



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

To,

The PD
National Highways Authority of India
National Highways Authority of India, Sri Towers 3rd Floor, DP 34 SP
Industrial Estate, Guindy, Chennai,,Chennai,Tamil Nadu-600032

Subject: Grant of Environmental Clearance (EC) to the proposed Project Activity under the provision of EIA Notification 2006-regarding

Sir/Madam,

This is in reference to your application for Environmental Clearance (EC) in respect of project submitted to the Ministry vide proposal number IA/AP/MIS/75727/2018 dated 22 Dec 2020. The particulars of the environmental clearance granted to the project are as below.

- | | |
|--------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. EC Identification No. | EC22A034AP110261 |
| 2. File No. | 10-49/2018-IA.III |
| 3. Project Type | New |
| 4. Category | A |
| 5. Project/Activity including Schedule No. | 7(f) Highways |
| 6. Name of Project | Construction of 6-lane highway from Chittoor to Thatchur from Design Ch. 0+000 to Ch. 126+550 of newly declared National Highway NH-716B in the state of Andhra Pradesh and Tamil Nadu under Bharatmala Pariyojana |
| 7. Name of Company/Organization | National Highways Authority of India |
| 8. Location of Project | Andhra Pradesh |
| 9. TOR Date | 09 Oct 2018 |

The project details along with terms and conditions are appended herewith from page no 2 onwards.

Date: 21/12/2022

(e-signed)
Amardeep Raju
Scientist E
IA - (INFRA-1 sector)

Note: A valid environmental clearance shall be one that has EC identification number & E-Sign generated from PARIVESH. Please quote identification number in all future correspondence.

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2. The above mentioned proposal was considered by the Expert Appraisal Committee (EAC) for Infrastructure, CRZ and other miscellaneous projects in its 251st meeting on 28th December, 2020.

3. This is a new greenfield alignment project. The Chittoor to Thachur Section (Newly declared NH 716) is proposed 6-lane highway having total length of 126.550 Km in the states Andhra Pradesh and Tamil Nadu. The Project start (Ch. 0+000) from junction of proposed Bangalore-Chennai expressway (Ch. 152+100) near Chittoor in Andhra Pradesh and ends at NH 5 near Thatchur in the proposed Chennai Peripheral Road project (Ch.126+550) in Thiruvallur district in Tamil Nadu. The proposed alignment is newly declared National Highway-716B. It passes through 2 districts namely Chittoor district in Andhra Pradesh and Thiruvallur district in Tamil Nadu. The proposed project is comprising of 4 number of major bridges, 19 number of minor bridges, 2 number of ROB's, 65 number of Vehicular Underpasses, and 8 number of Interchanges. All safety measures will be considered as per NHA Safety Manual and IRC: SP 88. The proposed Right of Way (ROW) requirement is 70 meter throughout the corridor.

4. The proposed proposal fall under 7(f), Category A as per EIC notification 2006. The overall cost of the project is Rs. 3,840.00 Crore. Total Environmental Budget considered is Rs. 46.5 Crores. Term of Reference (ToR) was issued vide letter No.10-49/2018/IA.III dated 9th October 2018. Public hearing was conducted at Thiruvallur and Chittoor district on 5th July, 2019 and 30th August 2019, respectively.

5. Total land acquisition for the proposed project alignment is approx. 849.782 Ha (including AP Section: 541.050 Ha + TN Section: 308.822 Ha). Resettlement & rehabilitation (R&R) Plan and Social Impact Assessment (SIA) has been prepared for the said project. Total No. of Project Affected households (HHs) Losing Privately owned structures are 192. Project Affected Persons (PAPs) are 768 (No. of PAPs was calculated as per the avg. HH size of the District). The impacted persons are calculated based on affected persons and structures. Apart from this there are seven community properties. Also, there are 329 minor assets like hand pump, bore well pump house etc. Approximately a total number of 45 kiosks and local mobile vendors are affected. Land acquisition (LA) and R&R Budget was prepared based on Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013 (RFCTLARR) and National Highways Act 1956.

6. Altogether, about 3,642 numbers of trees falls within the Corridor of Impact (CoI). However, trees with less than 30 cm girth size have been categorized as poles. The total number of poles is 16,042. The total number of trees and poles is 19,684. There are about 830 trees in forest section of the Road. Efforts will be made to minimize trees loss by restricting tree cutting within formation width. Avenue plantation shall be carried out as per IRC SP: 21:2009 on available ROW apart from statutory requirements.

7. Total 2,504,101 cum of fly ash are proposed to be used for the construction of embankment subject to the availability of the same, from Ennore Thermal Power Station, North Chennai.

8. Total water requirement for construction is estimated approx. 36.5 lacs KL for 2 years that will be sourced from purchasing Tankers. However, the ground water will be extracted for bare minimum requirement after obtaining the permission of appropriate authorities. Provision of rainwater recharge pits at every 500 m interval (staggered) is supposed; subject to the first aquifer below 10m. DG sets will be used as a source of energy.

9. The proposed project requires diversion of 18.569 Ha of forest land. The IRO, MoEFCC vide its letter No 4-APB182/2022-VIJ/579 dated 26th September, 2022 accorded diversion of 4.54 Ha of forest land in compartment No 297, Pulikundaram RF/Pulikundram Beat, Puttur range of Chittoor East Division, Andhra Pradesh. The IRO, MoEFCC vide its letter No. 4-TNC099/2022-CHN/1382 dated 21st December, 2022 has granted diversion of 14.029 Ha of forest land in Tiruvallur forest division, Tamil Nadu.

10. The project will give significant economic benefits to the State. Development of highway will lead to better connectivity and will play a significant role in reducing the pollution due to traffic congestion in city area as well as it will help in changing the socio-economic condition of the people living in the region. Installation of proper road safety system through signage, barricades, crash barriers, noise barrier etc. on project road will further enhance the road safety and minimize human-animal conflicts. The project will also generate direct and indirect employment to the local people of the State. The indirect benefits include savings in vehicle operating costs, less fuel consumption and decreased cost and time of passenger travel. About 2000 Workers will be employed for three years during the construction Phase and 200 Workers will be employed during the Operation Phase.

11. Details of Court cases: No court cases are pending against the proposed project.

12. The project proponent along with the EIA consultant M/s, made a presentation through Video Conferencing during 251st meeting held on 28th December, 2020. The EAC based on the information submitted and clarifications provided by the project proponent and detailed discussions held on all the issues, recommended the project for grant of environmental clearance with stipulated specific conditions along with other Standard EC Conditions.

13. 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 6-lane highway from Chittoor to Thatchur NH-716B (Km0.000 to 126.550) from District Chittoor, Andhra Pradesh to Thatchur, District Tiruvallur, Tamil Nadu**” 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.

A. SPECIFIC CONDITIONS

- (i) 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. Sufficient animal passes shall be provided by NHAI at regular interval as suggested in the Mitigation Plan and the Wildlife Conservation Plan prepared and approved by Chief Wildlife Warden as per recent guidelines of Wildlife Institute of India for linear infrastructure projects.
- (ii) 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.
- (iii) The recommendations of Cumulative Impact Assessment studies and proposed mitigation measures for all the packages shall be implemented in toto and be submitted to the concerned Regional Office of the MoEF&CC along with half yearly compliance report.

- (iv) 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.
- (v) No Ground water shall be extracted and used during the construction and post-construction phases. Approval/permission of concerned authority shall be obtained before drawing surface water from canal or any other sources.
- (vi) The proponent shall obtain permission from the competent authorities for tree felling along the proposed alignment.
- (vii) Quarry areas shall be developed as water reservoirs with proper fencing around quarry area. Rain water harvesting pit shall be at least 3 - 5 m above the highest ground water table.
- (viii) The RoW shall not exceed 70 m at any point of the proposed alignment, except for the junction improvement at the intersections of the other roads. Standardisation of ROW for plain land, undulating land, hilly and mountain terrain and forest land to be defined and to be remain constant for all the packages.
- (ix) 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 be implemented and become part of EMP.

B. STANDARD CONDITIONS:

- i. Responsibility for implementation of EC conditions rests with the project proponent only.
- ii. Cut and fill works shall be carried out strictly in accordance with the design drawings proposed at the time of appraisal of the project.
- iii. The project proponent shall obtain necessary permission from the owning agencies of water bodies/temple/tanks etc., as applicable, before execution of works.
- iv. The project proponent shall obtain necessary permission from the concerned State(s) Irrigation Department(s) before drawing water from the river sources for the purpose of the proposed construction activity.
- v. 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 1000 m (200 m for pre-splitting) from the blasting site in all directions.
- vi. The fly ash shall be used for the proposed project to comply with the Fly Ash Notification, 1999, as amended.
- vii. Rehabilitation of project affected families (PAFs) and payment of compensation to PAFs shall be carried out as per the extant policy of the Central/State Government,

as provided under the law. All the Indian Road Congress (IRC) guidelines wherever applicable may be followed.

- viii. All entry/exit/access points on this highway shall be appropriately designed and preferably frozen to avoid traffic congestion and pollution.
- ix. 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.
- x. All the recommendations of the EMP shall be complied in both letter and spirit. All the mitigation measures submitted in the EIA report shall be prepared in a matrix format and the compliance for each mitigation plan shall be submitted to MoEF&CC.
- xi. Sidewalk shall be provided along the bridges.
- xii. The seismic nature of the area shall be taken into account while designing the project.
- xiii. IRC guidelines shall be followed for widening & up-gradation of road.
- xiv. 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.
- xv. The solid waste generated shall be used for rehabilitating the borrow areas.
- xvi. For providing safety to the crossing animals and avoid road accidents speed breakers/rumbled strips shall be constructed at the identified locations of the animal movements. Enough hoardings and signages shall also be put up for the public and vehicles convenience.
- xvii. Necessary clearance/approval shall be obtained for extraction of sand from the rivers.
- xviii. The embankments/slopes and the slopes left after cutting shall be provided with vegetative growth to avoid soil erosion.
- xix. The hot mix plant shall be located at least 500m away from habitation and on the barren land to avoid its adverse impact on the human population.
- xx. For road safety, IRC guidelines in respect of road signages, service roads, bus bays, inter-sections, pedestrian crossings, etc. shall be strictly adhered to.
- xxi. The responses/commitments made to the issues raised during public hearing shall be complied in both letter and spirit. A hard copy of the action taken shall be submitted to the MoEF&CC and also to its concerned Regional Office.
- xxii. Beside fulfilling obligations under Corporate Social Responsibilities as per Company's Act, 2013, the proponent has to adhere to the followings Environment Responsibilities:
 - (a) The Company shall have a well laid down Environment Policy approved by the Board of Directors.
 - (b) 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.



- (c) 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.
 - (d) 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.
- xxiii. Appropriate measures must be taken while undertaking digging activities to avoid any likely degradation of water quality.
- xxiv. Borrow sites for each quarry sites for road construction material and dump sites must be identified keeping in view the following:
 - (a) No excavation or dumping on private property is carried out without written consent of the owner.
 - (b) No excavation or dumping shall be allowed on wetlands, forest areas or other ecologically valuable or sensitive locations.
 - (c) Excavation work shall be done in close consultation with the Soil Conservation and Watershed Development Agencies working in the area, and
 - (d) 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.
- xxv. 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.
- xxvi. Adequate precautions shall be taken during transportation of the construction material so that it does not affect the environment adversely.
- xxvii. Borrow pits and other scars created during the road construction shall be properly levelled and treated.
- xxviii. The project proponent will set up separate environmental management cell for effective implementation of the stipulated environmental safeguards under the supervision of a Senior Executive.
- xxix. Full support shall be extended to the officers of this MoEF&CC and its Regional Office by the project proponent during inspection of the project for monitoring purposes by furnishing full details and action plan including action taken reports in respect of mitigation measures and other environmental protection activities.
- xxx. MoEF&CC or any other competent authority may stipulate any additional conditions or modify the existing ones, if necessary, in the interest of environment and the same shall be complied with.
- xxxi. In the event of a change in project profile or change in the implementation agency, a fresh reference shall be made to the MoEF&CC.
- xxxii. The project proponents shall inform the Regional Office concerned as well as the MoEF&CC, the date of financial closure and final approval of the project by the concerned authorities and the date of start of land development work.



xxxiii. 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.

14. In addition to above mentioned conditions following general guidelines are to be adhered:

- i. The above stipulations would be enforced among others under the provisions of Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and control of Pollution) act 1981, the Environment (Protection) Act, 1986, the Public Liability (Insurance) Act, 1991, EIA Notification, 2006 and its subsequent amendments. All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department, the Forest Conservation Act, 1980 and the Wildlife (Protection) Act, 1972 etc. shall be obtained, as applicable by project proponents from the respective competent authorities.
- ii. The project proponent shall advertise in at least two local Newspapers widely circulated in the region, one of which shall be in the vernacular language informing that the project has been accorded Environmental Clearance and copies of clearance letters are available with the State Pollution Control Board and may also be seen on the website of the Ministry of Environment, Forest and Climate Change at <http://www.envfor.nic.in>. The advertisement shall be made within Seven days from the date of receipt of the Clearance letter and a copy of the same shall be forwarded to the concerned Regional office of the MOEF&CC.
- iii. A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zila Parishad/Municipal Corporation, Urban Local Body and the Local NGO, if any, from whom suggestions/ representations, if any, were received while processing the proposal. The clearance letter shall also be put on the website of the company by the proponent.
- iv. A copy of the environmental clearance letter shall also be displayed on the website of the concerned State Pollution Control Board. The EC letter shall also be displayed at the Regional Office, District Industries centre and Collector's Office/Tehsildar's office for 30 days.
- v. The proponent shall upload the status of compliance of the stipulated EC conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of the Ministry, the respective Zonal Offices of CPCB and the SPCB.
- vi. The project proponent shall also submit six monthly report on the status of the compliance of stipulated EC Conditions including results of monitored data (both in hard copies as well as by email) to the concerned Regional Offices of MoEF&CC/CPCB/SPCB.
- vii. The environmental statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of EC conditions and shall also be sent to the respective Regional Offices of the Ministry/CPCB/SPCB by e-mail.

15. Any appeal against this clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

16. The Ministry reserves the right to add additional safeguard measures subsequently, if found necessary, and to take action including revoking of the environment clearance under the provisions of the Environmental (Protection) Act, 1986, to ensure effective implementation of the suggested safeguard measures in a time bound and satisfactory manner.

17. This issues with the approval of the Competent Authority.



(Amardeep Raju)
Scientist-E

Copy to:

1. The Principal Secretary, Department of Forests & Environment and Chairman, Govt. of Andhra Pradesh, A.P. Secretariat, Velagapudi, Amaravathi, A.P.
2. The Chairman, Central Pollution Control Board, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, Delhi – 32
3. The Member Secretary, AP Pollution Control Board, Chalamalavari Street, Kasturibaipet, Vijayawada – 520 010.
4. The APCCF (C), Tulja Guda Complex, building, M.J. Market, Hyderabad, (Andhra Pradesh) – 500001
5. The Member Secretary, Tamil Nadu Pollution Control Board, No. 76, Mount Salai, Guindy, Chennai - 32
6. The APCCF (C), MoEF& CC, RO Regional Office (SEZ), Ist and IInd Floor, Handloom Export Promotion Council, 34, Cathedral Garden Road, Nungambakkam, Chennai - 34
7. Monitoring Cell, MoEF&CC, Indira Paryavaran Bhavan, New Delhi.
8. Guard File/Record File
9. Notice Board.



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