

IN THE HON'BLE NATIONAL GREEN TRIBUNAL, WESTERN ZONE,  
PUNE BENCH

IN  
APPEAL NO. 44 OF 2016

IN THE MATTER OF:

Gujarat Khedut Samaj & Ors.

**Vs.**

...Appellants

The Secretary, Ministry of Environment,  
Forest and Climate Change & Ors.

...Respondents

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REG. SR. NO 939-2024  
BOOK NO. 06-2024  
PAGE NO. 189  
DATE : 28 OCT 2024

*[Signature]*  
ALPA A. PRAJAPATI  
NOTARY  
GOVT. OF INDIA



28 OCT 2024

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

**IT IS MOST RESPECTFULLY SHOWETH:**

I, Yogesh Kumar, S/o N. K. Prasad, aged 35 years, resident of Gandhinagar-Gujarat, do hereby solemnly affirm and state as under:-

1. That I am working as Scientist C
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 Appeal thereof and as such authorized and competent to swear the present affidavit.
3. I further submit that I deny all the allegations/averments mentioned in the Appeal filed by the Appellants except those that are specially admitted in the Reply Affidavit filed.
4. That the Appellants herein have challenged the Environmental and CRZ Clearance dated 11.02.2016 granted by the answering Respondent to National Highways Authority of India (hereinafter referred to as "NHAI") for development of Vadodara-Mumbai

*Yogesh Kumar*





Expressway (Phase-I) in Gujarat, Dadra & Nagar Haveli and Maharashtra.

5. It is humbly submitted that a Reply Affidavit was filed on behalf of the answering Respondent in January 2017 and thereafter in April 2017. That an additional affidavit was also filed by the answering Respondent in compliance of the Interim Order of this Hon'ble Tribunal dated 13.09.2017 to place a copy of the order rejecting the application of NHAI for amendment to the Environmental and CRZ Clearance dated 11.02.2016. That the present Reply Affidavit is being filed to bring on record the due procedure followed by the answering Respondent under the provisions of the EIA Notification, 2006 while granting the Environmental and Coastal Zone Regulation (CRZ) Clearance dated 11.02.2016.
6. In this regard, the answering Respondent humbly submits that under the Schedule to the EIA Notification, 2006, as amended, relating to the list of activities requiring prior Environmental Clearance, Highways are covered under entry 7(f) of Clause (7) of the said Schedule, 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 re-alignment or by-passes	i) All New State Highways projects; ii) State Highway expansion projects in hilly terrain (above 1000 m AMSL) and/or ecologically sensitive areas	General Condition shall apply  <u>Note:</u> Highways include Expressways

*[Handwritten Signature]*



7. It is respectfully submitted that further, in exercise of the powers conferred by sub-section (1) and clause (v) of sub-section (2) of section 3 of the Environment (Protection) Act, 1986 read with clause (d) of sub-rule (3) of Rule 5 of the Environment (Protection) Rules, 1986, the then Ministry of Environment and Forest had notified the Coastal Regulation Zone Notification, 1991 on 19th February, 1991. In supersession of the CRZ Notification, 1991, the Coastal Regulation Zone Notification, 2011 was notified on 6th January, 2011, for regulation of developmental activities along the coastal stretches and to ensure the livelihood security to the fisher communities and other local communities, living in the coastal areas, to conserve and protect the coastal stretches.
8. That primarily, the proposal received from the NHAI for the development of Vadodara- Mumbai Expressway (Phase-I) was considered by the Expert Appraisal Committee (hereinafter referred to as the "EAC") in accordance with the provisions of the EIA Notification, 2006 and the CRZ Notification, 2011, in its 127<sup>th</sup> EAC meeting held on 28<sup>th</sup>-30<sup>th</sup> October, 2013 and based on the deliberations held during the meeting, the Terms of Reference dated 14.11.2013 were issued to the Project Proponent (NHAI) for conducting EIA study and public consultation. True copy of the Terms of Reference dated 14.11.2013 issued to the NHAI is herewith annexed and marked as **Annexure- I**.
9. The answering Respondent respectfully submits that the EIA Report was submitted by the NHAI and the public hearing was also conducted in District Bharuch on 24.02.2014, District Vadodara on 25.02.2014, District Surat on 21.02.2014, District Navsari on 28.02.2014, District Valsad on 18.02.2014, District

*Alpa A. Prapatti*



and providing mitigating measures by way of specific and general conditions imposed upon the Project Proponent.

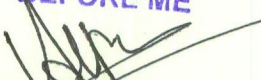
14. In addition to this, regarding the progress of construction of the Mumbai- Vadodara Expressway (Phase-I), it is humbly submitted that out of the total of 10 packages, substantial work on 4 packages have been completed and in one package, 100 % percent of the work is completed. Therefore, substantial developments have taken place in the said project and quashing or setting aside the Clearance would result in huge financial and infrastructural loss to the nation.
15. In view of the above, it is prayed that this Hon'ble Tribunal may take on record and consider above submissions and dismiss the present Appeal or pass any other appropriate order, which the answering respondent shall duly comply with and thus render justice.
16. The answering Respondent craves liberty to file additional information, if any, till *pendente lite*.



#### VERIFICATION

I, the aforementioned Deponent do hereby declare on this 28<sup>th</sup> day of October at Gujarat that the contents of the affidavit are true to my knowledge and belief and nothing material has been concealed therefrom.

SOLEMNLY AFFIRMED  
BEFORE ME

  
ALPA A. PRAJAPATI  
NOTARY  
GOVT. OF INDIA

28 OCT 2024



DEPONENT

डॉ. योगेश कुमार / Dr. Yogesh Kumar

वैज्ञानिक 'सी' / Scientist 'C'

पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय,

Ministry of Environment, Forest & Climate Change,  
भारत सरकार / Govt. of India

ए. के. का., गाँधीनगर (गुजरात) / IRO, Gandhinagar(Gujarat)



DEPONENT

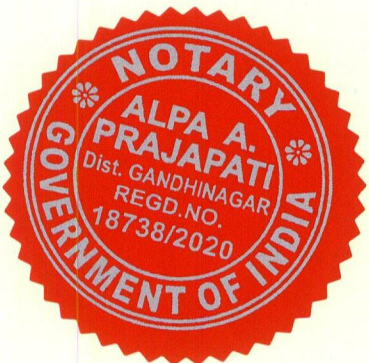
डॉ. योगेश कुमार / Dr. Yogesh Kumar

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पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय,

Ministry of Environment, Forest & Climate Change,  
भारत सरकार / Govt. of India

ए. के. का., गाँधीनगर (गुजरात) / IRO, Gandhinagar(Gujarat)



**1273**Telegram : PARYAVARAN,  
NEW DELHIदूरभाष :  
Telephone : 2436 8526टेलिग्राफ :  
Telex : W-06185 DOE IN  
FAX : 4360878भारत सरकार  
पर्यावरण एवं वन मंत्रालय  
GOVERNMENT OF INDIA  
MINISTRY OF ENVIRONMENT & FORESTS  
पर्यावरण भवन, सी. जी. ओ. कॉम्प्लेक्स  
PARYAVARAN BHAVAN, C.G.O. COMPLEX  
लोधी रोड, नई दिल्ली-110003  
LODHI ROAD, NEW DELHI-110003

F.No.10-57/2013-IA.III

Dated: 14<sup>th</sup> November, 2013To  
Chief General Manager (LA), *-on leave*  
M/s National Highways Authority of India,  
G- 5&6, Sector - 10, Dwarka,  
New Delhi - 110075*DGM(Env)**GMD(Env)*Subject: Finalization of ToR for Vadodara - Mumbai Expressway (Phase-I)  
from km 104.700 (km 390.864 of NH-8) to km 378.722 (km 80.000  
of NE-I) in the States of Gujarat, Dadar Nagar Haveli and  
Maharashtra by M/s NHAI - Reg. *26/11/13*

Dear Sir,

Kindly refer to your above proposal submitted to this Ministry. The project proposal includes construction of new 6/8 lane expressway from km 104.700 (km 390.864 of NH-8) to km 378.722 (Km 80 of NE-1) in the States of Gujarat, Dadar Nagar Haveli and Maharashtra. The total length of Phase-I of the project road is 274.022 kms and proposed Right of Way is 100/120 m. The project road passes through plain & rolling terrain of districts of Vadodara, Bharuch, Surat, Navsari, Valsad in the state of Gujarat (260.4 kms), Union Territory of Dadra & Nagar Haveli (5.5 kms) and district of Thane in the state of Maharashtra (8.1 kms). The project road falls within 10 km of Dadar & Nagar Haveli Wildlife Sanctuary at km 115 and the nearest distance is 260 m. It also falls within 10 km of Dahanu Taluka Eco-Fragile Zone and critically polluted areas of Vapi and Ankleshwar. Land use pattern along the project road is predominantly agricultural (80%) followed by, vacant land (5.33 %), settlements (5.5%), water bodies (4.48%) and vegetation (4.69%). The project requires approximate 3427.5 ha (3230.700 ha Gujarat, 59.87 ha in Dadar & Nagar Haveli, 136.98 ha in Maharashtra) of land to be acquired including forest area of 100.32. Forest land includes 55.59 ha (wood land & reserve forest) in Maharashtra, 44.2 Ha (Village forest of 13.53 Ha in Anklas & protected forest) in Gujarat and 0.527 Ha (protected forest) in Dadra & Nagar Haveli. Proposal for diversion of forest land in Gujarat, Maharashtra and Dadra & Nagar Haveli (UT) are with State Government. Proposed configuration of the road includes 15m carriageway, 3m paved shoulder and 3m earthen shoulder on either side and 12 m depressed median for 8-lane. In case of 6-lane it includes 19.5 m depressed median, 11.25m carriageway, 3m paved shoulder and 3m earthen shoulder. The proposal includes construction of 20 major bridges, 84 minor bridges, 623 culverts, 53 VUPs, 18 Flyovers, 102 pedestrian, 184 cattle underpasses, 27 Toll plazas, 28.85 km service road, 6 truck parking bays and 10 grade separated junctions. Median drain, shoulder drain (both side) and toe drain (both side) has

been proposed all along the road. No bypass is proposed as it's a green field project. The major rivers crossing the project road are Daman Ganga, Kolakriver, Par River, Kaveri, Tapi, Gondawa, Narmada, Dadar and Meni River etc. Total water requirement for 36 months of construction period is 7000 KLD. (Preferably from Gujarat industrial Infrastructure corporation and also from ground and surface water). 12 million cum of Aggregates, 47 lakh MT sand, 37 lakh MT Cement, 2126MT bitumen, and 30 million cum of soils estimated to be required for construction of road. The construction material will be sourced from government approved quarries and borrow areas identified along the project road. Approximately 2 million cum of fly ash is proposed to be used in the embankment. Approximately, 39 religious property 109 community property, 92 Govt. and 1109 private properties are likely to get affected due to proposed development. There are 1247 PAHs and 7512 PAPs (3849 male and 3663 female).

A length of 1.925 km (km 283+325 to km 285+250) falls in Coastal Regulation Zone (CRZ) across Narmada River in Bharuch district of Gujarat that has been recommended by Gujarat Coastal Zone Management Authority. Area falling in CRZ I(i) is 0.73 ha and CRZ I(ii) is 15.22 ha where road will be elevated on via duct. Land acquisition shall be done for 15.22 Ha. However, the area will not be disturbed except for erection of pillars. The total project cost is approximately Rs. 14203.36 Crores including Environmental Management & utility shifting cost (Rs. 667.35 crores) and R&R cost (Rs. 3228.21crores).

The above proposal was considered in the 127<sup>th</sup> EAC meeting held on 28<sup>th</sup> - 30<sup>th</sup> October, 2013. The details as presented by the project proponents and after discussions, the following "Terms of Reference" were finalized to be suitably added to those furnished by the project proponent.

- (i) The project road falls within 10 km of Dadra & Nagar Haveli Wildlife Sanctuary at km 115 and the nearest distance is 260 m. It also falls within 10 km of Dahanu Taluka Eco-Fragile Zone. Necessary clearance from NBWL and Dahanu Taluka Environment Protection Authority shall be obtained.
- (ii) A length of 1.925 km (km 283+325 to km 285+250) falls in Coastal Regulation Zone (CRZ) across Narmada River in Bharuch district of Gujarat. HTL/LTL demarcation from an authorised agency superimposed with the road falling within CRZ area along with the recommendation of SCZMA shall be submitted.
- (iii) The proposal indicates the diversion of 55.59 ha (wood land & reserve forest) in Maharashtra, 44.2 Ha (Village forest of 13.53 Ha in Anklas & protected forest) in Gujarat and 0.527 Ha (protected forest) in Dadra & Nagar Haveli. Forest land. Necessary Stage -I forestry clearance shall be obtained.
- (iv) It is indicated that 12314 nos. trees fall within the proposed RoW. Bare minimum trees to be cut. The information about their species and whether it also involves any protected or endangered species be provided. 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.

- (v) Submit the details of the water bodies along the project road.
- (vi) Explore the possibilities for utilization of fly ash.
- (vii) Explore the possibilities of cold mix technology instead of hot mix technology.
- (viii) Submit details on borrow areas as per OM dated 18.12.2012.
- (ix) Examine and submit a brief description of the project, project name, nature, size, its importance to the region/state and the country.
- (x) As the project involves diversion of forests land, guidelines under OM dated 20.03.2013(Annexure-I) may be followed and necessary action taken accordingly.
- (xi) 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.
- (xii) Submit 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, 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.
- (xiii) Describe various alternatives considered, procedures and criteria adopted for selection of the final alternative with reasons.
- (xiv) 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. and submit a detailed ground survey 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.
- (xv) If the proposed route is passing through any hilly area, examine and submit the measures for ensuring stability of slopes and proposed measures to control soil erosion from embankment.
- (xvi) 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 should be examined.

- (xvii) 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 this clearance from the standing committee of NBWL.
- (xviii) 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.
- (xix) 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. Explore the possibilities of relocating the existing trees.
- (xx) 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.
- (xxi) 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.
- (xxii) Submit details about measures taken for the pedestrian safety and construction of underpasses and foot-over bridges along with flyovers and interchanges.
- (xxiii) 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).
- (xxiv) Examine and submit the details of use of fly ash in the road construction, if the project road is located within the 100 kms from the Thermal Power Plant.
- (xxv) Explore the possibilities of utilizing the debris/ waste materials available in and around the project area.
- (xxvi) Submit the details on compliance with respect to Research Track Notification of MoRTH.

- (xxvii) 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.
- (xxviii) 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.
- (xxix) The air quality monitoring should be carried out as per the notification issued on 16<sup>th</sup> November, 2009. Input data used for Noise and Air quality modeling shall be clearly delineated.
- (xxx) The base line data used for the EIA shall be not more than one year old.
- (xxxi) Identify project activities during construction and operation phases, which will affect the noise levels and the potential for increased noise resulting from this project. 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 should be done by using mathematical modeling at different representative locations.
- (xxxii) 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, 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.
- (xxxiii) Also examine and submit the details about the protection to existing habitations from dust, noise, odour etc. during construction stage.
- (xxxiv) 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.
- (xxxv) If the proposed route is passing through low lying areas, details of filling materials and initial and final levels after filling above MSL, should be examined and submit.
- (xxxvi) Examine and submit 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.

- (xxxvii) Examine and submit 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.
- (xxxviii) Examine and submit 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. Provision of speed breakers, safety signals, service lanes and foot paths should be examined at appropriate locations through out the proposed road to avoid accidents.
- (xxxix) If there will be any change in the drainage pattern after the proposed activity, details of changes shall be examined and submitted.
- (xl) Rain water harvesting pit should be at least 3 - 5 m. above the highest ground water table. Provision shall be made for oil and grease removal from surface runoff.
- (xli) 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.
- (xlii) Submit the details of road safety, signage, service roads, vehicular under passes, accident prone zones and the mitigation measures.
- (xliii) IRC guidelines shall be followed for widening & upgradation of roads.
- (xliv) Submit details of social impact assessment due to the proposed construction of the road.
- (xlv) 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.
- (xlvi) Accident data and geographic distribution should 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.
- (xlvii) If the proposed project involves any land reclamation, details to be provided of the activity for which land is to be reclaimed and the area of land to be reclaimed.
- (xlviii) Details of the properties, houses, business activities etc likely to be effected by land acquisition and an estimation of their financial losses.

- (xlix) 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
- (l) Submit environment management and monitoring plan for construction and operation phases of the project. Submit a copy of your corporate policy on environment management and sustainable development.
- (li) 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.
- (lii) Submit a copy of your CSR policy and plan for meeting the expenditure to address the issues raised during Public Hearing.
- (liii) 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 far as possible.
- (ii) 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.
- (iii) 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 model TORs have been complied with and the data submitted is factually correct (Refer MoEF Office Memorandum No. J-11013/41/2006-IA.II(I) dated 4<sup>th</sup> August, 2009).
- (iv) 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 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 No. J-11013/41/2006-IA.II(I) dated 4<sup>th</sup> August, 2009). The project leader of the EIA study shall also be mentioned.
- (v) Environmental Management Plan presented before the EAC as a part of EIA report, shall be made part of Concessionaire Agreement/

other relevant documents. Proponent shall submit an undertaking in this regard.

- (vi) Since most of the environmental issues are related to design parameters, following additional information should also be provided by PP apart from the information required as per Chapter - 12 of the EIA Guideline manual for Highways (Disclosure of Consultant)
- a) Name of the Design Consultant.
  - b) Name of the EIA consultant, EIA Coordinator, Functional Area Expert and details of accreditation.
- (vii) The EIA report shall be prepared as per the EIA Notification, 2006, as amended from time to time.

Public hearing to be conducted for the project as per provisions of Environmental Impact Assessment Notification, 2006 and the issues raised by the public should be addressed in the Environmental Management Plan.

A detailed draft EIA/EMP report should be prepared in terms with the above additional TOR and should be submitted to the Ministry as per the Notification.

The prescribed ToRs would be valid for a period of two years for submission of the EIA/EMP Reports, after public consultation.

Yours faithfully,



(Lalit Kapur)  
Director (IA-III)

Copy to:

- (i) The Member Secretary, Maharashtra Pollution Control Board, Kalpataru Points, 3<sup>rd</sup> & 4<sup>th</sup> floor, Opp. Cine Planet, Sion Circle, Sion (E) Mumbai - 400 022, Maharashtra
- (ii) The Member Secretary, Gujarat State Pollution Control Board, Paryavaran Bhawan, Sector 10 A, Gandhinagar-382 010, Gujarat.
- (iii) Member Secretary, Daman Diu & Nagar Haveli Pollution Control Committee, Moti Daman-396220, Daman

# 1281

**F.No.10-57/2013-IA.III**

Government of India  
Ministry of Environment, Forest & Climate Change  
(IA.III Section)

Indira Paryavaran Bhawan,  
Jor Bagh Road,  
New Delhi - 3

Dated: 11<sup>th</sup> February, 2015

To

The Chief General Manager (LA),  
National Highways Authority of India,  
G- 5&6, Sector - 10, Dwarka,  
**New Delhi** - 110075

**Sub: 'Development of Vadodara - Mumbai Expressway' (Phase-I) in the States of Gujarat, Dadra & Nagar Haveli and Maharashtra by National Highways Authority of India - Environmental and CRZ Clearance - reg.**

Sir,

This has reference to your application No.1013/1/2k/Env./257 dated 04.11.2015, submitted the above proposal to this Ministry for grant of Environment Clearance (EC) in term of the provisions of the Environment Impact Assessment (EIA) Notification, 2006 and Coastal Regulation Zone (CRZ) Notification, 2011 under the Environment (Protection) Act, 1986.

2. The proposal for '**Development of Vadodara - Mumbai Expressway' (Phase I) from km 104.700 (km 390.864 of NH-8) to km 378.722 (km 80.00 of NE-1 in the States of Gujarat, Dadra & Nagar Haveli and Maharashtra by National Highways Authority of India** was considered by the Expert Appraisal Committee (EAC) in the Ministry for Infrastructure Development, Coastal Regulation Zone Building/ Construction and Miscellaneous projects, in its 154<sup>th</sup> meeting held on 22-23 December, 2015.

3. The details of the project, as per the documents submitted by the project proponents (PP), and also as informed during the above said EAC meeting, are reported to be as under:-

(i) Earlier, the ToR was accorded to the project vide letter No.10-57/2013-IA-II dated 14.11.2013.

(ii) The proposal involves development of Vadodara - Mumbai Expressway (Phase-I) from km 104.700 (km 390.864 of NH-8) to km 378.722 (km 80.00 of NE-) in the States of Gujarat, Dadra & Nagar Haveli and Maharashtra by National Highways Authority of India.

(iii) The project proposal includes construction of new 6/8 lane expressway having total length of 274.022 kms and proposed Right of Way is 100/120 m for Phase-I of the project road. The project road passes through plain & rolling terrain of districts of Vadodara, Bharuch, Surat, Navsari, Valsad in the state of Gujarat (260.4 kms), Union Territory of Dadra & Nagar Haveli (5.5 kms) and district of Thane in the state of Maharashtra (8.1 kms).

(iv) A length of 1.273 km (km 283+800 to km 285+166) falls in Coastal Regulation Zone (CRZ) across Narmada River in Bahruch district of Gujarat that has been recommended by Gujarat Coastal Zone Management Authority. There is no Mangrove area affected within CRZ. Area falling in CRZ I(B) is 1.639 ha, CRZ II

is 4.434 ha and CRZ IV (water body) is 9.050 ha where road will be elevated on viaduct. Land acquisition shall be done for 15.22 Ha. However, the area will not be disturbed except for erection of pillars.

(v) Land use pattern along the project road is predominantly agricultural (90.38%) followed by settlements (3.74%), Barren land (3%), water bodies (2.16%) and vegetation (0.5%).

(vi) The project requires approximate 3444.8529 ha (3229.8739 ha in Gujarat, 77.991 ha in Dadra & Nagar Haveli and 136.988 ha in Maharashtra) of land to be acquired including forest area of 96.403 ha.

(vii) **Forest land:** Total 96.403 ha of forest land involved in the project which includes 52.48 ha (Reserved forest) in Maharashtra, 43.38 Ha (Village forest of 13.53 ha in Anklas & protected forest) in Gujarat and 0.543 ha (protected forest) in Dadra & Nagar Haveli.

(viii) Proposed configuration of the road includes 15 m carriageway, 3 m paved shoulder and 3 m earthen shoulder on either side and 12 m depressed median for 8-lane. In case of 6-lane, it includes 19.5 m depressed median, 11.25 m carriageway, 3 m paved shoulder and 3 m earthen shoulder. The proposal includes construction of 27 major bridges (including canal bridges), 115 minor bridges (including canal & utility bridges), 623 culverts, 53 VUPs, 18 Flyovers, 102 pedestrian, 184 cattle underpasses, 24 Toll plazas, 30.605 km service road, 6 truck parking bays and 11 grade separated junctions. Median drain, shoulder drain (both side) and toe drain (both side) has been proposed all along the road. No bypass is proposed as it's a green field project.

(ix) **Water bodies:** The major rivers crossing the project road are Daman Ganga, Kolak River, Par River, Kaveri, Tapi, Gondawa, Narmada, Dadar and Meni River etc.

(x) **Trees cutting:** Total 30,786 trees are likely to be felled within proposed Right of Way. However, those trees will only be cut which are directly impinging on the construction work. Main species are Khair, Sheesam, Sagwan (Teak), Chandan and Mahuwa trees.

(xi) **Water requirement:** Total water requirement for 36 months of construction period is 7000 KLD. (Preferably from Gujarat Industrial Development Corporation and also from ground and surface water).

(xii) **Solid Waste Management:** 60 kg/day domestic solid waste is to be generated from the labour camps of 300 labour during construction. During Construction phase, domestic waste will be produced from labour camps which will be disposed as per established rules. During operation phase, the domestic/ commercial waste will be generated during operation phase from way side amenities, toll plazas, which will be handled as per established rules.

(xiii) **Hazardous Waste Management:** Used oil and lubricants will be produced which will be temporarily stored and sold to the recycler.

(xiv) 12 million cum of Aggregates, 47 lakh MT sand, 37 lakh MT Cement, 2126 MT bitumen, and 30 million cum of soil is estimated to be required for construction of road. The construction material will be sourced from government approved quarries and borrow areas identified along the project road. Approximately, 2 million cum of fly ash is proposed to be used in the embankment.

(xv) Approximately, 39 religious property 109 community properties, 92 Govt. and 1109 private properties are likely to get affected due to proposed development. There are 1109 PAHs and 2587 PAPs (51.06% males and 48.94% females).

(xvi) **SCZMA Approval:** The Gujarat Coastal Zone Management Authority has recommended the project vide their letter No.ENV-10-2011-373-E dated 27.03.2012.

(xvii) **Investment/Cost:** The EMP budget is Rs.15.65 crores including EMP cost (Rs.16.89 lacs). The R&R cost is Rs.3305.366 crores whereas the total project cost is approximately Rs.14203.36 Crores.

- (xviii) **Wildlife issues:** The project road falls within 10 km of Dadara & Nagar Haveli Wildlife Sanctuary at km 115 and the nearest distance is 260 m.
- (xix) **Critically Polluted Area:** The project falls within 10 km of critically polluted areas of Vapi and Ankleshwar. However the project has no impact on them as Vapi is 7.5 km and Ankleshwar is 4.6 km away from the project.
- (xx) **Public Hearing:** Public Hearing was conducted on 24.02.2014 in District Bharuch, 25.02.2014 in District Vadodara, 21.02.2014 in District Surat, 28.02.2014 in District Navsari, 18.02.2014 in District Valsad, 07.03.2014 in District Silvassa and on 01.12.2014 in District Palghar.
- (xxi) **Employment potential:** Direct and indirect employment.
- (xxii) **Benefits of the project:** Improved quality of life of the area, increased road safety, development of local industry, agriculture and handicrafts etc.

4. The EAC in its 154<sup>th</sup> meeting held on 22-23 December, 2015, has recommended the project for grant of Environmental and CRZ Clearance. As per recommendations of the EAC, the Ministry of Environment, Forest & Climate Change hereby accords Environmental and CRZ Clearance to the above-mentioned project '**Development of Vadodara - Mumbai Expressway' (Phase-I) from km 104.700 (km 390.864 of NH-8) to km 378.722 (km 80.00 of NE-1) in the States of Gujarat, Dadra & Nagar Haveli and Maharashtra by National Highways Authority of India** under the provisions of the EIA Notification, 2006 and the CRZ Notification, 2011 and amendments thereto and circulars issued thereon and subject to the compliance of the specific and general conditions as below:

#### **PART A - SPECIFIC CONDITIONS**

- (i) The development shall strictly be as per the provisions of the CRZ Notification, 2011. The project shall not affect the coastal ecology of the area including flora and fauna.
- (ii) The project proponent shall ensure that there is no destruction of mangrove near the project site during the construction as well as the operation phase of the project.
- (iii) There shall be no dressing or alteration of the sand dunes, natural features including landscape changes for beautification, recreation and other such purpose.
- (iv) All the conditions stipulated by Gujarat Coastal Zone Management Authority vide their letter No.ENV-10-2011-373-E dated 27.03.2012, shall be strictly complied with.
- (v) There shall be no ground water drawl within CRZ.
- (vi) The project proponent shall obtain necessary permission from concerned authorities for their proposed construction.
- (vii) Rehabilitation of project affected families shall be carried out as per the extant policy of the Central/State Government, as provided under the law.
- (viii) The proposal indicates the diversion of 96.403 ha of forest land in the Maharashtra, Gujarat and Dadra & Nagar Haveli, for which the proponent shall obtain the requisite Forest Clearance. The project may be executed in the entire stretch in non-forest land, and while making application to get the Forest Clearance, the execution of work on non-forest land shall not be cited as a reason for grant of FC and in case FC is declined, the forest land shall be maintained at its existing condition. The project proponent shall submit an

undertaking to this effect at the earliest to the concerned Regional Office to this Ministry.

- (ix) The environmental clearance is subject to obtaining prior clearance from wildlife angle including clearance from the Standing Committee of the National Board for Wildlife as applicable. Grant of environmental clearance does not necessarily implies that Wildlife Clearance shall be granted to the project and that their proposals for Wildlife Clearance shall be considered by the respective authorities on their merits and decision taken. The investment made in the project, if any, based on environmental clearance so granted, in anticipation of the clearance from wildlife angle shall be entirely at the cost and risk of the project proponent and Ministry of Environment, Forest & Climate Change shall not be responsible in this regard in any manner.
- (x) All entry/exit/access points on this highway shall be appropriately designed and preferably frozen to avoid traffic congestion and pollution, defeating the very purpose of this expensive project.
- (xi) It is indicated that 30,786 nos. of trees fall within the proposed RoW, however, bare minimum trees should be cut and information of the same should be provided. Necessary permission from competent authority shall be obtained for tree cutting. Necessary compensatory plantation shall be carried out and cost provision should be made for regular maintenance.
- (xii) Minimum of three times the number of trees to be cut shall be planted. It shall be ensured that the trees planted as a part of the afforestation shall be looked after by NHAI. Tree plantation shall be of the same species/local species and survival shall be monitored. Transplantation of trees shall be carried out wherever possible. The tree plantation shall be taken up on the extreme end of the road.
- (xiii) Rain water harvesting including oil and grease trap shall be provided. 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.
- (xiv) R&R shall be as per the guidelines of NHAI/State/Central Government whichever is higher.
- (xv) IRC guidelines shall be followed for widening & up-gradation of road.
- (xvi) All the recommendations of the EMP shall be complied within 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 MoEFCC along with half yearly compliance report to MoEFCC-RO.
- (xvii) Green belt development shall be undertaken as suggested in EMP.
- (xviii) The seismic nature of the area shall be taken into account while designing the project.
- (xix) The project proponent shall obtain necessary permission from the State Irrigation Department before drawing water from the river sources for the purpose of the proposed construction activity.
- (xx) Sidewalk shall be provided along the bridges.



- (xxi) The drain shall be at least 1 m. away from the toe of the embankment of the road adopting IRC guidelines.
- (xxii) 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.
- (xxiii) The solid waste generated shall be used for rehabilitating the borrow areas.
- (xxiv) 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.
- (xxv) Necessary clearance from the State Government shall be obtained for extraction of sand from the rivers.
- (xxvi) Proper signage shall be installed at appropriate locations for the convenience of the traffic movement.
- (xxvii) The embankments/slopes and the slopes left after cutting shall be provided with vegetative turning to avoid soil erosion.
- (xxviii) 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.
- (xxix) Rehabilitation and payment of compensation to the project affected people (PAPs) shall be made as per the policy of the State Government.
- (xxx) Noise barriers shall be provided at appropriate locations particularly in the areas where the alignment passes through inhabited areas so as to ensure that the noise levels do not exceed the prescribed standards.
- (xxxi) For road safety, IRC guidelines in respect of road signages, service roads, bus bays, inter-sections, pedestrians crossings, etc. shall be strictly adhered to.
- (xxxii) The responses/commitments made to the issues raised during public hearing shall be complied with in letter and spirit. A hard copy of the action taken shall be submitted to the Ministry.
- (xxxiii) Corporate Environment Responsibility:
  - 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.

## **PART B - GENERAL CONDITIONS**

- (i) Adequate provision for infrastructure facilities including water supply, fuel and sanitation must be ensured for construction workers during the construction phase of the project to avoid any damage to the environment.

- (ii) Appropriate measures must be taken while undertaking digging activities to avoid any likely degradation of water quality.
- (iii) 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.
- (iv) The construction material shall be obtained only from approved quarries. In case new quarries are to be opened, specific approvals from the competent authority shall be obtained in this regard.
- (v) Adequate precautions shall be taken during transportation of the construction material so that it does not affect the environment adversely.
- (vi) Borrow pits and other scars created during the road construction shall be properly levelled and treated.
- (vii) Adequate financial provision must be made in the project to implement the aforesaid safeguards.
- (viii) 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.
- (ix) Full support shall be extended to the officers of this Ministry/ 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.
- (x) A six-Monthly monitoring report shall need to be submitted by the project proponents to the Regional Office of this Ministry regarding the implementation of the stipulated conditions.
- (xi) Ministry of Environment, Forest & Climate Change (MoEFCC) 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.
- (xii) The Ministry reserves the right to revoke this clearance if any of the conditions stipulated are not complied with the satisfaction of the Ministry.
- (xiii) In the event of a change in project profile or change in the implementation agency, a fresh reference shall be made to the MoEFCC.

- (xiv) The project proponents shall inform the Regional Offices as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of start of land development work.
  - (xv) A copy of the clearance letter shall be marked to concerned Panchayat/ local NGO, if any, from whom any suggestion/representation has been made received while processing the proposal.
  - (xvi) Safety provision such as bus bays, service roads intersection improvement etc., will be carried out by the project proponent. The project proponent shall provide adequate facilities as per IRC norms/ guidelines.
  - (xvii) A copy of the environmental clearance letter shall also be displayed on the website of the concerned State Pollution Control Boards. The EC letter shall also be displayed at the Regional Office, District Industries centre and Collector's Office/ Tehsildar's office for 30 days.
  - (xviii) 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 this Ministry and its concerned Regional Office.
5. 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 and EIA Notification 2006, including the amendments and rules made thereafter.
6. All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department, Forest Conservation Act, 1980 and Wildlife (Protection) Act, 1972 etc. shall be obtained, as applicable by project proponents from the respective competent authorities.
7. 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 and CRZ Clearance and copies of clearance letters are available with the State Pollution Control Boards and may also be seen on the website of the Ministry of Environment, Forest & Climate Change at <http://www.envfor.nic.in>. The advertisement should be made within Seven days from the date of receipt of the Clearance letter and a copy of the same should be forwarded to the Regional Office of this Ministry.
8. 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.
9. This Clearance is subject to final order of the Hon'ble Supreme Court of India in the matter of Goa Foundation Vs Union of India in Writ Petition (Civil) No.460 of 2004 as may be applicable to this project.
10. Status of compliance to the various stipulated environmental conditions and environmental safeguards will be uploaded by the project proponent in its website.

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11. The project proponent shall also submit six monthly reports on the status of compliance of the stipulated Clearance conditions including results of monitored data (both in hard copies as well as by e-mail) to the respective Regional Office of MoEFCC, the respective Zonal Office of CPCB and the SPCBs.

12. The environmental statement for each financial year ending 31<sup>st</sup> March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Boards 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 Clearance conditions and shall also be sent to the respective Regional Offices of MoEFCC by e-mail.

*S.K.*  
11/2/2015  
**(S.K. Srivastava)**  
**Scientist E**

Copy to:

- 1) The Principal Secretary, Department of Forests & Environment and Chairman, GCZMA, Govt. of Gujarat, Sachivalaya, Gandhinagar
- 2) The Secretary, Department of Environment, Govt. of Maharashtra, Mantralaya, Mumbai - 32
- 3) The Secretary (Environment & Forest), Govt. of Dadra & Nagar Haveli, Secretariat, Silvassa
- 4) The Director, Forests & Environment Department, Govt. of Gujarat, Block No.14, 8<sup>th</sup> Floor, Sachivalaya, Gandhinagar - 10
- 5) The Chairman, Central Pollution Control Board, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, Delhi - 32
- 6) The Member Secretary, Maharashtra Pollution Control Board, Kalpataru Points, 3<sup>rd</sup> & 4<sup>th</sup> floor, Opp. Cine Planet, Sion Circle, Sion (E), Mumbai - 22
- 7) The Member Secretary, Gujarat Pollution Control Board, Sector 10-A, Gandhi Nagar -43
- 8) The Member Secretary, Dadra & Nagar Haveli Pollution Control Committee, Dadra & Nagar Haveli
- 9) The Additional Principal Chief Conservator of Forests (C), Ministry of Environment, Forests and Climate Change, Regional Office (WZ), E-5, Kendriya Paryavaran Bhawan, Arera Colony, Link Road No.3, Ravishankar Nagar, Bhopal -16
- 10) The Additional Principal Chief Conservator of Forests (C), Ministry of Environment, Forests and Climate Change, Regional Office (WCZ), Ground Floor, East Wing, New Secretariat Building, Civil Lines, Nagpur -1
- 11) IA - Division, Monitoring Cell, MoEFCC, New Delhi - 3
- 12) Guard file

*S.K.*  
11/2/2015  
**(S.K. Srivastava)**  
**Scientist E**