

Government of India
Ministry of Road Transport & Highways

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

RW-22012/01/2012-Mech

Dated: the 18th Dec, 2012

To,

1. All Chief Engineers of the States and Union Territories, dealing with National Highways.
2. The Director General Border Roads, Seema Sadak Bhawan, Delhi Cantt, New Delhi
3. The Chairman, National Highways Authority of India (NHAI), New Delhi
4. The Secretary General, Indian Roads Congress, New Delhi
5. The Director, Indian Academy of Highway Engineers, Noida

Subject: Use of Recycling technology for PR (Periodic Renewal) works on National Highways.

Sir,

In supersession to Ministry's circular No. RW/NHVI-67(10)/85 dated 16.10.1985 on the subject "Recycling of bituminous surfacing- Introduction of the technique of" the following circular is issued.

2. To strengthen the reaches overlay is considered, which requires fresh aggregates and bitumen. The level of road surface rises after overlay. Due to rise in level of road surface the level of adjacent structures such as footpath and median kerbs have to be raised. In urban areas overlay is generally associated with other infrastructure improvement works.
3. However for maintaining the reach with periodical renewal, recycling may be a better option than an additional renewal course. The restrictions on mining have necessitated the requirement to conserve aggregates. There is also a need to conserve bitumen by reusing it wherever feasible. As such, efforts are required to adopt suitable technology which will be helpful in the conservation of natural resources. Recycling can be one such technology.
4. Recycling technology is a part of Ministry's Specifications for Road and Bridge Works. Resurfacing of Bituminous surface by Hot-in-Situ Recycling / Central Plant Recycling was also recommended in the Chief Engineer's Meeting at the 197th Mid-term Session of IRC at Kohima.
5. In view of the inherent advantages of recycling technology, Recycling of bituminous surface on at least 10% of stretches which are otherwise structurally sound, may be proposed for PR works (Periodical Renewal) on National Highways.

6. It is suggested to select a stretch of 30-50 km (which may not be continuous) of two lane Highway, if necessary by clubbing the reaches. Proportionately minimum stretches for 4/6 etc. lane may be calculated. Recycling of the existing bituminous wearing course can be considered where the existing thickness of the bituminous layer is at least 100 mm. Thickness/depth of recycling shall be the thickness of existing wearing course and the treated finished wearing course shall be of the same specifications and thickness as that of the existing wearing course (such as SDBC, BC etc).

This circular is issued 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