



A.P. Mishra

सदस्य इंजीनियरिंग, रेलवे बोर्ड  
और पदेन सचिव,  
भारत सरकार  
रेल मंत्रालय  
नई दिल्ली-११० ००१  
MEMBER ENGINEERING, RAILWAY BOARD  
&  
EX-OFFICIO SECRETARY,  
GOVERNMENT OF INDIA  
MINISTRY OF RAILWAYS  
NEW DELHI-110001

Dated 10-03-11.

D.O.No.2011/Track III/TK/4

My dear (PCEs, All Indian Railways)

Sub: Mechanization in laying and maintenance of turnouts.

Ref: My predecessor's D.O. of even number dated 17.2.2010.

The quality of laying and maintenance of concrete sleeper turnouts has been an area of concern. Unsatisfactory laying affects the riding quality, maintainability and safety. I have reviewed the position of mechanized renewal and deep screening of turnouts as also the facilities available for achieving high quality of tamping.

2.0 Position at Annexure I reflects that mechanized renewal of 1,565 turnouts has been carried out during Apr.'10-Jan.'11, against the proportionate target of 2000 nos. and the total progress of 4,994 nos. Some of the Railways have been resorting to manual laying while available machine capacity was not fully utilized. This is an unacceptable position. Manual works should not be undertaken as long as machine capacity is available. Works of turnout renewal should be planned in a manner that divisions keep assemblies of turnouts ready in advance and the machine should move section by section for laying these turnouts, thus maximizing the mechanized laying. This would call for greater involvement of Zonal HQ in planning & execution of turnout renewal works.

3.0 Inadequate/caked up cushion under concrete sleeper turnouts is a matter of concern. Indian Railways have 44 BCMS which are capable of deep screening turnouts. Instructions were issued vide my predecessor's D.O. under reference that deep screening of turnouts on A, B & D Spl. routes should be undertaken with BCMS. Position at Annexure II reflects that only NCR and SCR have done substantial work in this regard. Some work has also been done on CR, ECoR, NFR and SR. Other railways have not done any significant deep screening of turnouts. Greater initiative is required in this regard particularly in coordination with operating and signaling departments. I would expect you to plan the work in a programmed manner to wipe out the arrears in deep screening of turnouts.

4.0 The railway-wise holding of Unimat 3S & 4S is enclosed at Annexure III. The 3S machines have the facility of 3<sup>rd</sup> rail lifting arm for lifting turnout side of long sleepers while tamping on the main line. 4S machines have the facility of tamping turnout side also while tamping the main line. 4S machines also have ALC for pre-measuring run and computerized design mode working. Field staff, often resort to shortcuts and do not utilize these facilities & sometimes the turnout side is not even tamped, which adversely affects the quality of turnout maintenance. I would expect you to set up a system for daily monitoring of use of these facilities at Zonal headquarter level.

5.0 Your plan of action for improving the mechanized laying and maintenance of turnouts as above may please be apprised and progress should be reported through PCDOs. Quality check should also be conducted by headquarter officers and Technical Audit teams. The reports of quality checks should be reviewed at your level for necessary corrective measures.

*with best wishes*

Yours sincerely,

*A.P. Mishra*

*10/03/11*

(A.P. Mishra)

PCE, All Indian Railways.

Copy to Director/IRICEN, Pune for information .

Mechanisation of Turn out Renewal upto Jan'11							
Rly.	Total open line Target	Total Progress upto Jan'11	No. of M/C	Target for mechanised T/O Renewal 2010-11	Prop. Target for mechanised T/O Renewal upto Jan'11	Progress by T-28 upto Jan'11	% mechanisation
1	2	3	4	5	6	7	8=(7)*100/(3)
CR	260	234	1	96	80	26	11
ER	379	481	1	96	80	52	11
ECR	423	367	2	192	160	100	27
ECOR	266	270	1	96	80	52	19
NR	775	668	2	192	160	102	15
NCR	393	311	1	96	80	54	17
NER	73	100	1	96	80	39	39
NFR	120	155	1	96	80	103	66
NWR	364	192	2	128	107	82	43
SR	186	168	2	192	160	176	105
SCR	360	348	4	384	320	229	66
SER	472	530	2	192	160	219	41
SECR	202	189	1	96	80	66	35
SWR	193	185	1	96	80	39	21
WR	519	477	2	192	160	130	27
WCR	283	319	1	160	133	96	30
IR	5268	4994	25	2400	2000	1565	31

Mechanisation of Deep Screening of Turn out upto Jan-11					
RLY.	No. of BCM capable of Deep Screening of T/Outs	Machine No.	Route	Work Done	
				Total Work (M/C+Manual)	By BCM Machines
CR	4	RM-76-306, 344, 357, 376	All	39	39
			A+B+D Spl	33	33
ER	2		All	0	0
		356, 370	A+B+D Spl	0	0
ECR	1		All	29	1
		359	A+B+D Spl	1	1
			All	6	6
ECOR	3	349, 361, 369	A+B+D Spl	6	6
		348, 360, 371, 377	All	0	0
NR	4		A+B+D Spl	0	0
		RM-76-305, 347, 354, 364	All	156	156
NCR	4		A+B+D Spl	155	155
			All	0	0
NER	2	362, 382	A+B+D Spl	0	0
			All	13	13
NFR	1	375	A+B+D Spl	13	13
			All	0	0
NWR	2	355, 372	A+B+D Spl	0	0
		343, 358, 368, 380	All	28	15
SR	4		A+B+D Spl	26	13
		346, 363, 367, 379	All	123	123
SCR	4		A+B+D Spl	123	123
			All	4	4
SER	2	366, 381	A+B+D Spl	1	1
			All	121	1
SECR	2	352, 383	A+B+D Spl	113	1
			All	1	1
SWR	2	351, 384	A+B+D Spl	1	1
		350, 365, 373, 378	All	0	0
WR	4		A+B+D Spl	0	0
			All	1	1
WCR	3	345, 353, 374	A+B+D Spl	1	1
			All	521	360
IR	44		A+B+D Spl	473	348

Note: Position of mannual works is not being submitted by any railway except ECR & SECR

Rly	UNIMAT				Total
	2-S	3-S	4-S		
CR	8256	8280, 8284, 8300, 8310	8402		6
ER	8258	8262, 8305, 8307	8405		5
ECR		8274, 8281, 8296	8406		4
ECOR	8259	8304, 8311			3
NR	8257	8270, 8273, 8285, 8293, 8306	8411		7
NCR	8250	8261, 8264, 8299, 8309			5
NER		8290	8404		2
NFR	8251	8275, 8295			3
NWR		8272, 8394, 8312			3
SR		8266, 8283, 8289	8403, 8407		5
SCR	8249, 8253	8265, 8278, 8282, 8288, 8308			7
SER	8254, 8260	8276, 8297, 8302			5
SECR	8252	8286, 8298	8408		4
SWR		8269, 8277	8409		3
WR	8255	8263, 8267, 8279, 8287, 8303	8401		7
WCR		8268, 8291, 8292, 8301	8410		5
Total					74