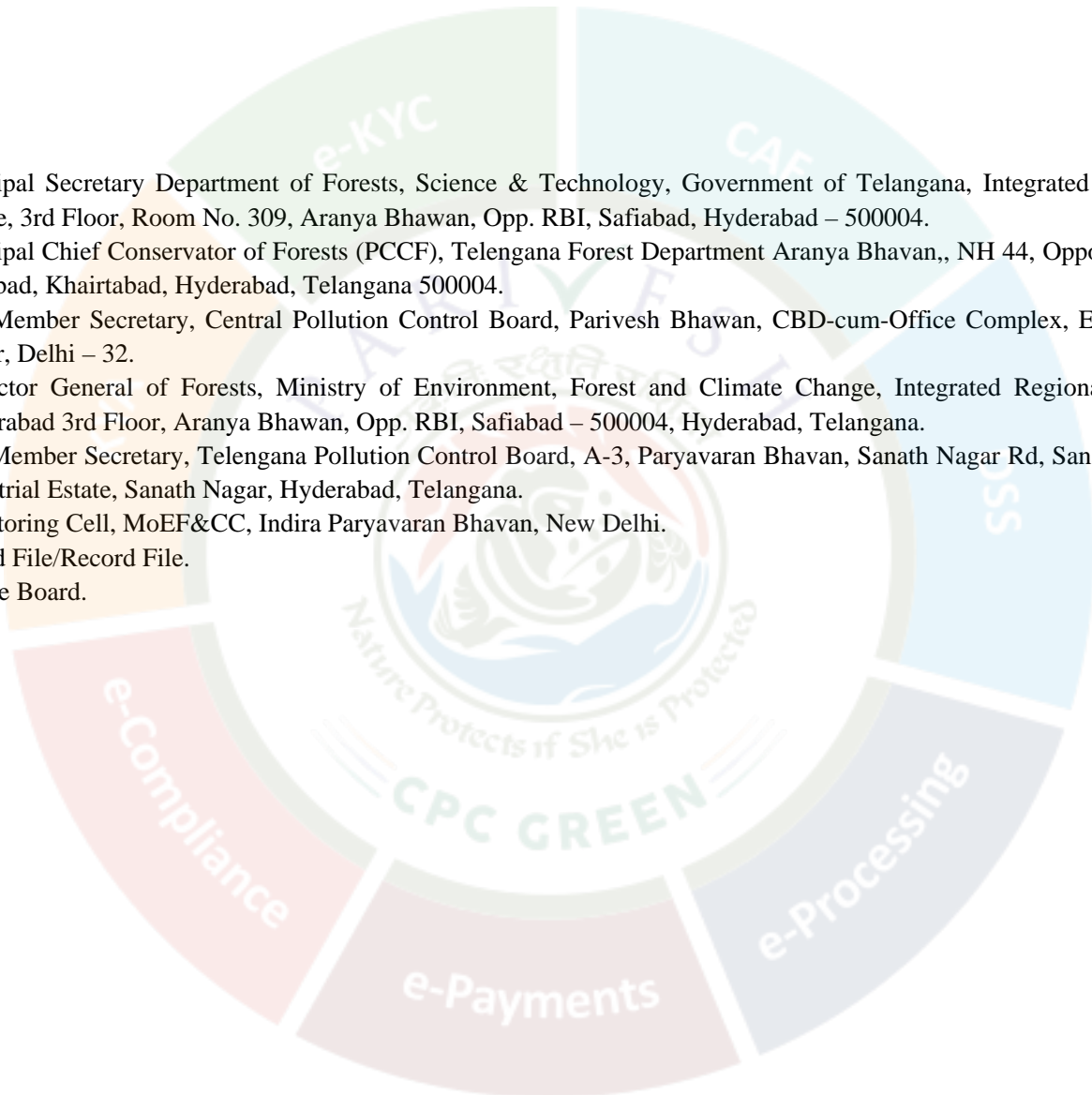
Sr. No	EC Conditions
5.1	The project proponent shall prominently advertise it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days indicating that the project has been accorded environment clearance and the details of MoEF&CC/SEIAA website where it is displayed.
5.2	The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
5.3	The project proponent shall have a well laid down environmental policy duly approved by the Board of Directors (in case of Company) or competent authority, duly prescribing standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions.
5.4	Action plan for implementing EMP and environmental conditions along with responsibility matrix of the project proponent (during construction phase) and authorized entity mandated with compliance of conditions (during operational phase) shall be prepared. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Six monthly progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six-Monthly Compliance Report.
5.5	Concealing factual data or submission of false/fabricated data may result in revocation of this

Sr. No	EC Conditions
	environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
5.6	The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.

**Annexure 2**

**Copy To**

1. Principal Secretary Department of Forests, Science & Technology, Government of Telangana, Integrated Regional Office, 3rd Floor, Room No. 309, Aranya Bhawan, Opp. RBI, Safiabab, Hyderabad – 500004.
2. Principal Chief Conservator of Forests (PCCF), Telangana Forest Department Aranya Bhavan,, NH 44, Opposite RBI, Saifabad, Khairtabad, Hyderabad, Telangana 500004.
3. The Member Secretary, Central Pollution Control Board, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, Delhi – 32.
4. Inspector General of Forests, Ministry of Environment, Forest and Climate Change, Integrated Regional Office, Hyderabad 3rd Floor, Aranya Bhawan, Opp. RBI, Safiabab – 500004, Hyderabad, Telangana.
5. The Member Secretary, Telangana Pollution Control Board, A-3, Paryavaran Bhavan, Sanath Nagar Rd, Sanath Nagar Industrial Estate, Sanath Nagar, Hyderabad, Telangana.
6. Monitoring Cell, MoEF&CC, Indira Paryavaran Bhavan, New Delhi.
7. Guard File/Record File.
8. Notice Board.



**Signature Not Verified**

Digitally Signed by : Dr Amardeep Raju  
Member Secretary, MoEFCC (EC)

Date: 05/07/2023