

GOVERNMENT OF INDIA MINISTRY OF ROAD TRANSPORT & HIGHWAYS

IAHE Campus, A-5, Sector-62 Noida-201301

F. No. RW/NH- 33044/35/2015/S&R (R)

Dated: the 23rd February, 2016

To.

- 1. All Engineers-in-Chief and Chief Engineers of Public Works Department of States/ UTs dealing with National Highways, other centrally sponsored schemes.
- 2. The Director General (Border Roads), Seema Sadak Bhawan, Ring Road, New Delhi-110 010.
- 3. The Chairman, National Highways Authority of India, G-5 & 6, Sector-10, Dwarka, New Delhi-110 075.
- 4. The Managing Director, NHIDCL, PTI Building, New Delhi-110001

Subject: The issue of applying Tack Coat over the Prime Coat.

Ministry has received a reference from Prof. Prithvi Singh Kandhal (copy enclosed for ready reference) regarding deletion of Tack Coat over the Prime Coat mentioning that it is fundamentally unnecessary and causes sheer wastage of public money. Hence, the Ministry is deliberating over the issue to come out with amended guidelines/ circular in the matter at the earliest.

- 2. In this regard, the Ministry now seeks the feedback/comments/inputs of the implementing agencies for taking a decision at the earliest. Hence, it is requested that relevant feedback/ inputs in the matter may be submitted to the Ministry on the email address: ami.yanshu@nic.in by 3rd March, 2016.
- 3. This issues with the approval of Competent Authority.

(Amiyanshu)

Asst. Executive Engineer (S, R&T) (Roads) For Director General (Road Development) & SS

Copy to the following for providing the feedback at the earliest:

- 1. CE(P-1)/ CE(P-2)/ CE(P-3)/ CE(P-4)/ CE(P-5)/ CE(P-6)/ CE(P-7)/ CE(NER)/ CE(NHDP-IV)/ CE(LWE)
- 2. All ROs and ELOs of the Ministry
- 3. Technical circular file of S&R (R) Section
- 4. NIC-for uploading on Ministry's website under "What's new"



Fwd: MORTH should fund ISRO towards next Mangalyaan!

8 messages

pankaj <joinpankaj11@gmail.com> Reply-To: cesideas@googlegroups.com

To: "cesideas@googlegroups.com" <cesideas@googlegroups.com>

Mon, Apr 13, 2015 at 11:31 AM

For discussion of our engineering fraternity

AN OPEN LETTER TO HON. NITIN GADKARI, MINSTER OF ROAD TRANSPORT AND HIGHWAYS, INDIA

12 April 2015

Honourable Shri Nitin Gadkari
Ministry of Road Transport and Highways (MORTH)
Transport Bhawan, 1, Parliament Street
New Delhi-110 001

Subject: MORTH should fund ISRO towards next Mangalyaan!

Honourable Minister:

The subject may sound strange to you but it is really true. You can do it! By eliminating just one unnecessary and highly untechnical process (applying tack coat over prime coat) used in new highway construction across India, MORTH can save 57 crores per year (that is 15.6 lakhs per day). Rather than wasting, MORTH should save 57 crores and send to ISRO every year to fund the next Mangalyaan. That would really be in the national interest.

I had written to you in detail about this criminal waste of taxpayers' money in my letter dated 24 June 2014 and the reminder letter dated 16 March 2015. Both are attached for ready reference. We have already lost 43 crores since I wrote to you first. Unfortunately MORTH administrative and technical staffs do not seem to care about this sheer wastage and therefore they may not have put up my two letters to you; although they were for YOUR EYES.

Again, I am requesting you to ask the following two simple questions to your staff:

- 1. Is tack coat applied over prime coat in developed countries? [If they say yes, they are not telling the complete truth.]
- 2. If they say "no", then ask them what is so special about India to use it?

Yours faithfully,
Prof. Prithvi Singh Kandhal
Karanpura House, 50 Raj Bhawan Rd.
Civil Lines, Jaipur 302 006
pkandhal@gmail.com
Two attachments.
CC: Hon. Narendra Modi, Prime Minister of India

For eyes of Hon. Nitin Gadkari 16 March 2015
Honourable Shri Nitin Gadkari
Ministry of Road Transport and Highways (MORTH)
Transport Bhawan, 1, Parliament Street
New Delhi-110 001
Subject: Unnecessary national loss of estimated Rs. 57 crores per year in road construction
Honourable Minister:
Please refer to my letter dated 24 June 2014 addressed to you personally on the subject. [Copy attached for ready reference.]
Although over 8 months have passed, I have not received any positive response from you. I had real high hopes that you and Hon. Prime Minister Modi believe in transparency, accountability and decisive action when public interest is involved.

I request you again to take immediate action to stop this unnecessary criminal loss of about 57 crores of rupees every year in highway construction. We have already lost about 38 crores during the last 8 months

It is that simple if you really care about wastage. I sincerely hope you will respond to this letter which is

being shared again with over 1500 highway engineers in India.

Yours faithfully,	
Prof. Prithvi Singh Kandhal	
Karanpura House, 50 Raj Bhawan Rd.	
Civil Lines, Jaipur 302 006	
pkandhal@gmail.com	Attachment.
**************************************	*****************
Registered Mail	For eyes of Hon. Nitin Gadkari
24 June 2014	

due to inaction. I sincerely hope your eyes will get to see this important reminder letter. I am looking

Honourable Shri Nitin Gadkari

Ministry of Road Transport and Highways (MORTH)

forward to hearing from you as soon as possible.

Transport Bhawan, 1, Parliament Street

New Delhi-110 001

Subject: Unnecessary national loss of estimated Rs. 57 crores per year in road construction

Honourable Minister:

I sincerely hope **your eyes will get to see this important letter** from a concerned Indian citizen like me unlike the previous regime when the ministry staff was a barrier between the minister and public.

I believe I have reasonable credibility in bringing the subject issue to your personal attention. In the interest of establishing my credibility I am sorry I have to sacrifice my modesty in stating that my peers in all continents of the world consider me an authority in the bitumen road technology. I have had the privilege of leading national and international bitumen road related organizations while in the US. (My brief resume at the end). I have practiced highway engineering in the US for over 30 years and in India for 20 years. In recent years I have drafted several important highway standards which have been adopted by the Indian Roads Congress.

Let me describe the issue in simple layman's language as follows. In new road construction, an unbound (that is, without any bitumen) stone base course (called wet mix macadam or WMM) is constructed. Before laying the first bituminous course over this stone base course, it is 'primed' with a spray of bitumen prime coat. (This is similar to prime coat applied on new wood surface before painting it.) and then the bituminous course is placed over it. This is the practice across the world including developed countries such as US, Australia, Europe, and S. Africa. However, we in India are really different! MORTH requires an "additional" spray of bitumen (called tack coat) over the prime coat before placing the first bituminous course.

This additional tack coat over the prime coat is fundamentally unnecessary and is a sheer waste of public funds to the tune of about 57 crores every year in India because bitumen is very expensive. According to experience in the US, this additional bitumen spray combined with the prime coat can result in excessive bitumen over the stone course, which has the potential of being rather harmful to the performance of the road payement.

I requested the Director General Roads MORTH and the Chairman, NHAI on 26 September 2013 to issue a circular deleting this requirement of tack coat over prime coat. Since no action was taken, I had to resort to RTI Act to seek a brief technical note from DG Roads MORTH as to why this additional, unnecessary, expensive bitumen spray (tack coat) is necessary and why not ban it. Sir, since I received a 2-sentence, evasive, noncommittal response dated 28 May 2014 from the office of the DG Roads, I am approaching you as a last resort with a belief that Modi Government listens to concerned citizens like me and is prompt and decisive in action.

Just ask the MORTH engineers this simple question: Is tack coat being used over prime coat in developed countries? If they say "yes"; they are not telling the truth. If they say "no", ask them what is so special about India to require it and explain in layman language to you. Please convey their explanation to me as well so that I can share it with over 1500 highway colleagues with whom I have shared my RTI correspondence on this subject. (Many of them are frustrated with MORTH's evasive response and have expressed their feelings to me, which I have included in the annexure to this letter, if you care to read.)

MORTH engineers may say to you they would like to "deliberate" it with the Indian Roads Congress. Sir, there is hardly anything to deliberate; it is a "no-brainer" common sense. Nobody knows how long they would take to deliberate because we are incurring loss every single day of about 15.6 lacs! I do understand the estimated total loss is only 57 crores in a year and not thousands of crores; nonetheless it is an unnecessary loss to the nation which can be utilized for some other purposes.

If you are concerned and would like to clarify/discuss this matter further with me, I can be reached at 94140-54804 (except between 4 and 6 pm). I sincerely hope your intervention will be prompt and decisive. Thanks for your assistance.

Yours faithfully,

Prof. Prithvi Singh Kandhal
Karanpura House, 50 Raj Bhawan Rd.
Civil Lines, Jaipur 302 006
pkandhal@gmail.com

ABOUT THE WRITER

Prof. Prithvi Singh Kandhal is Associate Director Emeritus of the National Center for Asphalt Technology (NCAT) based at Auburn University, Alabama, U.S.A. NCAT is the largest asphalt (bitumen) road technology center in the world.

Prior to joining NCAT in 1988, Prof. Kandhal served as Chief Asphalt Road Engineer of the Pennsylvania