RB/CE-I/1/2006

GOVERNMENT OF INDIA
MINISTRY OF RAILWAY
(RAILWAY BOARD)

No. 95/CE-I/GNS/2 Vol.II-Pt.II N.Delhi, Dated: 03/06-03-2006

The All GMs/PCEs/CAOs & CE(Co-ord)
of all Indian Railways
(as per list attached)

Sub.: Manpower for track maintenance/Rational formulae.

Presently P-way gang strength is being calculated based on Special Committee report of 1979. Over the years there has been many changes in track maintenance practices as also the recruitment methodology of the gangman. In view of this Board had set up another committee under the convenership of Sh. Gopalakrishna, (the then CAO/C/NFR & later as AGM/SR) to go into the whole issue of track maintenance and to suggest a Rational Formulae for the same. The Committee has since submitted (Vol. I & II) its report which has been examined in Board's office. Board has approved this report for calculating the gang strength based on Rational formulae.

2. The report consists of two volumes; Volume I and Volume II and the sample calculations for arriving at the gang strength is based on a computer software. The report has been approved by the Board with the following observations/modifications to some paras:

(i) **Para 0.12/8.10– "Heavy repairs to track including lifting".**

To avoid ambiguity, this para has been defined as lifting of the track more than 2 inches and casual renewal exceeding 250 sleepers per km would be termed as **"Heavy repairs to track, including lifting".**

(ii) **Para 0.16-**

(a) Railway should explore the possibility of utilizing the decategorised staff in alternative jobs before removing such a staff from service.

(b) Proper safeguard should be ensured in the system to prevent deliberate medical decategorisation of the staff for shifting them to lighter duties or even removal.

(c) The recognized Unions should also be consulted before implementing the recommendations at (ii)(a) & (ii)(b).

(iii) **Para 0.7.8/4.6.2**

A uniform alignment factor of 0.25 has been provided for more than 2 degree curve for BG track, more than 4 degree curve for MG track and more than 7 degree curve for NG track. PCE/CE (Coordination) may obtain the feedback from the field whether this factor needs to be linearly increased for steeper curves. If yes, the Railway should suggest the same.

(iv) **Para 0.11 Sub-activity S. 5/6.3.5 -- Bad formation**

There is a typographical error. Bad formation should be defined as where four or more attentions are needed in a year instead of 12.

(v) **Para 4.3.4**

For machine packed track, there is a typographical error in the formula.Figure 303 should be replaced by 239.

(vi) **Para 4.10.3 – Number of working days**

The number of mandays taken as 290 should be replaced by 294 as 290 days were calculated based on Casual Leave being 15. Since now CLs have been reduced to 11, therefore the number of working days should increase to 294 days/annum

(vii) **Table 1 (Volume II) Item 1.2 B**

Requirement of Mandays for working with tampers should be 3 instead of 6. And therefore the total mandays required should be 424 instead of 427 for maintaining 1km of machine packed track (BG).

(viii) **Para 8.6**

Mandays lost on account of absenteeism for more than what can be accounted by 12.5% leave reserve can be taken care of by deploying contractual agency wherever necessary, keeping in mind the prevalent labour laws and with the personal approval of PCE/CE (Coordination). The issue is being deliberated separately in consultation with legal Dte. & outcome thereof will be advised separately.

(ix) **Para 8.7**

Following should be added in the end of para:

For major yards, by separating the work of cleaning of yard, handling of materials and other miscellaneous works, for maintenance, operation of track, a part gang can be separated which can be manned by gangwoman. Further, gangwoman may be put on lighter duties such as " Look out or water" duties.

(x) **Para 8.9**

Board's decision on provision of 2% trainee reserve will be communicated separately.

(xi) **Para 8.10**

(a) Sub-item 10 should be read as : " Loading and unloading of P-way materials in bulk and loading and unloading of heavy materials".

(b) Sub-item 11, the wording should be changed to "Loading and unloading of P-way materials for other than casual renewals at isolated locations (in the normal course of day-to-day maintenance)".

(xii) **Table P1-Vol.II -Output and frequency of shallow screening (overhauling of track)**

Instead of 6 sleepers per man per day assumed by the committee for the above activity, it should be 4 in view of more ballast to be handled in heavy PSC sleeper track.

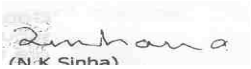
(xiii) **Para 5 – High Density Sub-urban Section**

Gang strength given by the committee mainly caters for Bombay suburban section where night work is resorted to. However, there are sub-urban sections in other metro cities where night working has not been resorted due to heavy mail/express and goods traffic during the night. Daylight hours in morning and evening time cannot be utilized for track maintenance on account of heavy suburban traffic thereby reducing effective time available for track maintenance considerably. Therefore, PCEs can suggest a separate table for working out the mandays keeping the ground realities in view for the suburban section on approaches of such metro towns where the train density is more than 5 trains per hours at least for 2 hours in the morning and one hour in the evening. The revised calculation can be sent to Railway Board for their approval.

(xiv) **Table under para 6.5.1 (vol.I)**

The value of factor 'm' should also be taken as 2 for areas infested with terrorist activities as has been taken for areas infested with wild animals.

3. This issue with the concurrence of the Finance Dte. of the Ministry of Railways.

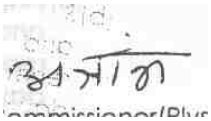


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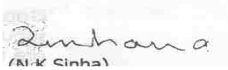
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Copy to: Dy. Comptroller & Auditor General of India(Rlys), Room No. 224, Rail Bhawan N. Delhi.



For Financial Commissioner(Rlys)

Copy to :Director/IRICEN, IRICEN should arrange necessary training courses for calculating the gang strength based on rational formulae as contained in the present report of Committee on Manpower and Cost Norms for Track Maintenance.



(N.K.Sinha)

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