

No.RW /NH/33044/3/98-(S&R)

Dated, the 22nd October, 1999

To

The Secretaries of States/Union Territories, Public Works Departments; Chief Engineers of States/UTs (dealing with National Highways and other Centrally Sponsored Schemes); Chairman, National Highways Authority of India; Director General Border Roads

Subject : Guidelines on selection of Grade of Bitumen

Instances have come to the notice of the Ministry that the grade of bitumen is not being selected appropriately for use on National Highway works and sometimes a single grade is being used in the entire State irrespective of traffic and climatic variations in work sections. Suitable guidelines on selection of the grade of bitumen for road works are contained in Appendix-4 of the Ministry's Specifications for Road and Bridge Works (Third Revision).

2. It may be mentioned that all the grades of bitumen, i.e., Grade 30/40, 50/60, 60/70 and 80/100 are learnt to be available with the Oil Refineries. However, it may be necessary to assess the requirement of different grades of bitumen for your State and place orders with refineries well in advance to plan their production at refinery end to meet the requirement as projected by the concerned State.

3. The grade bitumen may be suitably selected appropriate to the region, traffic, rainfall and other environmental conditions. Based upon contents of Appendix-4 of MOST specifications, broad features of the selection criteria for the grade of bitumen are given in the Table below for adoption

Climate	Traffic (CVD)	Bituminous Course	Grade of Bitumen to be used
Hot	Any	BM, BPM, BUGS	60/70
Moderate/Cold	Any	BM, BPM, BUSG	80/100
Any	Heavy loads, Expressways, Urban Roads	DBM, SDBC, BC	60/70
Hot /Moderate	Any	Premix Carpet	50/60 or 60/70
Cold	Any	Premix Carpet	80/100
Any	Any	Mastic Asphalt	30/40

4. It is requested that the contents of this letter may be brought to the notice of all field officers at Circle/ Division/Sub-Divisional level in your State to ensure that appropriate grade of bitumen is used for roadworks.