

**F. No. IA3-22/40/2022-IA.III [E198668]**  
**Government of India**  
**Ministry of Environment, Forests and Climate Change**  
**(IA-III Section)**

Indira Paryavaran Bhawan,  
Jor Bag Road, Aliganj,  
New Delhi - 110003

Dated: 6<sup>th</sup> February, 2023

**OFFICE MEMORANDUM**

**Subject: Standard Operating Procedure (SoP) for Environmental safeguards to be followed while constructing and operation of all Highway projects which are exempted up to 100 km from line of control or border - reg.**

The Ministry has issued a Notification vide S.O. 3194(E) dated 14th July 2022 exempting the requirement of EC for All Highway projects are exempted up to 100 km from line of control or border subject to compliance of Standard Operating Procedure notified in this regard from time to time. The Guidelines are to be followed for all roads/highway projects falling within 100 Km from the International Border/Line of Control (LOC) for sustainable environmental safeguards.

2. Further, the exemption of prior EC for all Highway projects up to 100 km from line of control or border does not exempt it from approvals/consent/permissions etc., required to be obtained under any other Act/Rule/Regulation/Bye-laws/Notification etc.

3. The Ministry hereby directs that the following environmental safeguards shall be followed while constructing and operation of all Highway projects which are exempted up to 100 km from line of control or border.

**A. Risk assessment, Landslide management plan and Disaster Management Plan**

- i. Risk assessment shall be carried out and based on the assessment, Disaster Management Plan as per the Disaster Management Act shall be got approved from Competent Authority and implemented.
- ii. If the proposed route is passing through any hilly area, comprehensive study on vulnerability for the landslide, slope stability, vulnerability of the project area from the point of view of seismic activity taking into account the seismic zone in which it is located, eco-fragility study of the area shall be carried out through reputed Technical Institute on the basis of which environmental friendly and safe construction methodology shall be adopted.

- iii. Landslide management plan shall be prepared and all remedial, precautionary measures before, during and post construction shall be undertaken to ensure that all environmental safeguards are mandatorily implemented under the supervision of subject matter experts before undertaking construction. In case of cutting or embankment, control of soil erosion from embankment, landslide, rock fall protection measures, etc. shall be carried out.

#### **B. Tunneling and Horizontal Directional Drilling**

- i. If the proposed route involves tunneling and/or horizontal directional drilling, a detailed study on tunneling and locations of tunneling with geological structural fraction and its possible impact on the existing structures in its vicinity, flora, fauna, terrain, etc. should be carried out so as to ensure that there is no damage to life, property and environment in its vicinity.
- ii. Quarry areas shall be barricaded during quarrying operations. Adequate environmental safeguards should be put in place to ensure that environment protection is not compromised. The abandoned quarry shall be rehabilitated/reclaimed as water reservoirs with proper fencing around quarry area as practically possible.

#### **C. Soil conservation measures and muck dumping plan**

- i. Construction waste including bituminous material and other hazardous materials must not be allowed to contaminate water courses and the dump sites for such materials must be secured so that they shall not leach into the ground water. The non-usable bitumen waste/spoils shall be disposed of in an environmentally sound manner by digging deep trench and providing clay lining at the bottom and filled with soil at the top (for at least 0.5m).

#### **D. Noise management**

- i. Base line ambient noise level survey shall be carried out prior to start of construction as per the CPCB guidelines. The ambient noise levels should conform to the standards prescribed under Noise Pollution (Regulation and Control) Rules, 2000.
- ii. Noise reduction measures and traffic management strategies to be deployed for reducing the adverse impact if any.

#### **E. Air Pollution Control**

- i. The baseline ambient air quality monitoring shall be carried out as per the notification issued on 16th November, 2009. Appropriate Air Pollution control measures shall be in place during transportation of the construction materials.

## **F. Water management**

- i. A comprehensive assessment of water catchment, hydrology and drainage pattern within 10km of the alignment shall be carried out. No diversion of the natural course of the river/creek shall be made. All the major, minor bridges and culverts should not affect the drainage systems. Flood plains of the rivers/ drainage systems are not to be disturbed. Rain water harvesting structures to be constructed at the either sides of the road.
- ii. In case the road passes through a flood plain of a river, the detail assessment of micro drainage, flood passages and information on flood periodicity should be carried out and a management plan shall be prepared and implemented.
- iii. Appropriate measures must be taken while undertaking digging activities to avoid any likely degradation of water quality.

## **G. Traffic management**

- i. The proponent shall carry out a detailed traffic study to assess inflow of traffic from adjoining areas like airport/urban cities. The detailed traffic planning studies shall include complete design, drawings and traffic circulation plans (taking into consideration integration with proposed alignment and other state roads etc.). Wherever required adequate connectivity in terms of VUP (vehicle underpass)/ PUP (Pedestrian underpass) needs to be included.
- ii. Traffic Control Devices/Road Safety Devices/ including various types of cautionary, informatory, regulatory as mandatory signboards, road markers, studs, etc. shall be provided at appropriate locations all along the project stretch in accordance with the specifications laid down in Manual of Specifications and Standards for Expressways (IRC: SP:99-2013) and IRC:8, IRC:25, IRC:26, IRC:35, IRC:67, IRC:79, IRC:103 and Section 800 of MORTH Specifications.

## **H. Avenue plantation/ Green Belt**

- i. 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. Green belt shall be developed with a native tree species in accordance with CPCB guidelines.
- ii. Old, large and heritage value trees should be retained based on girth and age regulations as may be prescribed by the Forest Department. Where the trees need to be cut/transplanted with prior permission from the concerned local Authority, compensatory plantation for the forest land in the ratio of 1:10 (i.e. planting of 10 trees for every 1 tree that is cut/ non- survival of any transplanted tree) shall be done and maintained as per the extant norms of

State Govt. /Central Govt. Plantations to be ensured species (cut) to species (planted).

- iii. The plantation activity be geo-tagged, before and after pictures be taken with geo tags and having date and time stamps to ensure maximum survival of the planted species. Periodical monitoring be carried out and survival percentage of the plantation should form the basis of making payments for such plantation.

#### **I. Budgetary provisions**

- i. Requisite funds shall be earmarked towards capital cost and recurring cost/annum for environment pollution control measures. An implementation schedule shall be prepared and implemented as per the timeline.
- ii. Adequate provision for infrastructural facilities including water supply, fuel and sanitation shall be ensured for construction workers during the construction phase of the project in order to avoid any damage to the environment.

#### **J. Monitoring Provision**


- i. The State Pollution Control Board /Pollution Control Committees shall obtain the relevant EIA / EMP study carried out by the Project Proponent through any NABET accredited Consultant in accordance with the instant SOP and shall upload the same on their website at the time of grant of CTE (Consent to Establish).
- ii. The concerned State Pollution Control Boards/Pollution Control Committees shall carry out periodic monitoring before, during, and after construction to ensure that the necessary environmental safeguards have been put in place as per the aforesaid EIA/EMP study.
- iii. Besides above, the Project Proponent shall also upload the information regarding the progress of construction on company's website in the format prescribed by the State Pollution Control Board so as to ensure that the necessary general and specific conditions related to construction and prevention as well as mitigation of environmental pollution as prescribed by the Institute of Repute are being complied with.

**Besides above, the Project Authority shall obtain other statutory clearances, wherever applicable. The following are list of some requisite clearances for guidance, but not limited to, which may be applicable to such road projects:**

- i. Indian Road Congress (IRC) guidelines.
- ii. Forest clearance under Forest Conservation Act, 1980 and CRZ clearance as per CRZ Notification 2011/ 2019.
- iii. 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 from the standing committee of NBWL.

- iv. Provisions for management of construction and demolition activities related thereto as contained in Construction and Demolition Waste Management Rules, 2016.
  - v. The project affected people shall be rehabilitated in accordance with the Resettlement & Rehabilitation plans approved by the concerned competent authority.
4. This is issued with the approval of the Competent Authority.

  
(Sundar Ramanathan)  
Scientist 'E'

To

1. Chairman, Central Pollution Control Board (CPCB).
2. Chairman of all the Expert Appraisal Committees
3. Chairperson/Member Secretaries of all the SEIAAs/SEACs
4. All the Officers of I.A. Division
5. Chairpersons/Member Secretaries of all SPCBs/UTPCCs

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