

SOUTH CENTRAL RAILWAY
HEADQUARTERS SAFETY ORGANISATION
BI-MONTHLY SAFETY BULLETIN – NOVEMBER & DECEMBER 2022

DETAILS OF ACCIDENTS AND UNUSUALS THAT OCCURED DURING – NOVEMBER & DECEMBER 2022

(1) Brief of the Accident : On 07.11.2022 at about 20:06 hrs, LP of coupled DSL/AC LE (13144 + 39118) arrived and stopped on down loop line (Road No.4) as Starter was at “ON” at Tiruchanur yard of Guntakal division. On observing down main line Starter (Road No.3) Signal Caution aspect, LP of Coupled DSL/AC LE mistook the same and started the loco and passed down loop line (Road No.4) Starter signal at “ON” and entered into overshoot line, damaging buffer stop, resulting into derailment of the diesel loco in dead end. Diesel loco all wheels derailed.

Cause of the Accident : LP mistook the Starter signal aspect of main line as that of loop line. LP stopped 350 m much before the Starter signal instead of at the foot of the Starter signal of Loop line Road No.4. LP & ALP were in hurry to reach RU to complete their duty and to avail rest.

RESPONSIBILITY :

PRIMARY :

1. LP has failed to observe the aspect of Road No. 4 Starter signal No. S - 37 and mistook the Road No. 4 Signal and entered into over shoot line then hit the dead end and got derailed. Thus violates Rule No. GR 3.08(4) (b) and GR 3.81(1) of SCR G&SR 2020.
2. ALP has failed to observe the aspect of Road No.4 Starter signal No. S – 37 and mistook the Road No.4 signal and entered into over shoot line then hit the dead end and got derailed. Thus violates Rule No. GR 3.08(4) (b) and GR 3.81(1) of SCR G&SR 2020.

SECONDARY :

1. CLI/RU (Nominated CLI of LP) for ineffective counselling regarding Engineman ship.
2. CLI/RU (Nominated CLI of ALP) for ineffective counselling regarding Engineman ship.

BLAMEWORTHY :

– NIL –

RULES VIOLATED :

1. Rule No. 3.08(4) (b), GR 3.81 (1) of SCR G&SR 2020.
Rule No. GR 3.08 : Description of Stop signals and their indications :-

(4) (b) : The aspects and indications of colour light signals in multiple aspects signalling territory :- Stop : Stop dead.

2. Rule No. GR 3.81 (1) of SCR G&SR 2020.

Duties of Loco Pilot when a departure Stop signal is “ON” or defective :-

The Loco Pilot of a train shall not pass a departure signal that refers to him, when it is “ON” or defective.

(2) Brief of the Accident : On 09.11.2022 at about 02:55 hrs, Train No. NMG-C while moving from Rajahmundry (RJY) North yard to Kadiyam (KYM) derailed by 12th Coach from the engine and capsized in Rajahmundry (RJY) yard of Vijayawada (BZA) division. There was no point of mount on the running rail i.e., LH side crossing, the wheels jumped out of the check rail of Point No. 67 – A and dropped by LH side wheels outside the track there were indications of the buffer entanglement of the derailed coach and its following coach No. NFX – NMG – 00201.

Cause of the Accident : The derailment was due to “Buffer entanglement which was proved due to the dent marks on the inside of the buffer of rear coach and corresponding marks on the RH buffer because of which the coach was forced to push on the outside. This was due to the broken RH side draw hook support stopper failure and restrict the lateral movement of the buffers” and to finally to derailment. The mechanism at site is also correlates with the evidences and witness statements.

RESPONSIBILITY :

PRIMARY :

1. SSE / C&W / TNPM / MAS Dvn. / S. Rly. (For improper attention of the drawbar hook stopper welding during C&W examination.)

SECONDARY :

1. SSE / P.Way / RJY, (For not removing the released sleepers which are lying by the side of track even though not in the infringement zone lead to toppling of the coach after derailment.)
2. Train Manager (Guard). (For not applying brakes immediately after receiving the message of sparks through walkie talkie from Train Manager of Train No. MRCJ.)

BLAMEWORTHY : - NIL -

RULES VIOLATED :

1. Para No. 901 (b) (i) of Maintenance Manual of BG Coaches of ICF design.
2. Rule No. 2.11 (2) (d) of G&SR 2020.

MATTERS BROUGHT TO LIGHT :

1. Loaded condition track readings :- As per Para 502 of IRPWM, track recording car enable collection of discrete values of various track geometry parameters on selected sampling interval under loaded condition. Specific instructions may be issued from the headquarters for taking the track readings in loaded condition.
2. The running staff and the operating staff highlighted that the walkie talkie communication at RJY yard is poor and needs improvement.
3. Trucking of released P.WAY material like sleepers, rails etc., to be done regularly. Further, stacking of such materials should be proper.
4. There are no guidelines issued for loading pattern of automobile consignments in NMG coaches. Pattern of securing these consignments is being ensured purely from customer point of view.
5. There have been instances in the course of the investigation that the supervisors have been asking for the readings which are out of proformas. A system may be established such that the denial/approval of giving extra readings pertaining to any department may lie within the purview of the concerned branch officer in consultation with Sr DSO.
6. Provisions given under different columns of wagon/coach/loco joint measurements proforma like “any other defects which may have contributed to or caused the derailment” and “other observation considered relevant to derailment”. Under this provision, the other readings / observations asked by the supervisors are to be given to facilitate the enquiry committee for thorough investigation and establishment of proper cause of derailment.

SUGGESTIONS AND RECOMMENDATIONS :

1. C&W staff should conduct rolling in and rolling out examination for goods trains also in maor yards like RJY, BZA.
2. After completion of duty hours of crew, relief crew to be arranged and after arranging relief crew, longer hours crew should not be continued.
3. WT signals should be improved at kajor yards like RJY, BZA.

(3) Brief of the Accident : On 18.11.2022 at about 02:38 hrs, Train No. 12655 (ADI – MAS) Exp. while rolling into Gudur (GDR) Station of Vijayawada (BZA) division stopped at Km.135/45 on Road No. 1 due to ACP in coach No. SR LWSCN 195371 (S-2), 13th from TE. Points man who was on “OFF” side informed to Dy. SS that there is smoke and fire in pantry car. On duty TNC Shri. P. V. Krishaiah and Points Man Shri. R. V. Suresh proceeded to the pantry car No. SR LWCBAC 212765 (14th from TE) and found flames inside the pantry car. Due to thick smoke in the pantry car inside the coach is invisible, Shri. R. V. Suresh, Points Man break and open the window glass door of pantry car on both sides, with portable fire extinguishers and used 4 fire extinguishers. ALP & Guard attended the pantry car No. SR LWCBAC 212765 (14th from TE). Used portable fire extinguishers available in adjacent

coaches and Station. Mean while fire brigade arrived and brought the fire under control. After obtaining joint statement for safe to run from TMR, LP, SS/GDR, C&W, Electrical, RPF & GRP and fit to run certificate from C&W staff, the train was permitted after a total detention of 82 minutes.

Cause of the Accident : Contract staff of pantry car kept the electrical stove in “ON” condition with vessel containing left over food items (Vada, Samosa etc.) and slept. Due to continuous heating and presence of oil, the vessel caught fire. Despite availability of four fire extinguishers in good fettle pantry car staff didn’t try to operate them.

RESPONSIBILITY :

PRIMARY :
IRCTC Licensee Vendor (Satyam caterer, Pvt., Ltd, New Delhi.

SECONDARY : - NIL -

BLAMEWORTHY : - NIL -

RULES VIOLATED :

Railway Act 1989, Section 154 (Endangering the safety of travelling passenger by act of negligence)

MATTERS BROUGHT TO LIGHT :

1. No modifications made in agreement for pantry car activities [popst](#) conversion of ICF coaches to LHB coaches and introduction of flameless cooking.
2. Fire training certificate is not available for all the travelling pantry staff.
3. No specified duties / responsibility is provided for pantry car manager, assistant manager.
4. As per latest board instructions, flameless cooking is permitted but the purpose and quantity is nowhere specified. No written instructions to allow only snacks in case of exigencies.
5. There are no written instructions presented to prevent cooking in the night time.
6. Fire extinguisher training not provided to TTE, pantry car staff.
7. OHE was switched off without planning for detachment of coaches.
8. Automatic fire detection and Automatic suppression system was found in working condition.
9. There is no evidence of vouchers for food items loaded at last loading point.

10. One pantry car staff was found travelling in the pantry car kitchen area without valid travelling authority, ID card and no checking had been done to deboard him.
11. At Gudur, the complete coverage of the platform not available under CCTV.
12. CCTV in the coach was not in working condition and warranty had been lodged.
13. 4 fire extinguishers with valid date were found inside pantry car in unused condition.

SUGGESTIONS AND RECOMMENDATIONS :

In order to avoid such incidents in future, the committee suggests that all the on board staff may be trained in fire safety measures and licensee staff may be sensitised about the duties and responsibility inside the pantry car. Night time cooking beyond 22:00 hours may be avoided to avert occurrences of such incidents.

(4) Brief of the Accident : On 27.12.2022 at about 17:55 hrs, Train No. JNPT/Container travelling from Road-4 to Road-6 of KLU yard of Guntakal division through multiple crossovers and reverse curves, 17th wagon BLLB 64251911201 all wheels derailed, 18th wagon BLLB 64251911195 all wheels derailed & 19th wagon BLLB 642511911188 leading trolley both wheels derailed, since the formation failed to negotiate the second and subsequent loop / reverse curves / turnouts in the station yard due to rigidity in the container wagon having SLDB type couplers between wagons while negotiating multiple crossovers resulted in mounting over the outer (RH) rail in the crossover portion.

Cause of the Accident : The cause of the accident as arrived at by the committee of JAG Officers is that "Due to rigidity in the container wagon unit system (01 unit consists of 05 BLL wagons) with rigid connection between successive wagons while negotiating multiple crossovers resulted in mounting over the outer rail in the cross over portion". The train was being dealt on Road No. 6 which involved negotiating two cross overs.

RESPONSIBILITY :

PRIMARY : - NIL -

SECONDARY : - NIL -

BLAMEWORTHY : - NIL -

MATTERS BROUGHT TO LIGHT:

There were large number of derailments of BLC / BCLC / BLL container wagons on second and subsequent loops while negotiating reverse curves due to multiple crossovers / turnouts, longer length of crossovers etc., as per Railway Board letter No.2009/CE-

II/Accident/ Policy, dated 20.08.2020. Consequent to these type of derailments several instructions were issued on the operation of container trains as listed below.

1. Vide Lr. No. 2009/CE-II/Accident/Policy dated 09.02.2016 : Railway Board has advised to restrict the movement of container wagons on second and subsequent loops until a fresh assessment is done by RDSO on this subject.
Further, Railway Board has advised zonal railways to check the layout of yards in their territory and fix the routes for movements / stabling of BLC / BCLC wagons in such a way that negotiation of multiple crossovers leading to formation of reverse curves is avoided, which was not conducted.
2. It is noticed that Chennai (MAS) Division of Southern Railway in their working time table (WTT) No. 106 (inforce from 01.10.2021) has incorporated certain restrictions for movement of BLC / BCLC wagons like roads fit for movements / stabling of BLC / BCLC wagons, speed restrictions etc.
3. CTE/SC's Letter No. WT-5/P/Vol.XIII dated 01-02-2017 addressed to COM with copies enclosed to all DRM's wherein it was stated that container flat wagons and EUR shall not be operated on 2nd and subsequent loops till the ongoing studies on their negotiability over series of crossovers/turnouts are completed by RDSO and such instructions shall be notified in SWRs and WTTs.
4. PCE/SC's letter No.WT-5/P/Vol.XIV, dated 17-10-2017 stated that the movement of container flat wagons and EUR rakes (10/20 rail panel rakes) should not be permitted on 2nd and subsequent loops till further instructions on this subject.
5. CSO/SC also reiterated the same vide Lr.No.safety.157/safety in operations/Vol.IX, Dt 17-10-2017.
6. Executive Director/Traffic trans (S)/RLY Board vide his letter No.2014/TT-III/32/3, dated 21-12-2017 advised to keep the instructions issued (wrongly mentioned as 09-02-2017) in abeyance, which was not endorsed by civil engineering department or RDSO.
7. Based on the Railway Board letter dated 21-12-2017, CTM/G&RP/SC has issued a letter dated 01-08-2-18, down the line without concurrence of engineering and mechanical departments.
8. RDSO letter No.MV/Contr. BLC 25-S issued on 18-03-2019 advised to avoid receiving of BLCA and BLCB wagon formations on 2nd and subsequent loops.
9. Vide Rly Board letter No. 2009/CE-II/Accident/Policy, dated 20.08.2020 by Principal Executive Director of Civil Engg., (Planning) stated that: "Operation of BLC/BCLC Container wagon on 2nd and subsequent loops was restricted by board, owing to reporting of large No. of derailment cases involving these wagons while negotiating reverse curves due to multiple crossovers / turnouts, longer length of crossovers etc., by Zonal Railways.

Certain ambiguity is existing over permissibility of above container trains over the 1st loop of yards over certain zonal railways. The issue of container train (BLC/BLCM etc.,) entry on 1st/2nd loop has been examined in board and it is clarified that the restriction imposed for operation of BLC/BCLC Container wagons vide letter under reference above is for 2nd and subsequent loops only. These wagons can be operated over 1st loops of deferent yard by zonal railways.

10. Vide Lr. No. T. Rly,BD/ Vol.IV dated 02.09.2020 to PED/Safety, Rly. Board CTM/G&PP/SC had sought clarification reg., the movement of BRN/EUR rakes and BLC/BCLC Container wagons on 2nd and subsequent turnouts, jointly circulars to be issued by Engg., Mechanical & operating departments. But till date no clarification has been received from board.

SUGGESTIONS AND RECOMMENDATIONS :

1. In view of the ambiguity, clear instructions may be issued for the movement of BLC/BLL Container wagons on 2nd and subsequent turnouts. Till that time, MAS Division's model may be examined for implementation.
2. Instructions were issued vide JPO NO.1/2015 – 16 dated 11-11-2016 at HQS PHoD level (PCME, PCEE, PCOM and PCE) operating procedure order for loading / unloading and transportation of welded rail panel form BHILAI flash –butt welding plant / MLY.
Similar JPO may be brought out for operation of container wagons over the second and subsequent/multiple turnouts in south central Railway yards.
3. RDSO may study the existing pattern of multiple crossovers and design of second and subsequent loops and to issue modification advice wherever required to overcome the slack less drawbar rigidity of BLC/BLL wagons for smooth operation on second and subsequent/multiple turnouts.

Note : “As the restriction on movement of container wagons is having serious operational constraints, necessary action may be taken on suggestions & recommendations made by the committee, at HQ / RB level clear guidelines may be issued jointly by Civil, Mechanical, Operating wings for smooth & safe operations of the container type train” as suggested by DRM/GTL while accepting the findings of the accident report.

ATTENTION STATION MASTERS

S.R. 5.19.2. If, for some reason, any vehicle is allowed to remain on a running line for some length of time, a clear remark in red ink shall be made immediately in the TSR indicating the time and the number of the running line on which it is detained. A record of the blocking of the running line shall be made in the station diary also and later, the time, when the vehicle is removed and the running line cleared of obstruction shall be indicated in the TSR and the station diary. The occupation of running line shall be recorded in the station diary at the time of handing over/taking over charge of duties by the Station Masters.

S.R. 5.19.3. At stations where CASMs are in charge of cabins, the Station Master shall also advise the CASM of the time and the number of running line on which any vehicle/wagon has been allowed to remain, confirming the same by exchange of PNs with each CASM. The CASM shall also exchange PNs mutually between themselves.

ATTENTION Engineering Department Staff

S.R. 15.26.2.4. The Station Master shall ascertain from the Control the particulars of trains likely to be encountered by the Trolley while working in the section, and furnish these particulars in part 'B' of the Trolley Notice (T/1518). On the non-controlled section, the relevant particulars shall be obtained from the station where trains originate.

S.R. 15.26.2.5. If there is total interruption of communication, the SM shall advise the official in charge of this fact and make an endorsement on the form T/1518 to this effect and it will be the personal responsibility of the official in charge to protect the Trolley as per rules. When communication is restored, Caution Orders will be issued as per the procedure mentioned above till the removal report of the Trolley is received by the SM.

ATTENTION

LOCO PILOTS / ASSISTANT LOCO PILOTS / TRAIN MANAGERS (GUARDS)

6.03. Protection of trains stopped between stations. :-

S.R. 6.03.6. In case of Light Engine or coupled Light Engines, the Loco Pilot or the Loco Pilots shall be responsible to protect the engine or engines in accordance with these rules.

S.R. 6.03.7. Flasher light units have been provided on Diesel/Electric locomotives. The unit, when switched on, flashes amber coloured light. At the same time the headlight, if on, is automatically switched off or, switched off by the Loco Pilot. When taking over charge of the electric/diesel locomotive from the shed/yard, the Loco Pilot shall test the working of the unit and make an appropriate entry in the loco log book