

No. PL-30 (185)/71

Dated the 12th March, 1974

To

All Chief Engineers of State PWDs dealing with roads.

Subject : More economical use of bitumen in road works

Due to the worldwide oil crisis, it is possible that shortages of bitumen may develop in India in due course. This makes it desirable that henceforth greater care may be exercised in the use of bitumen for road construction or maintenance.

2. Maximum scope for conserving bitumen exists at the stage of choice of specifications. By consciously adopting lower specifications for maintenance, new constructions, or strengthening of existing roads, considerable economy could be generated over the years. After carefully considering the various related aspects, Roads Wing recommend that as far as possible State PWDs should adopt specifications in accordance with suggestions in the Annexure to the letter.

3. Since implementation of these measures will be in national interest, it is requested that the matter may be given due attention and contents of this letter circulated among all concerned in your department.

DESIRABLE SPECIFICATIONS TO ECONOMISE ON THE USE OF BITUMEN IN ROAD WORKS

(a) Maintenance of roads

Both for National Highways and other State roads, renewal maintenance specification should normally be a single-coat surface dressing. Premix carpet and seal coat may be permitted only on heavily trafficked sections and in high rainfall areas.

(b) New constructions

Unless otherwise stated below, base course for none of the road categories should be richer than the conventional water-bound-macadam. Selection of wearing surface should be in accordance with the following suggestions.

Village Roads : These should be blacktopped only in exceptional cases. Where blacktopping is considered inescapable, this should be restricted to a width of 3 metres. Specification used should be a single-coat surface dressing.

Other District Roads : Normally single-coat surface dressing. If necessary, a second-coat may be given in due course.

Major District Roads : Wearing surface should either consist of two-coat surface dressing, or a 2 cm. open-graded carpet with seal coat, depending on traffic and other environmental factors.

State Highways : As for MDRs above.

National Highways : Normally the wearing surface should comprise of a 2 cm. open-graded carpet with seal coat unless heavy traffic and/or high rainfall warrant a richer specification like asphaltic concrete with a bitumen-bound base.

(c) Strengthening of existing roads

For roads other than National Highways, base course for strengthening should consist of water-bound macadam only. surfacing should be chosen *vide* para (b) above.

On National Highways, thickening of crust should be achieved normally with one or more courses of water-bound macadam followed by open-graded 2 cm. carpet and seal coat. Bitumen-bound base courses may be specified only under pressing circumstances when traffic or rainfall conditions so justify.
