

**F.No.10-107/2011-IA.III**  
**Government of India**  
**Ministry of Environment & Forests**  
**(IA-III Section)**

**Paryavaran Bhawan,  
CGO Complex, Lodhi Road,  
New Delhi - 110 003,**

**Dated: 19<sup>th</sup> February, 2014**

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

**Contact Person Details:**

**Shri V.K. Sharma,**  
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**Subject: Environmental and CRZ Clearance for widening and upgradation of existing carriageway to 4/6 laning of Goa – Karnataka Border (km 93.700) to Kundapur (km 283.300) Section of NH- 17 in the State of Karnataka by M/s. NHAI - Reg.**

This has reference to your letter No: 1013/1/2k/GM(Env.)/375 dated 24.09.2013 and subsequent letters dated 12.12.2013 and 12.12.2013 and 20.12.2013 Environmental and CRZ Clearance under the Environment Impact Assessment Notification, 2006 and Coastal Regulation Zone Notification, 2011. The proposal has been appraised as per prescribed procedure in the light of provisions under the Coastal Regulation Zone Notification, 2011 and EIA Notification – 2006 and on the basis of the mandatory documents enclosed with the application viz., the Questionnaire, recommendation of State Coastal Zone Management Authority, EIA, EMP and the additional clarifications furnished in response to the observations of the Expert Appraisal Committee constituted by the competent authority in its meetings held on 28<sup>th</sup> - 30<sup>th</sup> October, 2013 and 20<sup>th</sup> – 23<sup>rd</sup> November, 2013 and 22<sup>nd</sup> -24<sup>th</sup> January, 2014.

2. It is interalia, noted that the proposal involves widening and upgradation of existing carriageway to 4/6 laning of Goa – Karnataka Border (Km 93.700) to Kundapur (Km 283.300) Section of NH-17 in the State of Karnataka. Project road is part of NH-66 (formerly NH-17) starts from Goa - Karnataka border at km 93.700 and ends in Kundapur in Udupi District, Karnataka at km 283.300. The proposed road passes towards south from Goa-Karnataka Border through congested townd/villages viz. Karwar, Karwar Port, Navy's Sea Bird Project, Amadalli, Kumta, Haldipura, Honnavara, Kasarkod, Shirali, Bhatkal, Shirur, Byndoor, Maravanthe and Tallur. The proposed project is a part of NHDP programme of 4/6 laning and has total length of 189.600 km, whereas proposed length is 187.240km. The existing RoW width varies from 11m to 45m from km 93.600 to km 241.000 and from Km 241.000 to Km 283.300 it is 45m on the project road (11m in mountainous terrain to 45min plain terrain). As per NHAI Notification, a uniform width of 60m will be maintained throughout the project stretch for 4/6 lane carriageway

along the project road. Therefore widening of the road would require additional lands to accommodate the proposed RoW width throughout the project length. The project stretch passes through 120.130km of plain terrain, 24.20km of hilly terrain and 45.67km of rolling and hilly terrain. Land use along the highway is predominantly built-up and agriculture. The entire stretch of the project road falls under Seismic Zone-III of India. Patches of reserved forests are situated along the existing RoW. The existing RoW is not sufficient and for accommodating 60m of RoW width, acquisition of forest area would be required thus affecting forests. Approximately 162.429 Ha of forest land is required to be acquired including 2.629 ha mangroves area. Few sections of the existing highway fall under CRZ and the road is proposed on stilt in mangroves. The Project is located within 10km of proposed Catigaon Wildlife Sanctuary, Goa. There are about 23,491 plants/trees along the roadside which are likely to be affected due to the proposed development. The land which is required to be acquired all along the project road for widening of the existing 2-lane road to 4-lane is 525.16 ha, where the available RoW is less than design requirements. There are 13 major bridges, 40 minor bridges and 606 nos. of culverts along the existing road. Existing bridges and culverts along the existing road will be upgraded or reconstructed during the proposed development. There are 2 pedestrian/cattle underpasses, 4 numbers of RUBs and 2 numbers of ROBAs along the existing alignment. In the proposed development, 22 underpasses (3 vehicular, 19 pedestrian and cattle), 4 new flyovers have been proposed. There are 15 major junctions along the existing alignment. A total of 4 number of truck lays and 53 number of bus bays have been proposed. 3 new Toll Plazas have been proposed. 7m wide service roads of 60.742km are proposed on both sides at urban and rural built up stretches. The total water requirement would be 1829.868 KLD. 59.09 lakh cum of soil, 33.17 lakhs cum of aggregate and 2.07 lakh cum of sand shall be required and is proposed to be taken from nearby quarries/borrow areas. Cost of Environmental Management Plan is Rs. 45.00 Crore. It was informed that 1132 structures will be affected and the total cost of R&R is Rs. 328.32 Crore. The total cost of the project is Rs. 1756.32 Crore.

3. The project was considered by EAC in its meeting held on 10<sup>th</sup> – 11<sup>th</sup> January, 2012 and finalised ToR including conduct of Public Hearing. The Public Hearing was conducted on 05.12.2012 at Byndoor, 02.04.2013 at Kumta. The major issues raised are tree cutting, forests land involvement etc.

4. The Karnataka Coastal Zone Management Authority has recommended the project vide letter no. FEE 136 CRZ 2013 dated 12.09.2013.

5. The proposal was discussed in the EAC meeting in October, 2013 and the Committee decided that Shri S.K. Sinha, Member, EAC, will go through the original map and provide comments since it is not giving clear CRZ boundary. Though, the Project Proponent has prepared the CRZ maps of 1:4000 scale through IRS, Anna University, however they have not submitted maps of scale in view of the large size and numbers. In 128<sup>th</sup> meeting of the EAC held in November, 2013, the Member informed that the total length of Proposed Right of Way (PROW) is 189.6 km (from chainage 93.7 km to 283.3 km). The intersections of PROW with CRZ Zone are CRZ I (A) – 2.13 km, CRZ I (B) – 9.75 km, CRZ II – nil and CRZ III – 34.32 km. CRZ I crossings are mainly over the creeks. The PROW directly overlaps 10.5 hectares of mangrove area. All the above estimates are based on the original survey/mapping generated by IRS which was offered for examination.

6. While processing of the project, complaints from Rastriya Heddari Bhuswa Dhina Virodhi Horata Samitee, Uttar Kannada – Karwar and copy of complaint from Bhuswadhin a Virodhi Samitee filed before National Human Rights Commission were received against the

project. Main issues are land acquisition, forest and Wildlife Clearance, destruction of mangroves, involving blasting operation for making tunnel in forests area, submission of false data to Ministry etc. Copy of the complaint was provided to the NHAI for comments. NHAI has submitted detailed response on the complaint and details on tunnels. Tunnel is proposed after London Bridge in Karwar bypassing the Karwar Port. The tunnel has a length of 550 m on LHS and 594 m on RHS. Total length of the tunnel is 1144 m.

7. The Expert Appraisal Committee, after due consideration of the relevant documents submitted by the project proponent and additional clarifications furnished in response to its observations, have recommended for the grant of Environmental and CRZ Clearance for the project. Accordingly, the Ministry hereby accords necessary Environmental and CRZ Clearance for the above project as per the provisions of Coastal Regulation Zone Notification, 2011 and EIA Notification, 2006, subject to strict compliance of the terms and conditions as follows:

**8. SPECIFIC CONDITIONS:**

- (i) Road in Mangrove areas shall be on stilts. It is noted that the proposed ROW overlaps 10.5 ha of mangrove area. The Project Proponent shall carry out mangrove plantation in an area of 50 ha. in consultation with Forest Department.
- (ii) As the project is located within 10 km of proposed Catigaon Wildlife Sanctuary, Goa, prior clearance from NBWL shall be obtained.
- (iii) The project involves diversion of 162.429 ha protected forest land including 2.629 ha mangroves area for which the proponent shall obtain the requisite FC. The proponent can execute the above project on the entire stretch located in non-forest land, provided that the proponent submits an undertaking while making application to get FC that 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, width of the portion of road falling in the forest land will be maintained at its existing level.
- (iv) It is indicated that 23491 nos. of trees are proposed to be cut for the project. 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.
- (v) It is noted that according to NHAI, the impact zone is 50-200 m and the nearby habitation is Karwar Town at 600 m. However, NHAI shall intimate local authority before carrying out the blasting. If there are any damage caused due to blasting, NHAI shall compensate 100 % under the notice of local Authority.
- (vi) All the other required clearances for carrying out blasting shall be obtained from the competent Authority including Forests / Wildlife.
- (vii) The blasting shall be restricted only from 8 am to 6 pm.
- (viii) The technique adopted for controlled blasting at identified locations is non-electric detonating technique.

- (ix) Explore the possibilities of using cold mix technology wherever possible particularly near Wildlife Sanctuary.
- (x) Permission for ground water drawl shall be obtained from competent Authority.
- (xi) Rain water harvesting including oil and grease trap shall be provided. Water harvesting structures shall be located at every 500 mts along the road. Vertical drain type rainwater harvesting structures shall be set up to minimize surface runoff losses of rainwater.
- (xii) R&R shall be as per the guidelines of State/Central Government.
- (xiii) IRC guidelines shall be followed for widening & up-gradation of road.
- (xiv) The responses/commitments made during public hearing shall be complied with letter and spirit.
- (xv) All the recommendation of the EMP shall be complied with 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 along with half yearly compliance report to MoEF-RO.
- (xvi) Green belt development shall be undertaken as suggested in EMP.
- (xvii) The seismic nature of the area shall be taken into account while designing the project.
- (xviii) 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.
- (xix) Sidewalk shall be provided along the bridges.
- (xx) The drain shall be at least 1 m. away from the toe of the embankment of the road adopting IRC guidelines.
- (xxi) 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.
- (xxii) The solid waste generated shall be used for rehabilitating the borrow areas.
- (xxiii) 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.
- (xxiv) 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.

- (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 500 mts. 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.

**9. 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 & Forests 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 Ministry of Environment and Forests.
- (xiv) The project proponents shall inform the Regional Office 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) State Pollution Control Board shall display a copy of the clearance letter at the Regional Office, District Industries Center and Collector's Office/Tehsildar's office for 30 days.

10. These 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.

11. 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.

12. 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 Board and may also be seen on the website of the Ministry of Environment and Forests at <http://www.envfor.nic.in>. The advertisement should be made within 10 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.

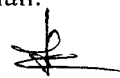
13. Any appeal against this clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

14. 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.

15. Status of compliance to the various stipulated environmental conditions and environmental safeguards will be uploaded by the project proponent in its website.

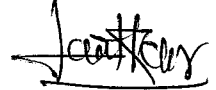
16. The project proponent shall also submit six monthly reports on the status of compliance of the stipulated Clearance conditions including results of monitored data (both in hard copies as well as by e-mail) to the respective Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB.

17. 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 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 Clearance conditions and shall also be sent to the respective Regional Offices of MoEF by e-mail.

  
(Lalit Kapur)  
Director (IA-III)

Copy to:

- (1) The Secretary, Department of Environment, Government of Karnataka, Bangalore.
- (2) The Chairman, Central Pollution Control Board, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, Delhi – 110 032.
- (3) The Member Secretary, Karnataka Coastal Zone Management Authority & Director, Environment Technical Cell, Department of Forests, Ecology and Environment, Govt. of Karnataka.
- (4) The Member Secretary, Karnataka State Pollution Control Board, "Parisara Bhavan, 4<sup>th</sup> & 5<sup>th</sup> Floor, # 49, Church Street, Bangalore-560 001.
- (5) The CCF, Regional Office, Ministry of Environment & Forests(SZ), Kendriya Sadan, IVth floor, E&F wings, 17<sup>th</sup> Main Road, Koramangala II Block, Bangalore – 560 034.
- (6) IA - Division, Monitoring Cell, MOEF, New Delhi - 110003.
- (7) Guard file.



**(Lalit Kapur)**  
**Director (IA-III)**