

Government of India
Ministry of Road Transport & Highways

1, Parliament Street,
 Transport Bhawan,
 New Delhi- 1100 01

RW-22012/02/2012-Mech

Dated: the 4th Jan, 2013

To

1. The Principal Secretaries/Secretaries of all States/U.Ts. Public Works Department dealing with National Highways, other Centrally Sponsored Schemes and State Schemes.
2. The Engineers-in-Chief and Chief Engineers of Public Works Departments of States/U.Ts dealing with National Highways, other Centrally Sponsored Schemes and State Schemes.
3. The Chairman, National Highways Authority of India (NHAI), G-5&6, Sector-10, Dwarka, New Delhi- 110 075.
4. Director General (Border Roads), Seema Sadak Bhawan, Ring Road, New Delhi- 110 010.

Subject: Mechanised Patching.

Sir,

Road maintenance including pothole/ patch repair is required to ensure public safety, repair of defects and to ensure required level of service. Inadequate and improper road maintenance at the time of creation of potholes generally leads to deterioration of roads which result in higher vehicle operating costs, increased number of road accidents and reduces the reliability of transport services. Introduction of mechanized repair is considered essential in order to have faster and long lasting repair. Also mechanized repair will be more reliable and lasting than non mechanised means of repair.

2. Pothole/Patch repair is a part of Ministry's Specifications for Road and Bridge Works. Mechanised repair of potholes was also discussed in the Chief Engineer's Meeting at the 197th Mid-term Session of IRC at Kohima and recommended that at least 10% of the stretch to be repaired using machinery under OR(Ordinary Repair) in each State.
3. Mechanized patching machine containing all the required materials/equipment may be considered for efficient, immediate patching to avoid deterioration.
4. Mechanized patching machine should contain the following in the single unit.
 - (i) Jack hammer/hand tools suitable for the purpose of removal of the defective material.
 - (ii) Provision of Compressed air to remove dust and loose particles.
 - (iii) Filling the pothole with graded material as per specifications.
 - (iv) Facility/ Arrangement for preparation of mix.
 - (v) Arrangement for Tack/prime coat.
 - (vi) Arrangement for Compaction with vibratory walk behind roller/plate compactor etc.
 - (vii) Traffic control equipment.

5. Mechanized patching can be undertaken through any of the following technologies.

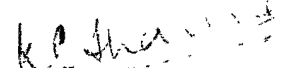
- (a) Emulsion based cold mix technology
- (b) Emulsion based cold mix through High velocity jet technology
- (c) Infrared technology.
- (d) Any other technology

Any of the above mentioned technologies is required to be approved by the employer for patching, from cleaning to the stage of making it road worthy.

6. In view of the above at least 10% of the stretches to be repaired may be identified and proposed for Mechanized patching under OR (Ordinary Repair) in each State.

This issues with the approval of the competent authority.

Yours sincerely,


(K.C. Sharma)

Superintending Engineer (Mech)
For Director General (RD) & Special Secretary

Copy to:

- 1. All the Technical Officers in the Ministry of Road Transport & Highways
- 2. All ROs and ELOs
- 3. Secretary General, Indian Roads Congress
- 4. Director, IAHE
- 5. Technical Circular File of Mechanical Zone.
- 6. NIC for placing on the website