

RGM

66/3 (9)

GOVERNMENT OF INDIA
MINISTRY OF RAILWAYS
(RAILWAY BOARD)
RAIL BHAWAN

JOINT OPERATING AND ENGINEERING CIRCULAR

Dated: 08.05.2009

No. 99/Track-III/MC/6 Vol-V

GM, All Zonal Railways

COM, PCE, CSTE & CEE, All Zonal Railways

Sub: Traffic Block and other Operating issues in connection with operation of Rail Grinding Machine on Indian railways

1.1 Background:

1.1 Indian Railway has placed order for procurement of two Rail Grinding Machines at a total cost of Rs.190crores, including spares, etc. It is the costliest machine of IR. The machine will be put in operation w.e.f. March'10. It is an important machine and considered one of the main pre-requisites for heavy haul rail operation. It aims at increasing rail life by better rail-wheel interaction by customizing the site specific rail-ball profile condition. Introduction of RGM on IR is as inevitable as the heavy haul operation IR.

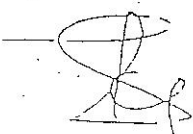

1.2 Under ideal condition, the grinding speeds of Rail Grinding Machine (72 stones), shall be about 10kmph @ 0.20 mm metal removal. That means, loss of one hour grinding due to indecision in field, may cost a loss of 10km of grinding.

1.3 The first two years of operation and maintenance of RGM is with LORAM, the supplier of the machine, but the safe utilization of RGM train is the responsibility of Indian Railway.

2.0 In view of above, the committee appointed on working of RGM on IR deliberated various operating issues and recommended relevant items for successful implementation of RGM on IR. Accordingly, a Joint Engineering and Operating Circular is being issued at the level of AM (traffic) and AM (CE) to emphasize the importance of rail grinding machine and its successful operation of RGM on IR.

2.1 Existing Joint Circulars of Railway Board on Fixed Time Integrated Corridor Blocks (FTICB) (Letter no 98 Track-III/TK/27 dated 02-12-2002, Annexure-6/1-3) and Mega Blocks (MB) (letter no. 2003/Track-III/TK/1 Vol.III Pt dated 29.12.2006 Annexure 12/9-12) regarding Traffic blocks for maintenance of assets should be implemented by railways. Four hours stipulated traffic block per day and six hours mega blocks on weekend, shall be granted by resorting single line train operation, cancellation or regulation of trains, wherever, corridor blocks are not available.

- 2.2 For maximum use of RGM and a closer monitoring of RGM working on a particular railway, a **monthly / quarterly programme**, jointly signed by Pr.CE & COM of respective railways, shall be issued based upon the **annual programme** of RGM. Correspondingly **weekly / monthly programme** shall be issued at the **divisional level** jointly signed by Sr. DOM & Sr. DEN/C
- 2.3 During the first two years after commissioning, the supplier has to operate and run the machine but **railway has to provide pilot and guard purely to ensure safety**, though this machine is self propelled/powerd and can run at 80kmph without any additional Locomotive. Hence, a **separate roster for engine, driver and guard** shall have to be organized at divisional level so that work does not suffer on account of engine pilot and guard. This roster should made considering **two shift working of RGM**, as the same may have to work for six hours within a total span of 12 to 16hours.
- 2.4 Railway and LORAM operators shall gain acquaintance in operation/running of RGM on RGM rotes, obtain route learning certificate like other track machine. This is required to be achieved in the **first three months of commissioning of RGM** so as to enable them to operate RGM in self-propelled manner like any other machine and thus avoid requirement of additional pilot and guard.
- 2.5 Time loss of 20minutes shall result into loss of progress of 3km of preventive gradual grinding in ideal condition. Hence, Section Controller and Station Manager shall ensure that blocks are granted promptly.
- 2.6 Section Controller shall regulate Goods Trains carrying highly inflammable goods like naphtha, on the immediate adjacent lines during the traffic block. Train on the blocked line where RGM has worked, will be permitted only after the receipt of a certificate from site-in-charge of RGM (PWI).
- 2.7 Traffic path shall be given on priority for the movement of RGM train from field base station to work site or RCD points and back to base station or while moving from one division or zonal railways to other.
- 2.8 Division shall arrange **dedicated Traffic Inspector, Guard and Driver** for working and shunting operation of RGM in two shifts.
- 2.9 OHE block shall not be required for day to day working of RGM. However, during maintenance work while placed in stabling siding, there may be a need of unwired line / OHE block for a very short duration.
- 2.10 **Stabling siding and base station:**
- 2.10.1 Stabling sidings shall be planned and developed at a distance of about 50km on the sections where RGM will be deployed, with minimum CSR of 300m, yard connectivity at both ends and requisite facilities of lighting, watering and water supply pipe line, toilet, bath room, resting facility, and approach road, for accommodating RGM, UTV, two BTPN wagon, two

66/5

camp coaches and locomotive. Preferably, there can be two spurs with minimum length of one of the spurs being 150 m (CSR) to accommodate RGM of length about 130m. In case the same is not available, the new siding should be laid or existing spurs should be extended for stabling of RGM train.

- 2.10.2 In unavoidable scenario, operating sidings can be utilized for stabling RGM. However, the same should be done in planned manner and due intimation to all concerned, to avoid disturbance to traffic movement.
- 2.10.3 Zonal railway shall provide requisite facilities for smooth working of RGM from that the identified base station by March '10.
- 2.10.4 The RGM siding should be stabled in either unwired line for maintenance of RGM or siding having OHE isolation system.
- 2.11 Existing fuelling points (RCD) of IR shall be tapped as an alternate source of supply of HSD oil. This has been agreed in principle by the Stores and Mechanical Directorate. Operating Department shall ensure expeditious movement of RGM train to RCD points and back to the base station to avoid loss of working days.
- 2.12 Traffic Directorate shall allot and arrange rolling stocks like two BTPN wagons and two GS passenger coaches per RGM, for the purpose of storing diesel and water in BTPN wagons and conversion of GS coaches into four camp coaches-cum-mobile resting-cum-store-cum-repair workshop. These stocks shall be made part of RGM train formation.
- 2.13 Optical rail profile measuring system shall be allowed path on priority for measurement of rail surface condition measurements.

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