SOUTH CENTRAL RAILWAY
HEADQUARTERS SAFETY ORGANISATION
BI-MONTHLY SAFETY BULLETIN – NOVEMBER & DECEMBER 2021
****
DETAILS OF ACCIDENTS AND UNUSUALS THAT TOOK PLACE DURING NOVEMBER & DECEMBER 2021

1. ***Brief of the accident*** *(Derailment):* On 13.11.2021, between PDTR-JMDG stations of GTL division, Train No. RE BT consisting of Batching plant mounted on 4 BRN wagons hauled by Loco 14576/'GY moved in to PDTR-KMDC block section in pushing mode for unloading of material. While negotiating curve at KM 107/2, the hopper unit mounted on BRN has tilted, worked out from the position and finally fallen on LH side of the 2.5^0 curve and caused derailment of wagon NO.SE No.BRNA SER 340712547 3^{rd} Wagon from TE.
   Cause of the Accident: due to toppling effect of hoper the wagon leading trolley leading RH wheel lifted off from the rail table, thus the LH wheel dropped inside track and caused derailment of wagon.
   Responsibility:
   Primary**:** RE organisation for not ensuring the approval of Design & drawing certificate from HQ
   Secondary: Sri. B.Venkata Muni Reddy, JE/DRG/RE/GTL- for ensuring covering of tarulin to avoid wetting of sand.
   Blameworthy: nIl
   Matters brought to light:NIL
   Suggestions and Recommendations:
   1) Proper authority to be obtained by RE organisation to run the GAMZEN system on wagons.
   2) GAMZEN system to be maintained at scheduled periodicity to check its healthiness.
   3) GAMZEN system fitting on wagon body to be certified by competent authority.
   4) SE/JE of RE to ensure the Hopper system fittings and its fitness for every trip.
   5) The design of the Batching plant mounted on BRN wagons to be reviewed and the frame width under the hopper needs to be widened to avoid CG falling away to avoid tilting of Hooper and causing unsafe running of wagons/train.

2. ***Brief of the accident*** *(Derailment):* On 15.11.2021, at CVB station of HYB division, DEMU empty rake left MLY Shed at 21.32 hrs, to proceed to JALNA station. As per control instructions, SM/CVB admitted train on common loop line and arrived on common loop at 21.52 hrs. The train has to negotiate two cross overs to admit from DN main line to common loop line. While admitting on common loop line, 4^{th} coach (15558) rear trolley and 5^{th} coach (15561) both trolleys from train engine were derailed at KM 611/39-37 and the speed fo the train was 14 Kmph.
   Cause of the Accident*:* The combination effects of steep changes of cant (undulations in rate of change of cant) and the restrictions of negotiation in curve by the front trolley of coach No.5 caused the uplift of the rear trolley of coach No.4
   Responsibility:
   Primary**:** Sri. J.R.Srinivas, SSE/P.WAY/MED(In-charge)
   Secondary: SSE/DEMU/Bogie maintenance/LGDS
   Blameworthy: Sri M. Bhaskar, GLP/KCG
   Matters brought to light:

All track parameters need to be ensured as per laid down stipulations at the time of laying and proper maintenance too wile in service.

Suggestions and Recommendations: The derailed DEMU rake is a hybrid coach provided with air spring for which railway board accident proforma is not available

3. ***Brief of the accident*** *(SPAD):* On 18.11.2021, at KCC station of BZA division, Train No.02886 (Humsafar Express), while approaching KCC observed KCC home signal showing caution/main line/Rd-4. LP controlled the the train below 60 kmph, while entering KCC further controlled the train. Further ALP call out starter signal was proceed and same was acknowledged by LP. While approaching starter signal suddenly observed KCC Rd-4 Starter at danger. Immediately LP applied emergency brake and ALP also applied emergency brake. Unfortunately train stopped after passing starter signal and travelled 132 meters

Cause of the Accident*: Disregard of the starter signal aspect.*

Responsibility:

Primary**:**

1. Sri. P. Madhava Rao, LP/Mail/BZA

2. Sri. Sk. Zakeer, Sr. ALP/BZA

Secondary:

1. Sri . T. Prathap Kumar, CCC/BZA
2. Sri. K. Ramesh, CLI/BZA
3. Sri. Ch.V.S.S.Rama Kumar, CLI/BZA

Blameworthy: NIL

Matters brought to light:

1. *As per KCC SWR and SIP* signal overlap for S-25 from Down starter (S-25) and upto the end of BJ 135 BT is 195 m. But the actual existing distance is 175 m. (The same to be corrected in both SWR and SIP (Signal Interlocking Plan).
2. There is a system of auto generation of SMS whenever signal passed at danger. In this case of SPAD at KCC, the same has not been generated due to non-fulfilling of condition of logic as per RDSO guidelines (The logic to be suitably modified to enable generation of SMS In KCC type of SPAD situation also
3. There are two JPOs issued from Hqrs on 11 03.2008 and 11, 04.2017 to deal with the LP/ALP who are away from train handling duties. According to that such LP/ALP to be sent to refresher course followed by train handling training for 1000 Kms. (This has not been followed in this SPAD case).

Suggestions and Recommendations:

At KCC station the SWR and SIP the signal overlap distance to be correctly modified with the existing length.

1. The SPAD SMS logic to be suitably modified to cover KCC type SPAD cases also.
2. Whenever the incident of SPAD taken place apart from generating SMS message an audio/ video alert to be generated on the VDU panel to alert on duty Station Master also.
3. As per Accident Manual Rule No. 902.1 of chapter 1X, the Station Master to give a memo to LP/ALP about the incidence of SPAD, the distance travelled from stop signal etc and take acknowledgement from Loco crew to avoid any future disputes from Loco staff. The same to be strictly followed by all Station Masters.

4. JPO issued from Hqrs on 11 03 2008 and 11.04.2017to deal with the LP/ALP who are away from train handling duties are to be strictly complied with.

4. ***Brief of the accident*** *(Derailment):* On 10.12.2021, at CGTA station of GTL division, Train No. BT spl(03L+07E+02L) with Loco No.12510 was stabled at Hot Axle siding of CGTA station. It was planned to pullout BT special from Hot axle siding to Rd-1, shunting movement given at around 12.25 hrs duly taking off shunt signal No.14. Train started and after travelling approximately 100 mts, 7th wagon from TE, ER BOBY NM1 700205 17963 leading trolley four wheel derailed after passing of point No.17A at KSN end at about 12.30hrs.
Cause of the Accident: left over ballast in wagon with uneven load at RH side
Responsibility:
Primary**:** Sri. Rajneesh Prabhat, SSE/P.Way/KSN-for planning unloading of ballast without line block during shunting movement and failure to ensure balancing of left over ballast before starting the train.
Secondary: nil
Blameworthy:
1. Sri. Rajneesh Kumar, LP/G/RC –for not resisting unloading of ballast during shunt movement.
2. Sri. Rakesh Kumar Meena, Goods Guard/RC for not resisting unloading of ballast during shunt movement.
Matters brought to light:nil
Suggestions and Recommendations: During GDR check of Ballast BT, GDR should check availability and evenness of load in the wagons.

5. ***Brief of the accident*** *(SPAD):* On 11.12.2021 at PGDP station of SC division, Train No.17016 SC-BBS Visaka Exp left Bibinagar station at 17.42 hrs. While approaching Dn main line starter signal(S3) of PGDP station, Loco Pilot could not stopped and passed signal at 'ON' position(stop aspect) at 17.46 hrs and stopped after passing signal about 17.9 meters, Loco Pilot again started without permission and stopped after 250 meters. There was no causalities/injury to any person
Cause of the Accident: LP failed to stop short of starter signal S-3 which is at 'ON' as he applied brakes late and ALP failed to apply RS in time.
Responsibility:
Primary**:**
1. Sri. K.Purna Chandra Rao, LP/Pass/GNT
2. Sri. D. Kishore Kumar, Sr.ALP/GNT
Secondary: nIl
Blameworthy:
1. Sri. P. Vijaya Suresh, DI/GNT- not done effective counselling on LPs weak areas.
2. |Sri. G.Venkata Ramana, CLI/GNT- not done effective counselling on ALPs weak areas. And he did not demonstrated RS application while on run to ALP.
3. Sri. KSSK Kanthi Raj, M/E/Guard/BZA
4. Sri. Pankaj Kumar Jha, SS/PGDP
Matters brought to light:
1. Sri. K. Purna Chandra Rao, LP/P/GNT signed OFF at 07.50 hrs at SC lobby and went to running room for taking rest. At about 12.'O' clock he left running room and gone to St.

Joseph Hospital at Erragadda for personal work and returned to running room after 14.00hrs without RR/SC-incharge permission.

2. Though the crew was aware of working with walkie-talkies, they started the train after first stop i.e. crossed starter signal one locomotive length, started by hearing a unknown voice on walkie-talkie without ascertaining the credentials of the voice.

Suggestions and Recommendations:

1. All crew should be counselled the working procedure with VHF set/walkie talkies while on run i.e. instructions to be specifically prefixed or suffixed by train number and the person speaking with designation.
2. Regarding Hqrs instructions of controlling train speed to 60 kmph or below while passing signal at caution aspect should be followed by all LPS without any deviation. Further speed reduction to 10 kmph should be invariably followed before two OHE mast of danger signal. This should be ensured by CLIs during their footplate inspections and counsel LPs as required.
3. It has come to the notice that at PGDP station masters are always dealing trains on main line(via S3 signal) trains bound for branch line. In this instant case, Block section towards BMNP/GNT division was blocked with 12513 SC-GHY Exp at the time taking off PGDP home signal for 17016 SC-BBS Exp via starter S3(keeping Pt No. 17 & 18 in reverse position). Had this train admitted via common loop line, the detention for subsequent following trains could be avoided during such incidences, The above issues should be counselled all the staff of PGDP station and suitable instruction to be issued.

6. ***Brief of the accident*** *(Derailment):* On 27.12.2021, at 21.12.24 hrs at GTL yard, of GTL division, after coming Jaipur Suvidha Rake(82653) on Rd-11(PF-3), the LE after detaching from the rake passed the starter signal No. S-43 and crossed shuntsignal No.88 in the opposite direction and stopped. The shunter after changing the cab passed the shunt sinal No.88 at 'OFF' position and passed the Rd-12(PF-2). Without observing shunt signal; No.62 "ON' position (stop aspect) shunter moved the Loco and derailed at point No.84B at 21.30 hrs *Cause of the Accident:* Shunter of Loco No.40368/KJM has passed theshunt signal NO.62 at 'ON'.
   Responsibility:.
   Primary**:** Sri. Bheem Singh Meena, LPG/SHG
   Secondary: nil
   Blameworthy: Sri. Pankaj Kumar Mahto, Dy.SS/Platoform/GTL failed to intimate the shunter about movements.

Inspection Notes of PCSO/SC during GM Inspection between PGDP-NDKD section of GNT division on 12th November 2021

S. No	Observations/Irregularities
1.0	**General Observations:** a. At CTYL, NLDA MRGA & NDKD yards under/over driven ERCs need to be driven properly. Some of seized / broken ERCs are to be removed / replaced. Missing MS/GFN liners to be recouped. 'J' type ERCs to be provided at prescribed locations (GJ, fish plate joints). b. Lime marking across the track at signal warning board not provided as required as part of foggy weather precautions between PGDP-NDKD section. (S.R.3.61.2.2 of G&SR). c. Sigma boards for stop signals are missing / not provided between PGDP-NDKD section. *It should be ensured that retro reflective strip in Sigma shape for identification of stop signal is provided as per the existing instructions.* (S.R.3.61.2 (5) ofG&SR).
1.1	Joint Inspection of Points & Crossings and Track circuit portion in yards by both Engineering & Signal & Telecom departments as per Para No.3.1.2.(h) of IRSEM that *the all interlocked points & crossings must be jointly inspected by SSE/Signal (IC) with SSE/P.Way(IC) and SSE/JE/Signal/section with SSE/JE/P.Way/Section alternately and duration between two joint inspections shall not exceed 3months and similarly track-circuited portion of the track shall be jointly inspected by Sr.Section Engineer (Signal) in-charge & and Sr. Section Engineer (P- way) in-charge and jointly by Sectional SSE/JE (Signal) & SSE/JE (P- way)atleast once in six months (*para 17.3.9 of IRSEM). This should be scrupulously adhered to.
1.2	There are 14 Non Interlocked gates in PGDP-NDKD section out of which 02 (50 & 54) NI gates are with normal position closed to road traffic. Division should examine the same and process to change normal position of these gates from 'Closed to road traffic' to 'Open to road traffic' duly following the procedure and the conditions as laid down item no. 9(a) of Annexure 9/1 of IRPWM- June'2020 duly obtaining approvalof DRM, PCE & PCOM.
1.3	**Station Yards:** It is seen that Cess in between Railway lines in the yard is high at many of the locations. Cess is at / and even above the Rail level at a few locations. It is very important and necessary to keep the Cess at the original Formation level i.e. at about 60 cm to 70 cm below the top of the rail level, so as to ensure the effective drainage from track and for retentivity of packing and to maintain track parameters within the limits and also to prevent/minimize track circuit failures. Therefore, this work of lowering of cess in between the Lines should be taken up and completed in the entire yard at the earliest duly disposing of the muck away from the yard in low lying area. Drive may be laynced to identify such locations of high Cess. In all yards and ensure that the Cess is lowered and brought to the original formation level.

2.0	**LHS No.73A (in lieu of LC No.21) at KM 39/10-11 between VLG-RMNP Stations:** a. Track Gauge varying -4mm to -8mm on RUB proper. The same tobe attended. b. Under driven / over driven ERCs, to be driven properly. c. Retro reflective arrow signages to be kept at approach bend ofRUB.
3.0	**RUB No.79A (in lieu of LC 23) at Km 42/20-21 between RMNP-CTYLstations:** a. RUB/LHS Number plaque to be provided on both directions. b. Water oozing from side walls, stagnation of water in LHS portion to be prevented ensuring proper drainage arrangements. c. Drain channel to be cleared off muck and vegetation in LHSportion. d. De-silting of drain to be done. e. Retro reflective arrow signages to be provided over the retaining wall of approach road at the bend of approach road of RUB. f. Clearances at height gauges are more than the vertical clearance from road surface to the bottom of slab of RUB which should be adjusted suitably. **g.** Entry of RCC pipe provided at road level of approach of RUB should be provided with steel grating to prevent ingress of vegetation and stray dogs etc**.** h. OFC cable is seen through the ballast in the track which may get damaged during maintaining of track. This should be re-laid in the casing pipe atleast 1.0 m below Formation level.
4.0	**Minor Bridge No.75(1x4.5m, RCC slab) at KM 40/2-3 between VLG-RMNP Stations:** a. Gauge varying -4mm to -5mm. cross level varying 2RL to 4RL. The same to be attended. b. Some ERCs are found to be under driven over the bridge proper and approach which may be driven properly so that edge of leg of ERC is flush with Insert end.
5.0	**Chityal (CTYL) Station:** a. LC No.26/Eng is 'A' class gate located between RMNP-CTYL at Km 49/15-16. But it is shown as 'B1' class gate on SM panel located at Km 49/7-8. Same to be corrected. b. Location of LC No.26/Engg is not shown in SWRD and traction diagram but shown on SM panel. c. As per SWR, BSNL Ph: 08682-242101 which is not available at the station. Another BSNL phone No: 7382403513 kept in place of it. The same to be corrected in SWR or phone to be replaced. d. Hindi SWR not available at the station. e. FOB not mentioned on panel and in SWRD, which may be suitably incorporated. f. Station back side UFSBI (CTYL-RMNP) block panel earth pit having two different dates of measurement and two different values. To be painted/corrected properly

	g. Digital multi-meter and Digital earth tester brought for inspection do not have valid calibration certificate. These should be calibrated periodically (once in a year). h. Sigma boards are not available on approach of starter & Last stop signals. The same to be provided as per stipulated guidelines issued by PCEE. i. Road No.3 is being used as Goods unloading line. Power Block to be ensured while unloading/loading consignment by mechanical means with Poclain/JCBs. Sr DOM has informed that isolator arrangement is available for Rd3. The record should be maintained of the time and date at which isolation is done duly mentioning rake particulars etc, so as to ensure safety of staff / workmen while loading / unloading consignment.
5.1	**Checked Point No.7B/CTYL at KM 50/14-16, 1in12, FSL, 60kg PSCsleeper with 52kg rail:** a. Fish plates of 610mm long are provided for tongue rails which are connected to lead rails. These fish plates may be replaced with 1.0m long fish plates with provision of 6 bolts. b. Gauge at TOS is -6mm, Gauge at station no.3 is (-) 10mm in switch portion on main line. Gauge at crossing nose on loop line is -10mm. Gauge need to be attended on priority. c. 'J' type ERCs with cut liners are to be provided at prescribed locations. d. Provision of combination liners (T-3708/T-3707) should be ensured at approach sleepers and turn-out portion. e. LH & RH side housing is only for 02 & 03 sleepers respectively as against 4 sleepers minimum. This may be attended to. f. LH & RH tongue rails in floating condition. This should be jointly attended by Engg and S&T.
5.2	**SEJ No.18, LWR No.9 at KM 50/13-14:** Reference posts to be provided at the breathing length (Annexure 3/16 of IRPWM). Additional reference marks in central portion of CWR / LWR and breathing length may be provided to know the behaviour of LWR/CWR.(item no.4 of Para 343 of IRPWM)
6.0	**Engineering Non-Interlocked LC No.38 at KM 68/7-8 between SRMR-NLDA stations:** a. Gate warning board is provided after the speed breaker board. Gate warning board to be suitably relocated. b. The height of speed breaker board (1.80m), speed breaker board should be maintained as per standards as 2.0m from road surface.(Annexure 9/6 of IRPWM) c. Speed breakers are laid very close to height gauges, which need to be relocated as per standards.

7.0	**Curve No.20 at KM 68/6-69/8 between SRMR-NLDA Stations:** a. Degree of curve is 1.5, Radius is 1167m, SE 70 mm and versineis 43mm. b. J type Clips at joggled fish plated locations found to be driven in reverse direction and should be attended and driven properly. Under / over driven ERCs should be driven properly. c. The practice of Lime / terra coat colouring of ballast noticed on curve portion should be avoided /discontinued as it is only waste of efforts and expenditure and does not in any way improvemaintenance.
8.0	**Nalgonda (NLDA) Station:** a. On duty SMs are not conversant with usage of VHF sets for taking line clear etc from adjoining station. TI and SSE/Tele should explain and counsel ASMs in regard to usage of VHF sets for taking line clear etc. b. FOB/NLDA last inspected on 10/2016 which is due for inspection on 10/2021. c. VHF channels numbers to contact adjoining block stations to be indicated on VHF set and also should be incorporated in SWR and also to be exhibited near Block instrument. d. Relay room is provided with two leaves door and “Proximity” switch is provided on right leaf of door without opening right leaf, it may be possible to enter inside relay room through left leaf of door. Division may provide single shutter door or alternatively proximity switches may be provided on both leaves of door.
8.1	**Nalgonda (NLDA) yard:** a. The structure bond of OHE (mast no. NLDA/1001) is connected to main line rail across and over the sand hump wall / track connected to loop line No.2 on SC end, the same to be connectedbeneath the track. b. Switch portion in the Point No-14B to be attended for packing. c. Side drains to be cleared off silt and pebbles for free flow of rain water. d. ROB No.128/A on SC end of NLDA station, last inspection by SSE/Bridges/GNT on 04/2019. Schedule of inspection is overdue from 04/2020 as per Para 2.2.1 of E.S.O.83 of dated 07.01.2020. e. Guard rails to be provided under ROB No.128A since RH side pier is at 6.3 meters from centre of track.
9.0	**Major bridge No-151 (12X 12.20m, thipparthi vagu) KM 88/15-20between RYGA-TPPI Stations:** Gauge varying -7 to -10mm and cross levels are varying 2LL to 6RL overbridge proper. To be attended on priority.
10.0	**Traffic Interlocked LC No.70 at KM 113/8-9 between KADM-MRGAstations:** a. Track Gauge on road portion is varying -3mm to -6mm. Gauge to beattended. b. Check rails in the gate portion are 20 mm lower than running rails.This should be rectified. c. Arrangement of TPR (Track Proving Relay) to be checked for proving interlocking with LC.

11.0	**Miryalaguda (MRGA) Station:** a. Joint inspection of points & crossings 4th quarter done on 29.10.2021. 11 deficiencies noted. Out of 11, 4 deficiencies not yet attended. The same may be attended. b. All weather warning messages must be repeated to Engineering (both P.Way & Works), and TRD departments. SMs to be counselled. c. FOB available in the station, but same is not mentioned in SWR, SWOD &SIP. It may be incorporated. d. VHF channels numbers to contact adjoining block stations to be indicated on VHF set and also should be incorporated in SWR and also to be exhibited near Block instrument. e. MEMU Train No.07792 arrived PF. No -1 at 16.49 hrs on the day of inspection, Sri Surendra Kumar/ Pass. Guard /SC is not trained in working of MEMU training. Guard working EMU/MEMU/DEMU shall have to undergo requisite technical training periodically (theory & practical) at ZRTI/MLY to comply with Para 4.21 of G&SR.
11.1	**Miryalaguda (MRGA) Station yard:** a. In Points & Crossing portion - tight gauge at switch & Crossingportion to be attended by providing proper combination liners. b. SEJ No-2 greasing to be done c. Weld collar painting to be done in point No-12B. d. Under/over driven ERCs to be driven properly in point No-13B. e. FOB: Last inspection done on 10/2017 and over due for inspection. Date of painting of steel work of FOB and inspection by concerned SSE/works/NDKD to be painted / stencilled on FOB.
12.0	**Important Steel Girder Bridge No-314(10X45.77m) Km 138/15-139/07bet VNUP-PDGL:** a. Gauge on approaches and bridge proper is varying between (-)1mm to -6mm. The same to be attended. b. Bearings:- Greasing last done on 11/2018, due on 11/2021. Greasingmay be done early duly availing traffic blocks.
13.0	Nadikudi (NDKD) Station: a. FOB available in the station, but same is not mentioned in SWR, SWOD & SIP. This may be incorporated. b. Train no.07781 (MEMU) arrived on PF. No -2 at 1900 hrs. Sri Sk Asharaff/ Pass. Guard IBZA not trained in MEMU. Guard working EMU/MEMU/DEMU shall have to undergo requisite technical training periodically (theory & practical) at ZRTI/MLY to comply with Para 4 21 of G&SR. c. Last weather warning message was received on 7 ,11.2021 But there is no record in weather warning register. d. AII weather warning messages must be repeated to SSE/P.Way,SSE/ e. works and TRD departments. But weather warning messages are being advised to only SSE/P.Way by on duty SIV. SMs have been counselled. f. VHF channels numbers to contact adjoining block stations to be indicated g. on VHF set and also should be incorporated in SWR and also to be exhibited near Block instrument

ATTENTION ……..

STATION MASTERS

S.R.5.13.4. No engine should be allowed on any running line at a station occupied by a train carrying passengers, except train engine or banking engine or shunting engine required to perform shunting on that particular train. The movement of such an engine should be permitted only under control of the person in charge of shunting.

i) If it is unavoidable to allow the engine(s) in rear of a passenger carrying train, such engine(s), not involving shunting with passenger carrying train, shall be accompanied and hand signalled by shunting staff and stopped in rear of passenger carrying train at a safe distance.

ii) The Shunter/Loco Pilot of light engine(s) shall be informed before commencing such shunting.

iii) All such light engine(s) should not be left unmanned by Shunter/Loco Pilot

ATTENTION ……..

LOCO PILOTS / ASISTANT LOCO PILOTS/GUARDS

Caution Order (Authority for Relief engine / train to enter into an occupied block section" -T/A.602), – to observe the speed of 15 KMPH during day when view is clear or 10 KMPH during night or when view ahead is not clear or proceed at walking speed preceded by two men on Single Line/one man on double line on foot with Red light and fog signals incase of foggy/tempestuous weather or electric light of the loco not working.

ATTENTION …….. Engineering

15.26. Protection of Trolley on the line.— The qualified person in charge of a Trolley shall, before leaving a station, ascertain the whereabouts of all approaching trains, and shall, when a clear view is not obtainable for an adequate distance —
(a) on a single line, in both directions, or
(b) on a double line, in the direction from which trains may approach, take such precautions for the protection of his Trolley as may be prescribed by special instructions.