

SOUTH CENTRAL RAILWAY
HEADQUARTERS SAFETY ORGANISATION
BI-MONTHLY SAFETY BULLETIN – Jan & Feb 2016

DETAILS OF UNUSUALS AND ACCIDENTS THAT TOOK PLACE
DURING JANUARY & FEBRUARY 2016

1. **Brief of the incident** (yard derailment): On 31st January 2016, at 20.40 hours light engine diesel multi derailed near CMS crossing at RDM station of SC Division.

Cause: Due to reverse super elevation (Construction) as per joint memo issued.

Staff held responsible:

- SSE/P.Way/Construction/KZJ for not attending line before commissioning.
- SSE/Signals/Construction/SC for lack of co-ordination with other Departments.
- SSE/OHE/Construction/KZJ for giving safety certificate without completion of work.
- Under ‘blameworthy’ – Drawing Branch which prepared approved drawings for 3rd line RDM yard not highlighted the actual site asset as per field condition properly and in consonance with Divisional Drawings.

2. **Brief of the incident** (UMLC accident): On 4th January 2016, when Train No. 19301 Express was on run between Dharmabad – Basar stations of HYB Division, hit a concrete mixture at UMLC No.181 resulting in damages to loco.

Cause: Negligence of road vehicle driver.

Staff held responsible: Tractor Driver under ‘Primary’, Contractor under ‘Secondary’ for violation of agreement and Trackman working as Gatemitra under ‘Blameworthy’.

3. **Brief of the incident** (yard derailment): On 14th February 2016, at 02.20 hours while backing empty rake of 17641 from shunting neck to pitline No.3, 3rd coach derailed after passing Point No. 100 at KCG station of HYB Division

Cause: Due to rough shunting.

Staff held responsible:

Matters brought to light:

Suggestions & Recommendations:

4. **Brief of the incident** (yard derailment): On 18th February 2016, at about 19.10 hours, while attaching the loco (after reversing), BV derailed at MTDI station of NED Division.

Cause: Though the speed of the engine was only 1 KMPH while attaching, the speedometer chart analysis reveal that tractive effort has gone up to 50 KN and in the short span of movement, speed cannot pick up accordingly. Hence, it is clear that high tractive effort was contributing to the derailment.

Staff held responsible:

Primary – LP, Guard, Pointsman are ‘primary’.

Matters brought to light:

- Joint observations of Sr. Supervisors was very sketchy.
 - No evidence was preserved such as; photographs, readings of track, condition of CBC etc.,
 - ART siren given remotely from Control failed.
5. **Brief of the incident (Yard derailment):** On 8th January 2016, at about 01.30 hours, at PAU station of NED Division, while pushing empty rake of Train No. 57521 (PAU-PRLI) Passenger from shunting neck to stabling line, formation of 9 coaches went on to adjacent line i.e., AC coach line which is only 66m length as a result rear SLR derailed.
- Cause:** Wrong setting of Point No. 105 by Pointsmen and outdoor Dy.SS/PAU.
- Staff held responsible:** Pointsmen/PAU and Dy.SS/PAU under 'Primary'.
- Matters brought to light:**
- a. Pointsmen were not in possession of walkie-talkie sets leading to communication gap.
 - b. Delay in reporting the accident by 50 minutes.
 - c. Lighting arrangements in the yard towards PBN end is not adequate.
 - d. Poor co-ordination among shunting staff.
 - e. Failure of supervision by Dy.SS.
 - f. Provision of standard dead-end for AC sick line is made in the SIP but physically not available.
- Suggestions & Recommendations:**
- a. Intensive counseling of shunting staff is essential.
 - b. Frequent ambush checks needs to be conducted.
 - c. Close monitoring at Supervisory level on shunting staff.
 - d. At major yards, multi-disciplinary audit system needs to be introduced.
 - e. Proper recorded handing over and taking over by Pointsmen is essential.
 - f. Dy.SS responsible for supervising shunting shall not change the Pointsmen till the desired planning of shunting is completed.
6. **Brief of the incident (Derailment):** On 19th January 2016, at 08.45 hours, between PRLI – GTU stations of SC Division, while Train No. CWHC BCNL Goods was on run, 3 wagons derailed at KM 254/15.
- Cause:** Engineering block was given from 13.35 to 15.35 hours but the block was bursted by 2 hours and finally cleared at 17.45 hours. From the video footage of the previous day, it was concluded that huge blasting took place due to which large size boulders have fallen on the track on a curve & cutting. Subsequently, 4 JCBs were deployed to clear the boulders that have fallen on track. And at this location only, the derailment took place next day. The enquiry committee was of the opinion that track structure was disturbed heavily. Measurements noted from point of drop, super elevation varying from 140mm to 188mm and 180 to 150mm where the twist parameters beyond permissible limits are considered main contributory factors for derailment.
- Staff held responsible:**

Primary: SSE/P.Way/PRLI for failing to ensure safety of track at work site during widening of cutting work and intentionally tampered the evidences. JE/P.Way/PRLI for failing to follow prescribed procedures for safety of track during and after widening of cutting work.

Secondary: NIL

Blameworthy: Supervisors who have failed to proper readings, preserve clues and signed in the joint proceedings without cross checking the readings.

Matters brought to light:

- a. Caution Order was issued to leading loco LP without obtaining acknowledgement at PRLI.
- b. The Goods train was on run with BV next to working loco which is unsafe practice.
- c. Work site precautions during the cutting work are not adequate.
- d. Locos derailed have been despatched to other Division without the consent of Sr.DSO.

Suggestions and Recommendations:

- a. Disaster Management training to be imparted to all Sr. Supervisors stationed at PRLI.
- b. One loco on either end of unusual spot to be kept ready to avoid delay in restoration works, after arrival of SPART.

7. **Brief of the incident (Yard Derailment):** On 24th January 2016, at about 19.35 hours, derailment took place at KCG station of HYB Division. Light engine in the course of shunting while going from Road No.3 to pitline, loco derailed on non-interlocked Point No.100.

Cause: Improper setting of non-interlocked Point No. 100 by Pointsman and Dy.SS. The Pointsman failed to ensure correct setting of Point No.100 and given exchange of signals from Point No. 102 which resulted in derailment of loco on Point No.100.

Staff held responsible: Pointsman/KCG as 'Primary' and two other Pointsmen + LP/Shunter under 'blameworthy'.

Suggestions & recommendations:

- a. Shunting staff manpower needs to be enhanced.
- b. Lighting arrangements to be provided at every Point location to ensure correct setting of point.
- c. All points should be provided with individual electric motor instead of manual setting and locking.

8. **Brief of the incident (Yard Derailment):** On 24th January 2016, at 19.35 hours while backing empty rake of Train No.12702 Express from shunting neck to PF – 4 at HYB station of SC Division, 2 coaches derailed at non-interlocked Point No.24.

Cause: Improper setting of non-interlocked Point No.24 by Pointsman.

Staff held responsible:

Primary: Pointsman and Shunting Jamedar under 'Primary'.

Secondary: YM, Shunter and SSE/C&W/ART in-charge.

Matters brought to light: After rerailling, while moving the coaches to platform, one coach again derailed on Point No.40. Cause for the second derailment was due to the failure of not ensuring proper attention to the rerailed coach before authorizing the movement of the formation from the site of accident.

9. **Brief of the incident (Breach of block rules):** On 25th January 2016, at about 03.55 hours TrainNo. 17229 Sabari Express (TVC – HYB) was wrongly received on Goods R&D line No. 10 at BTTR station of BZA Division and further allowed to continue its journey (run through).

Cause: CASM/South/BTTR wrongly communicated with CASM/North and PF as Goods train instead of Sabari Express.

Staff held responsible: CASM/South/BTTR is held responsible under ‘primary’, LP of Sabari Express under ‘Secondary’ and Dy. Punctuality under ‘blameworthy’.

10. **Brief of the incident (LC Gate in ‘open’):** On 22nd January 2016, when Train No. 22694 (NZM – SBC) Rajdhani Express was on run between Balanagar – Gollapally stations of HYB Division, LP of the train noticed non-interlocked LC Gate No. 39/E in ‘open’ position. On noticing the LC Gate in ‘open’ condition, LP applied emergency brakes and stopped the train and informed the SM/GLY and Guard of the train. Subsequent to the closure of the LC Gate, the train started its journey.

Cause: Trackman working as Gateman failed to close the LC Gate after exchanging PN with the SM.

Staff held responsible: Gateman.

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1.0 Irregularities noticed in the working of Operating Department:

- a. During the footplate inspection by Train No. 12732 Padmavathi Express on 21st January 2016 by CSO from RC to AD stations of GTL Division, it was noticed that Dy.SS/RC served Caution Order copy (T.409) to Crew without obtaining acknowledgement of the LP & ALP which is in violation of Appendix I of G&SR.

- b. At AD station of GTL Division, it was noticed by CSO during his surprise night inspection that DN Rajdhani Express No. 22691 bound to NZM which was admitted on DN Mainline at 02.19 hours was **found without flashing tail lamp**. Only flashing tail light was kept by Guard / GTL. The train was made to stop at ESV station and Guard was instructed to keep the flashing tail lamp. Similarly, UP Rajdhani Express No. 22692 bound to SBC was admitted on UP Mainline at 03.07 hours and this train Guard/SC, also **failed to keep flashing tail lamp**. On enquiry, the Guard replied that tail lamp is defective from SC station and hence, he did not place the tail lamp. The train was made to stop at NRR and Dy.SS/NRR was instructed to supply one flashing tail lamp from station safety equipment under acknowledgement and the same was complied.

These incidences display irregularity (for not keeping flashing tail lamps as per GR 4.16) on the part of not only Guards of Rajdhani Express trains and also all station staff of en-route stations who failed to ensure the availability of tail lamps as per GR 4.17. Division to sensitise on this subject.

- c. Guard/GTL who worked Train No. 16339 UP Nagarcoil Express which was admitted on PF No.1 at 03.45 hours of 21.01.2016 at AD station of GTL Division, **failed to respond to**

the danger hand signal exhibited by the Dy.SS (as a part of ambush check) to stop and enquire or by speaking on walkie-talkie.

- d. Ambush check was conducted at LC Gate No.192/E interlocked between ASP – NRR stations of GTL Division in the early hours of 21st January 2016 advising the Gateman to inform the Dy.SS/ASP that gate boom is damaged and sliding boom arrangement also failed for Train No. 16340 Nagarcoil Express at 05.30 hours. This check was made to test the response and working of Dy.SS/ASP. Dy.SS/ASP prepared PLCT for the Nagarcoil Express and despatched the train **without exchanging PN with the Gateman of LC Gate No.192 and failed issue Caution Order to the train as per SWR stipulation. This is a serious violation of rules.**
- e. **During the surprise night inspection of Aspari station of GTL Division by CSO on 21st January 2016**, as per the SWR assurance register, only 3 amendments are acknowledged whereas **Amendment Slip No.5 was issued on 06.11.2015 which was not acknowledged by any SM.** However, on further scrutiny it is noticed that there is no record of Amendment Slip No.4 to SWR.
- f. **During the inspection of KMLP and BTTR stations of BZA Division by CSO on 24.02.2016**, it was noticed from the Relay Room Key Register that on 14.12.2015, at 08.55 hours, S-38 DN Mainline Starter route got locked and for attending the same, the Relay Room Key was obtained. **However, failure entry to that effect is not made in the Signal Failure Register. No failure message was prepared and handed over.**
- g. **During inspection of BTTR station of BZA Division on 24.02.2016 by CSO**, many failures in PLCT working of serious in nature were noticed and the CASMs appears to be very casual in preparing and cancelling without making failure entries and not preparing the corresponding documents etc., which is improper. Secondly, preparing the document supported by PN received from adjacent station SM and cancelling appears to be causing concern.

2.0 Irregularities noticed in the working of Engineering Department:

- a. During footplate inspection by CSO from RC to AD by Train no. 12732 Padmavathi Express on 21.01.2016, it was noticed that at UMLC Nos. 208, 203 & 202 – **Road Safety Counsellors were not available during night time.**
- b. At AD station of GTL Division, it was noticed from the Joint Inspection of Points & Crossings Register, that from all the quarter inspections of 2015 year – most of the defects are repeatedly mentioned such as; ‘Tongue rail floating, stock rail burr, housing improvement, stretcher bar insulation to be replaced & packing required’. It indicates poor maintenance of P&C portion by Engineering and S&T Staff.
- c. During the inspection of Engineering LC Gate No. 192/E between ASP – NRR stations by CSO on 21.01.2016, it was noticed that Trackman of Gang No.3/ASP who was posted to work as Pilotman at KM 476/3-4 caution order spot (destressing work) **was found resting at LC Gate No.192/E instead of being available at the caution order spot for piloting which is 400m from the LC Gate.** As per Gateman information, the said Trackman was available at the LC Gate **for the last 2 ½ hours.** The very purpose of posting Pilotman at SR spot is defeated when the Pilotman takes shelter at LC Gate. **The track condition at SR spot was found to be bad.** The rail joints at caution order spot provided with ordinary fish plates & closure pieces (one side with one bolt & other side clamp) instead of 6.5m rail closures with 1.0m fish plates as per stipulated instructions in LWR manual. **There is excessive gap at rail joints. Also, it was noticed that road surface on approach roads and within the tracks at LC Gate is very bad and there is potential danger of vehicles getting struck in the LC Gates. Secondly, it was noticed that the gate boom distance**

from centre of track is more than 8m thereby giving a scope for a vehicle to get struck up within the gate, even after closure of the booms. As per guidelines, the distance shall not be more than 5m.

- d. During push-trolley inspection by CSO on 24.02.2016 on UP line Between KMLP-MBL stations from KMLP (KM 151/25 to KM. 148/23), Cut rails with the free rail joints existing in the breathing lengths of the LWRs at KM 150/21-23 & 150/9-7. One weld joint available at KM 150/1-3, R4 was observed **without joggled fish plates**, as 60 kg rails of rolling mark XI/2005 laid in 2007 and has crossed more than 50% of GMT. The removed fishplate was used to joggle newly done welds. **This is highly unsafe**. New welds done at KM 150/01-3 in the month of 01/02/2016 not tested by USFD. Due to these reasons, SSE/P.W/NLR was **instructed to impose SR at KM150/21-9**. Girder Bridge No. 290 (2X12.19m) at KM 149/13-15. Guard rails splayed portion at BZA end **has no hold to the approach sleepers** and the rails are badly corroded which should be attended. Approach sleepers packing to be done. The cut rail provided to the bridge approach at KM 149/13-15 is of rolling mark IX/2012 and the adjacent rails rolling mark is IX/2005, the corrosion at rail foot is measured as 0.5mm. Girder bridge No. 291(6X12.19m) at KM 150/11-13. Guard rails is badly corroded and guard rail bolts missing at isolated locations on the bridge. There is no hold on approach portion.
- e. **It was noticed during the safety audit inspection of PAU station of NED Division on 24.02.2016 from the register of Joint Inspection of Points & Crossings that the defects are repeatedly mentioned in almost all quarterly inspections for 2015; the attention is inadequate or not done.**

3.0 Irregularities noticed in the working of S&T Department:

- a. **During surprise night inspection of AD station of GTL Division by CSO, it was noticed that IPS monitor display found showing wrong indication i.e., displaying red light indicating to call S&T staff even though battery voltage was full. Also, it was seen that 25 Watt VHF set – no outgoing voice during power supply failure due to non-availability of battery backup.**
- b. At AD station of GTL Division, it was noticed during surprise night inspection by CSO that Safety Point Alarm, after the arrival of Train No. 22134 DN YPR – SUR Express on DN loop (common loop) at 02.57 hours, the point in rear (Point No. 26) was not altered to check the efficacy of the equipment and found that **the equipment did not give alarm**.
- c. **AD station of GTL Division, slit indication**, on common loop, 25T slit indication was found not displaying red indication when (occupied display) Train No. 12627 DN Karnataka Express was admitted at 02.35 hours.
- d. At KMLP station of BZA Division, it was noticed by CSO during his inspection on 24.02.2016 that Block telephone between KMLP – VRJN stations and vice-versa is **out of order for the last 3 months**. No effort is made to record the failure in the Failure Register and even the S&T Officials at the station (who are on duty round the clock in shift duties) did not bother to rectify the same though the failure is known to them.

4.0 Irregularities noticed in the working of Mechanical Department:

- a. During surprise night inspection by CSO at SC station of SC Division on 20/21st January 2016 at 20.00 hours, Technician/C&W/SC was **tested 'positive' with** 127mg who was on rolling 'in'/'out' duty at SC PF-10.

- b. During safety audit inspection of PAU station of NED Division on 24.02.2016, it was observed that **LI**s of NED Division have not undergone **G&SR Refresher Course for many years.**

**CHIEF SAFETY OFFICER
HEADQUARTERS SAFETY
ORGANISATION**

ATTENTION

ELECTRICAL AND S&T OFFICIALS

Joint inspection of Electrical & S&T Departments: As per IRSEM Part II Para 22.10.8.8.5 & 6, it is essential that the traction return and track circuit bonding is maintained in its design condition. The Electrical and S&T Supervisor shall physically inspect once in six months to ensure conformity with approved bonding plan. The results of the joint inspection shall be entered in a register maintained by the S&T Supervisor and put up within a month for the scrutiny of DSTE / DEE.

ATTENTION

OPERATING STAFF

When line clear taken for a train and further planning is changed to give precedence to another train, **do cancel the line clear train taken initially and take fresh line clear & make proper entries in TSR to that effect as per BWM.**

ATTENTION

LOCO RUNNING STAFF

LP/ALPs of passenger carrying trains - When reception / departure signal/s are cleared for Goods R&D lines at a station, pay special attention and stop the train and bringing it to the notice of SM.

ATTENTION

STATION OPERATING STAFF AND LC GATEMEN – When any unusual is noticed on a running train, do not hesitate to exhibit ‘danger’ signal and stop the train. In case, it could not be stopped, inform the adjacent SM and Gatemen of in between stations apart from SCOR duly keeping a written record of the same.