

# EAST CENTRAL RAILWAY

Office of GM (Safety)  
Hajipur

## SAFETY BULLETIN

No. ECR/Safety Bulletin/01/2022

Date: 15.01.2022

**Sub: Precautions during working of Track Machines etc. in Block Section.**

### **1. Brief History/ Introduction :**

An incidence of breach of Block Rule classified under G-3 took place on 10.01.2022 in SEE division of ECR. Duomatic Machine Block was granted between SMO-CRR in UP line from 12.45 hrs to 13.45 hrs. Machine moved for worksite from CRR and was to return to CRR after work. But train no. 03315 Up (KIR – SPJ MEMU pass.) was dispatched from SMO station to CRR station after obtaining line clear from CRR station despite the machine was still working in the block section and block was not cancelled. In this case on duty SM/ SMO asked for line clear and SS/ CRR granted Line clear to 03315 Up passenger without ensuring cancellation of traffic block and clearance of Block Section. 03315 Up passenger train was stopped in the Block Section on banner flag.

**2. Important Facts and Observations:** - PCSO and CTPM from HQ and DRM from Division along with concerned officers visited site of incidence in the late evening of 10.01.2022. Some important observations after visiting CRR and SMO stations and having interactions with concerned available staff who were on-duty at the time of incidence (except on duty SS/CRR who could not report to the investigating team and absconded) and seeing station records available were as under:-:

- It was found that entry regarding granting of block was written on top of the page of TSR at SMO station. It seemed that entry was done after the incidence and also private number was later endorsed. Train entry of UP and DN both direction was found done in one page in mixed pattern.
- Procedure regarding condition for closing block section as per G & SR 14.10 and condition for granting line clear at a class 'B' station as per G & SR 8.03 was not followed. Procedures regarding working of Track Machine as per Rule 4.65 (c) (i), (ii), (ix) of G & SR were not properly followed.
- Form T-806 (Shunting Order) of CRR station was checked and found that it was last issued on 30.12.2021. Shunting of Machine from/to siding, which is a non-

signalled movement is being done on verbal instructions and Shunting Order T/806 is not being used.

- Block Requisition Notice and Permit was given on a small paper sheet instead of the standard form prescribed in G & SR. Simple paper memo was given for reception of the Duomatic machine for passing red signal instead of standard T/369(3b). PWI and Station staff were not well conversant with the procedure too.
- In Para 6.8.4 of CRR Station Working Rule, it is written that Block Proving Axle Counter has been provided between CRR and SMO but it was actually not there. The Axle Counter provided is only for line verification and not integrated with Block Instruments.

### **3. Procedure/Systematic Failure:**

- SS/CRR, without ensuring clearance of machine and obtaining Safety Fit Certificate from PWI, made the Block Instrument in closed condition from TOL and granted line clear to SM/SMO for 03315 train. He did not inform the Control and failed to exchange Private no. with the Control for clearance of section and cancellation of block. SM/SMO also failed to check from Control about block clearance and cancellation of block and did not exchange private no. with the Section Controller. Control failed to ensure exchange of Private no. at the time of permitting and cancellation of block with both the stations.
- PWI was not aware of the prescribed procedure for availing and cancelling Block. TMC Operator was also found to be not very concerned about safety and was carrying out some activities simply on verbal instructions only.
- Record of Memos being given and Block Register is not being maintained at CRR station. Line occupied board, which is to be used for hanging in the Block Instrument when block is granted, was also not available at CRR station.
- It also came to notice that Axle Counter is not interlocked with the Block instrument. Had Block instrument been interlocked with Axle Counter, the SM/CRR would not have granted line clear on Block Instrument and incidence of breach of Block Rule could have been avoided.
- The said block was granted in the face of passenger train no. 03315 (KIR – SPJ MEMU Pass.) which arrived SMO at 12.44 hrs and block was given from 12.45 hrs. It clearly indicated bad planning and created undue pressure on SM/SMO where passenger train was standing.

**4. Immediate Action:** Based on prima-facie facts and evidences, on duty SS/CRR, on-duty SM/SMO, Sectional TI/NNA, on-duty Section Controller and SSE (P. Way) attached with Track Machine have been put under suspension for lapses in duty on their parts and a JAG level Committee consisting of JAG Officers of Optg., Safety, S&T and Engg.) has been ordered for conducting Inquiry into this case.

### **5. Precautions to be taken:**

It appears that this incidence of Breach of Block Rule is result of a number of non-observance of rules by the staff. Detailed instructions and procedures to be followed for working of Track Machines have been prescribed in the G & SR under Rule 4.65 and in

Manuals. These Rules and Procedures have to be followed in letter and spirit in true practice and no short cuts are to be adopted. Some basic and important precautions and actions are reiterated as under and must be ensured by all concerned:-

**(I) For SS/SM of both end stations:-**

- (i) Requisition of traffic block/ power block should be accepted by SS/SM only if it is demanded in prescribed format as per Annex I/II mentioned in G&SR.
- (ii) Before granting Block, exchange of private number with adjacent station and Section controller must be ensured.
- (iii) SM shall take all necessary precautions to prevent entry of any train into the concerned block section after granting Block. He shall use stop plug/button collar/level collar and hang a 'Line Obstructed Board' written with white letters against red background on the Block Instrument to serve as an aid to memory.
- (iv) The Station Master on either side shall be responsible to inform all the level crossing gates equipped with telephones falling in this block section about the total number of Material Train/TRT/PQRS, Track Machine(s), Tower Wagons(s) permitted to work in the block section under exchange of private number.
- (v) SM will make necessary entries in the Block Register, Power Block Register and Train Signal Register (With Red ink). SS/SM will keep proper record of blocks given and all forms should be preserved as record.
- (vi) Shunting will be performed on proper Authority T/806 and proper Authority will be given to the Track Machine Operator/LP for passing signal at danger.

**(II) For PWI/ Block taking official/ Machine / Tower wagon In-charge:**

- (i) Requisition of Block should be made in prescribed format as mentioned in G&SR and all relevant columns must be filled up properly.
- (ii) The official In-charge (Track Machine Block)/Overall In-charge [Integrated Block] is responsible for the protection of the site of the work and also for protection of adjoining track in case of infringement, if any. He shall also be responsible for safety of track after the working.
- (iii) In course of working, when required to pass a manned or unmanned level crossing, each Material Train/TRT/PQRS, Track Machine(s), Tower Wagon(s) shall stop short of the level crossing and pass only after ensuring the safety at the level crossing.
- (iv) The official In-charge (Track Machine Block)/Overall In-charge [Integrated Block] shall always take four efficient flagman equipped with Banner Flag, 10 detonators and Red hand signal each to protect the Material Train/TRT/PQRS/Track Machine/Tower Wagon. One Flagman shall exhibit Banner Flag at a distance of

600 meters on either side of the worksite and one Flagman showing Stop Hand Signal at a distance of 1200 meters on either side of the worksite.

- (v) Some Track Machines may foul the adjacent line while working on Double Line Section or in the Yard. BRM may foul the adjacent line when stretching out its blades. If any part of a Track Machine is likely to foul the adjacent line while working, the Official In-charge (Track Machine Block)/Overall In-charge [Integrated Block] shall request SM in writing to block both the lines and then such work should only be undertaken, if permitted.
- (vi) The Official In-charge (Track Machine Block)/Overall In-charge [Integrated Block] is responsible for the protection of the worksite and also for protection of adjoining track in case of infringement, if any. Additional precautions as prescribed in G & SR during dusty atmosphere, heavy noise pollution and mass labour working must be taken.
- (vii) During Integrated Block, Overall In-charge [Integrated Block] will co-ordinate with In-charge [Material Train, Tower Wagon and Track Machine(s)] and ensure safety.
- (viii) Official In-charge [Track Machine Block]/Overall In-charge [Integrated Block]/Tower Wagon In-charge will be responsible for obtaining Power Block, if required.
- (ix) After finishing the work and clearing the section, Track Fit Certificate in prescribed form as per Annex-III mentioned in G & SR will be given by Official In-charge, to SS/SM on duty. He will also hand over the Permit to the SS/SM on duty along with this.
- (x) Official in-Charge will further ensure that Track Machine Operator follow the safety rules and move on proper Authority.

**(III) For Section Controller:**

- (i) Section controller must plan block in such a way that no passenger train is delayed in-ordinate at any roadside station as it may cause public agitation and creates undue pressure on SS/SM.
- (ii) He must check and ensure that there is no train running in the Block section before permitting traffic/ Power block.
- (iii) On ensuring that no train is in the Block Section and after exchanging private number with SM of both stations, Block will be permitted. He will make entry in a register in this regard and also on Control chart.
- (iv) Section Controller will advise Engineering Control/TPC regarding permission granted for Block/ Integrated Block. Engineering Control and TPC will monitor the block in Control Office.

- (v) After getting information of Block being cancelled by the Block granting station after receipt of Track Fit Certificate as per Annexure III of G & SR along with Block Permit, Section Controller will check from the respective Control of the same and after ascertaining the same he will exchange Private nos. with both the stations and the Block will be cancelled. Section Controller then only will permit movement of train in the section.

Compliance of above should be strictly ensured by all concerned. Supervisors and Officers in the Division will have regular and surprise checks to monitor the above.

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**PCSO/ECR/HJP**

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