

**F. No. 22-34/2018-IA.III**

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

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Indira Paryavaran Bhawan  
Aliganj, Jorbagh Road  
New Delhi-110 003

Dated: 26<sup>th</sup> March, 2019

**OFFICE MEMORANDUM**

**Sub.: Standardization of Environment Clearance conditions for Infrastructure sector (Highways), covered under schedule 7(f) of the EIA Notification 2006 - reg.**

The Ministry of Environment Forest & Climate Change is in the process of standardizing the Environmental Clearance conditions for various sectors. This initiative is for expediting the process of Environmental Clearance without compromising environmental norms and the rigor of environment impact assessment.

2. In view of the above the draft standard Environmental Clearance conditions for Infrastructure sector (Highways), covered under schedule 7 (f) of the EIA Notification 2006 has been prepared and is enclosed herewith.
3. You are kindly requested to provide your comments & suggestions on the standard Environmental Clearance conditions. Your comments may be sent to this Ministry at the earliest for further necessary action.
4. This issue with the approval of the competent authority.



**(Sharath Kumar Pallerla)**  
**Director /IA Policy Division**

Encl: As above

To,

1. The Joint Secretary (Env. & Forest)  
Ministry of Road Transport & Highways  
Transport Bhawan, Sansad Marg, Gokul Nagar,  
Connaught Place, New Delhi, 110001
2. The Secretary General  
Indian Roads Congress  
Kama Koti Marg, Ranji Nagar, Sector 6,  
Rama Krishna Puram, New Delhi, 110022

**Draft Standard Environmental Clearance conditions for Infrastructure sector (Highways), covered under schedule 7(f) of the EIA Notification 2006**

**I. Statutory compliance:**

- i. 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.
- ii. Diversion of Forest Land to be minimized to the extent possible and bare minimum ROW to be proposed in forest areas.
- iii. All mandatory clearances under the applicable law including the Forest Clearance under the Forest (Conservation) Act, 1980 shall be obtained for diversion of forest land and cutting of roadside trees notified as protected forest. The proponent shall submit an undertaking that project shall be executed on the entire stretch located in non-forest land, and execution of work on non-forest land shall not be cited as a reason for grant of approval under the Act and in case approval under the Act for diversion of forest land is declined, width of the portion of road falling in the forest land will be maintained at its existing level.
- iv. Commencement of work in non-forest land will not confer any right on the user agency with regard to grant of approval under the Forest (Conservation) Act, 1980.
- v. In case project involves use or alteration of any part of a protected area, approval from National Board of Wildlife (NBWL) shall be obtained under Wildlife (Protection) Act, 1972.
- vi. In case any project is located within the Eco-Sensitive Zone (ESZ) around a National Park / Wildlife Sanctuary / Biosphere Reserve / Tiger Reserve / Elephant Reserve etc., recommendation of NBWL shall be obtained
- vii. The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State pollution Control Board/ Committee.
- viii. The project proponent shall obtain necessary permission from the concerned State(s) Irrigation Department(s) before drawing water from the river sources and permission from appropriate authority of the state in case water is drawn from water body, lake and wet land for the purpose of the proposed construction activity.
- ix. Construction material shall be obtained only from quarries having valid environment clearance under EIA Notification, 2006 as amended from time to time.
- x. Necessary clearance/approval shall be obtained from state authorities for extraction of earth and sand/minor minerals from the rivers.

- xi. IRC guidelines shall be followed for widening & up-gradation of road.
- xii. All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department shall be obtained, as applicable by project proponents from the respective competent authorities.
- xiii. No development activity (including building, mining, excavating, blasting) will be permitted in the “prohibited areas” (100m). Development activities likely to damage the protected monument will not be permitted in the “controlled / regulated areas” (300m) without prior permission from the Archaeological Survey of India (ASI) if the site/remains/ monuments are protected by ASI or the State Directorate of Archaeology.
- xiv. 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.

## **II. Air quality monitoring and preservation**

- i. Transport, loading and unloading of loose and fine materials through covered vehicles
- ii. Water spraying on the unpaved haulage roads and other dust prone areas. Effective mitigation measures as mentioned in EIA/EMP report to be taken to control Air Pollution during construction phase.
- iii. All entry/exit/access points on this highway shall be appropriately designed and preferably fenced to avoid traffic congestion and pollution.
- iv. The Batching, WMM, HMP and crushers shall be located at least 1000 m away from habitation to avoid its adverse impact on the human population.
- v. Hot mix plant should be fitted with dust extraction unit. The hot mix plant shall be located at least 1000m away from habitation to avoid its adverse impact on the human population.
- vi. The D.G. sets to be used during development/ construction phase shall be in conformity to Environment (Protection) Rules prescribed for air and noise emission standards.
- vii. Adequate precautions shall be taken during transportation of the construction material so that it does not affect the environment adversely

## **III. Water quality monitoring and preservation**

- i. Steep as well as heavy cuts will generally be avoided; Flora and fauna of the area generally will not be disturbed; All efforts will be made to maintain the natural drainage pattern.



- ii. 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.
- iii. The embankments/slopes and the slopes left after cutting shall be provided with vegetative turning to avoid soil erosion.
- iv. Turfing using bio engineering techniques and use of bio- degradable geo-textiles will be considered for protection of embankment slopes wherever feasible
- v. Slope to be protected by providing frames, drystone pitching, masonry retaining walls, planting of grass and trees as per the site conditions.
- vi. Silt fencing will be provided along the water bodies adjacent to which construction work is being carried on
- vii. The drain shall be at least 1 m away from the toe of the embankment of the road adopting IRC guidelines.
- viii. Cut and fill works shall be carried out strictly in accordance with the design drawings proposed at the time of appraisal of the project.
- ix. No groundwater will be utilized for any construction work without the approval of the competent authority (Central/State).
- x. 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.
- xi. No vehicles or equipment will be parked or refueled near water-bodies, so as to avoid contamination from fuel and lubricants.
- xii. Oil and grease traps and fueling platforms to be provided at re-fueling locations.
- xiii. All chemicals and oil to be stored away from water and concreted platform with catchment pit for spills collection.
- xiv. All equipment operators, drivers, and warehouse personnel will be trained in immediate response for spill containment and eventual clean-up. Readily available, simple to understand and preferably written in the local language emergency response procedure, including reporting, will be provided by the contractors
- xv. Construction camp to be sited away from water bodies

#### **IV. Noise monitoring and prevention**

- i. Instead of blasting, rock breakers shall be used preferably for construction purpose.

- ii. Noise barriers to be provided along with the length of the road as habitation/villages located within 250 m from central line on either side from the proposed carriageway and also to ensure that noise levels do not exceed the prescribed standards.
- iii. Construction equipment and machinery to be fitted with silencers and maintained properly.
- iv. Near school, noisy construction activities to be carried out preferably after closing of school and in the weekends /holidays.
- v. Manage smooth traffic flow to avoid traffic jams and honking.
- vi. Construction of noise barrier at sensitive receptors. Honking restrictions near sensitive areas
- vii. Initiation of multi-layered plantation. to serve as mitigation option for operation phase
- viii. PPEs to be provided to workers deployed in high noise environment

**V. Safety of Public and Animals including Wildlife:**

- i. Sidewalk shall be provided along the bridges. Roads passing through populated areas should have provisions of under passes or foot over bridge for safe passage of human and animals.
- ii. Adequate number of pedestrian/cattle underpasses to be proposed at different settlement area as per traffic survey. Apart from this provision of footpath, foot over bridge, guard railings, service roads, and street lightings etc. will enhance the safety of pedestrians.
- iii. 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. Important measures may be taken to prevent animal injuries and mortality during earth cutting, clearing of vegetation and managing pools and streams.
- iv. For road safety, IRC guidelines in respect of road signages, service roads, bus bays, inter-sections, pedestrians crossings including overhead crossovers, etc. shall be strictly adhered to. Metallic barriers should be provided on median in accident prone areas.
- v. Adequate animal underpasses in addition to additional Culverts and bridges shall be provided to facilitate movement of small animals and reptiles.
- vi. Greenfield alignment will be preferred between the original and destination point by following a crow-flight alignment with a little distance from existing habitations/towns.
- vii. The major settlement areas will generally be avoided by providing Bypasses and realignments.

- viii. The seismic nature of the area shall be taken into account while designing the project. The structural safety measures should be applied with the help of third party agency, like IIT etc.

## **VI. Waste management**

- i. The solid waste generated shall be used for rehabilitating the borrow areas.
- ii. No agriculture land shall be used to borrow earth material. Borrow pits and other scars created during the road construction shall be properly levelled and treated and submit the report to concerned regional office of the MoEF&CC. The proponent should deposit bank guarantee with concerned Panchayat/municipal authority, which may be refunded after restoration of borrow pits.
- iii. No excavation or dumping on private property is carried out without written consent of the owner(s).
- iv. No excavation or dumping shall be allowed on wetlands / water bodies, forest areas or other ecologically valuable or sensitive locations.
- v. Excavation work shall be done in close consultation with the Soil Conservation and Watershed Development Agencies working in the area.
- vi. 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.
- vii. The fly ash shall be used for the proposed project to comply with the Fly Ash Notification, 1999, as amended. Proper agreement shall be made with the Power Plants for utilisation of fly ash.
- viii. The existing bitumen surface and excavated material to be reused if feasible.
- ix. Unusable and non-bituminous debris materials will be suitably disposed off at pre-designated disposal locations, with approval of the concerned authority. The bituminous wastes to be disposed in secure landfill sites only in environmentally accepted manner.

## **VII. Green Belt**

- i. Green belt development shall be undertaken as suggested in EMP. Third party monitoring and evaluation of this component including plantation to be carried out by the competent agency engaged by the implementing agency. The monitoring and evaluation report shall be submitted to MoEF&CC and its concerned regional office.
- ii. Avenue and median plantation will be undertaken as per provisions contained in IRC:SP:21-2009



- iii. Transplantation/relocation of existing trees to be cut should be done by qualified agencies having trained manpower and strict supervision with utmost care and maintenance ensuring their survival.
- iv. Permission from the competent authority under local law will be taken for Tree felling on non-forest area.

#### **VIII. Public hearing and Human health issues**

- i. As per MoEF&CC's circular no. J-11013/41/2006-IA.II(I) dated 22.09.2008, provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
- ii. 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 shall be followed.

#### **IX. Corporate Environment Responsibility**

- i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 1<sup>st</sup> May 2018, as applicable, regarding Corporate Environment Responsibility.
- ii. The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
- iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will report directly to the head of the organization.
- iv. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.
- v. Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.

- vi. Responsibility for implementation of all the conditions mentioned in this letter rests with the Proponent.

## **X. Miscellaneous**

- i. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.
- ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- iv. The project proponent shall monitor the criteria pollutants level namely; PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>x</sub> (ambient levels) or critical sectoral parameters, indicated for the projects and put on the website of the company.
- v. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- vi. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- vii. The project proponent shall inform the Regional Office as well as the Ministry, the date of commencing the land development work and completion of the project.
- viii. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- ix. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee 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 every six month
- x. No further expansion or modifications in the project shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).



- xi. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- xii. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xiii. 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. In case of any change(s) in the scope, the project would require a fresh appraisal by the MoEF&CC.
- xiv. 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.
- xv. 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 and concerned Regional Office within three months of issue of this letter.
- xvi. The Ministry reserves the right to stipulate additional conditions if found necessary. The project proponent, in a time bound manner, shall implement these conditions.
- xvii. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
- xviii. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.
- xix. Any appeal against this EC 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.

#### **XI. Coastal Regulation Zone (CRZ) – If applicable**

- i. Coastal stretches shall be protected by using web breakers and other suitable protective measures from coastal erosion with National Institute of Ocean Technology (NIOT), Chennai.
- ii. All the provisions of the CRZ Notification, 2011 and subsequent amendments shall be strictly complied with, and in case of any change in scope of work, necessary recommendations from the concerned CZMA shall be obtained for further consideration by the concerned regulatory authority.

- iii. Locations for stockyards for construction materials and labour camps shall be at least 500 m away from the CRZ. Movement of machinery, workforce shall be restricted around the water body and no waste from construction camps or sites shall be disposed into it. The guidelines issued by the Ministry of Labour in connection of the construction labours for their welfare should be strictly followed.
- iv. The CRZ stretch, providing habitat to any marine life, e.g. turtle etc., shall be provided with trespass proof and corrosion proof barrier/fencing along these stretches, and marking these zones as no stay/halting or camping zone.
- v. Bioengineering barriers shall be provided along the eco-sensitive and vulnerable portions of the highway facing the sea with no habitation, and also to be protected from aesthetic and other forms of destruction.
- vi. The bridge elevation shall be decided based on highest flood level, analysing Tsunami and storm surge.
- vii. The project proponent shall ensure that there is no destruction of mangrove near the project site. If any mangrove plantation is to be undertaken by the proponent it may be undertaken by the suitable agency in consultation with the state forest department. There shall be no dressing or alteration of the sand dunes, natural features including landscape changes for beautification, recreation and other such purpose.
- viii. Appropriate provisions through pipe/box culvert shall be provided to ensure free flow of tidal water. The size of opening shall be decided on the basis of the site conditions.

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