

SOUTH CENTRAL RAILWAY

Safety.387/Fly Leaf/08/2021

Fly Leaf No. 08/2021
Attention..... ALL CONCERNED

Dashing of Road Vehicle with Engine of Train No.014633 (SMNH-JBP SPL) at manned LC No.39/C (Km. 43/9-44/0) in Gondal – Virpur Single Line Block Section (BG) of Bhavnagar Division of Western Railway occurred at 12.29 hours on 22.11.2020.

The Accident: :

On 22.11.2020, Train No. 01463 (SMNH-JBP SPL.) was worked by LP(P), ALP - and Guard with Locomotive No. 40177 WDP-4D. Train started its journey from origin station at scheduled time and was running Right Time. The train left Jetalsar station at 11.57 hrs. to enter SL block section Jetalsar-Virpur, At 12.20 hrs., train passed Virpur station and entered block section of Virpur-Gondal where the accident occurred.

The said train was approaching Engineering. Manned LC No. 39/C (Km. 43/9-44/0) at appx. 101 Kmph speed when Loco Pilot suddenly observed one Road Vehicle (Maruti Car No. GJ03-HR-5583) passing through this LC gate and applied emergency brake from around 204 meter distance. However in the process, the locomotive of train dashed with the car at 12.29 hrs. and the car- entangled with the buffers of the Locomotive was dragged for about 310 meters from the LC Gate along the track before the train came to halt at Km. 43/6-7.

At the time of accident, this gate was being manned by Ex- Serviceman working in 12 hour shift duty and LC gate was in Open condition at the time of passing of train and no banner flag was available. Road user (car occupant) was killed

Cause of the accident:

Due to the gate open, even after exchange of PN with SM/GDL by the Gateman confirming closing of the gate, without display of banner flags, when the train was crossing the gate.

However, accident could have been averted, had the local unsafe practice by Gateman was detected/reported by TI/PWI/Safety team in time or had the gate been interlocked or functioning of gate was altered as OTRT(Open To Road Traffic) in place CTRT(Closed to Road Traffic) or other safety measures were taken by Railway in time this gate.

Responsibility:

Primary:

On duty Gateman of LC-39

- (i) LC gate was kept in Open condition at the time of passing of train and gateman failed to close it.
- (ii) Gateman has failed to display banner flag after keeping the gate In open condition.
- (iii) The gateman had kept his LC gate open after false exchange of PN with SM/GDL

Secondary:

1. On duty SM & SS/GDL

- (i) Normal position of LC-39 as specified in SWR of GDL station was "Closed to Road Traffic" (CTRTR). However, in practical, the gate was functioning as "Open to Road Traffic" (OTRT) as per pattern of PN exchange between the SM/GDL and Gatemen
- (ii) With tacit consent of SS & SM/GDL Gateman had evolved a local system of not closing the gate physically but giving PN to the SM in confirmation of closure of gate. And, SM/GDL in turn used to intimate the Gateman when the train passed Virpur
- (iii) Station Masters were using 'one to All communication feature' of gate phones rather than using 'One to one'
- (iv) Station Masters of Gondal station, knowing that gate remains open in field (though 'close' on books), did not take action for improving the system's safety by minimizing 'line clear' time duration but allowed the short-cut to continue in system.

2. Concerned JE/SSE/P.Way:

- i. LC-39 was having 76,057 TVU (Jan-2019) PWI has not taken any kind of action for the conversion of this LC gate from 'C' Class to 'Special' Class.
- ii. Despite the heavy road traffic/ high TVU, the normal position of this gate was not changed from CTRTR to OTRT. However non-fulfilment of one criteria of visibility being less than 600 meter cannot be considered as sufficient reason for ignoring safety of LC gate.
- iii. Even if visibility was an issue at this LC gate, other safety measures should have been put in place by PWI such as like imposing SR, improving visibility by relocating gate hut, imposing continuous whistling by LP in place of intermittent whistling etc., No such action was taken by PWI.
- iv. With tacit consent of Engineering officials, Gateman had evolved a local system of not closing the gate physically but giving PN to the SM in confirmation of closure of gate.

Blameworthy:

1. Engineering department of Bhavnagar division.
2. Operating Department of Bhavnagar division

Could the accident be averted?

During enquiry, it got clearly substantial that accident could have been averted, had following errors/lapses/short cuts not been adopted by the on duty Gateman & different staff of Bhavnagar division of Western railway:

The accident could have been averted had the on duty Gateman not kept the gate open after exchange of PN with SM/GDL confirming closing of the gate or had he displayed the banner flags when the train was approaching/crossing the gate.

Impact of accident could have been minimal or might have been averted:

- Had the local unsafe practice by Gateman been detected and reported in time by TI/PWI/Safety team.
- Had the gate been interlocked by S & T deptt.
- Had SR been imposed by Eng. dept considering poor visibility from Virpur side at this LC gate.
- Had the LC gate not allowed to function as 'OTRT' in deviation from SWR provisions of CTRT
- Had railway staff been deployed instead of ex-serviceman at such sensitive LC gate by railway administration.

Points to ponder/other matters brought to light:

It is observed during enquiry that following points need to be highlighted in the interest of improving safety environment over railway:

- (a) Despite requirement of 3 gatemen at Special class gate, only 2 gateman in 12 hours shift were deployed by railway due to gate wrongly classified as C class even after TVU census of 76,057 at this LC gate as per Jan-2019.
- (b) Even though the gate was sensitive in nature, it was allowed to be manned by ex-Serviceman whereas railway's own gateman were deployed at other gates.
- (c) LP of train should have controlled speed of train after sighting boom in open condition from 400 mt distance. He however applied emergency from 204 mt distance meaning thereby that LP was not attentive on duty. This needs to be looked into by railway.
- (d) It is noted that LP/ALPs were carrying personal Mobiles on duty which were in ON condition, though their official SIMs were in Off condition. This needs to be looked into since it has safety implications.
- (e) ARME from RJT exited in 26 minute time whereas as per para 602 of Accident manual of WR, it should leave within 20 minute time in double exit station. This also needs to be looked into by railway.

- (f) Reconstruction of ROB dismantled during 2016-17 was not yet completed and continuation of heavy road traffic was allowed without any safety measures at this gate for around 4 years with infrastructure suitable only for handling low TVU. Neither ROB was completed nor safety measures ensured at LC-39.
- (g) While the division had already imposed 30 Kmph SR post-accident at this gate, following steps were further taken on advice of Commission:
- Deployment of Gatemen in 8 hours shifts as against 12 hours earlier.
 - Deploying railway Gateman in place of ex-serviceman at this gate.
 - Shifting gate but from RHS to LHS to eliminate the obstructed visibility of train from gate.

Recommendations:

- i. Railway should take action to review system of deploying Contract/ex-serviceman gatemen.
- ii. Interlocking of LC gates similar to LC-39 should be completed on priority. Till such time, each non-interlocked LC should be inspected jointly by ADEN and ADSO at increased periodicity of once in 2 months.
- iii. Implementation of Para 910(2) of IRPWM (automatic PN generating device) needs to be completed for non-interlocked gates on top priority. Railway should take action to examine the system of granting line clear in section having such busy gates in longer block sections which necessitates close of busy LC gates for long duration.
- iv. Provision of CCTV camera of vulnerable LC gates should be planned to enhance safety of safety of train operation at LCs.
- v. Railway should re-visit the policy of conversion of CTRT to OTRT to the extent that in case on criteria of poor visibility does not get fulfilled.
- vi. Railway should vigorously pursue with state authorities to ensure time bound completion of pending ROB works by holding review meetings at higher level.

PRINCIPAL CHIEF SAFETY OFFICER

SAFETY ORGANISATION

SOUTH CENTRAL RAILWAY