

SOUTH CENTRAL RAILWAY
HEADQUARTERS SAFETY ORGANISATION
BI-MONTHLY SAFETY BULLETIN – MARCH & APRIL 2022

**DETAILS OF ACCIDENTS AND UNUSUALS THAT OCCURED
DURING MARCH & APRIL 2022**

1. **Brief of the accident (Derailment):** On 02.04.2022, at Daulatabad(DLB) yard of NED division, while unloading of container by CONCOR authorities, BLC wagon no.53252110638 was lifted and wheel flange was placed on the rail head. During shunting movement, the wheel travelled around 23.88 meters on the Rail head and got derailed on right hand side towards wharf area of CONCOR siding. After derailment, wagon dragged from Km 100/5 to 101/2-3 (appro. 600 meters) which has resulted in point No. 9A &14B got damaged completely and taken two routes. Due to dragging and subsequent point damages total 4 BLC wagons got derailed and main line blocked.

Cause of the Accident: BLC wagon no. 53252110638 was lifted during the unloading and wheel flanged was placed on the rail head by CONCOR authority at CONCOR siding.

Responsibility:

Primary: CONCOR siding authority and or CONCOR contractors

Secondary: Goods Train manager/AWB and Goods Loco Pilot/AWB

Blameworthy: Assistant Loco Pilot/AWB and Pointsman/DLB

Matters brought to light:

- 1) CONCOR authority should also ensure the condition of wheels of wagons, after the unloading of container from the wagons, since CONCOR authority is using machines for unloading.
- 2) Due to unavailability of path at CONCOR siding GDR was conducted in one direction only. Compound wall of the siding is obstructing the other side. However, Goods train manager has conducted by climbing on the wagons.
- 3) The lighting facility of the siding is insufficient. It is to be improved.
- 4) During the shunt movement of the wagons, ensure the smooth rolling of wagons and shunting staff should available in rear of formation whenever BV is next to engine.
- 5) Goods Train Manager has to personally supervise the movement of entire rake during the shunt movement as per SR 5.14.1..
- 6) During shunting process, Points man should obey the order of the shunting supervisor/ Train Manger and act accordingly, If he observed any unusual he has to stop the train and report the same to his shunting supervisors.
- 7) CGSR/DLB verbally communicating with CONCOR for starting of unloading. CGSR not using standard format of release memo and not writing unloading particulars.
- 8) At accident site no tea/snacks was arranged by the CGSR/DLB.
- 9) Inspection of CONCOR siding line record could not be produced by SSE/P.WAY/AWB.

10) During shunting, LP experienced hard to pull the load if LP would stop movement and check the formation. Breakage of point machine and track assets could be minimized.

Suggestions and Recommendations:

- 1) Whenever any derailment occurred, re-railment work may be started after getting permission from the competent authority without waiting ART by using local resources (Hydra, JCB, Crane etc.) duly preserving all important clues and evidences of accident site in presence of any railway officers who is at the site.
- 2) Lighting facility should be immediately improved at the siding.
- 3) CONCOR authority should ensure the condition of intactness of all wheels of wagons before releasing rake, since they are using powerful machines for loading/unloading to avoid the reoccurrence of such incidence in future.
- 4) Inspection Schedule for Private siding to be maintained by the engineering staff and deficiencies noticed to be attended or informed to siding authority.
- 5) LP should keep the rear loco in idle and use front loco in the direction of movement during the shunting process.
- 6) It seems that the shunting was supervised negligently in this case. Such practices should be stopped immediately,
- 7) The CLIs should counsel their staff under them regarding the hard pulling of wagons/coaches,
- 8) Train Manger should supervise the train from rear of the formation while performing shunting.
- 9) Any railway official should preserve the clues and evidence as they are arriving at the site and same should be handed over to the safety team.

2. **Brief of the accident (Derailment):** On 18.04.2022, at VTM station of BZA division, Train No. NMG/GFPA while entering to VTM station, point No. 20A at Km 331/18-20 wagon No. 35401810279, 7th from TE derailed by leading trolley all wheels, and the leading trolley of wagon No. 35431500041 6th from TE got derailed and re-railed over the switch portion of the point No. 20A by the leading trolley RH wheels on the turn out stock rail and LH wheels on the straight stock rail. The train parted between 5th and 6th wagon and the distance between the parting was 11 meters.

Cause of the Accident: due to twist in the track along with the combination of deficiencies in the wagons have not allowed the wagons to negotiate the excessive twist which is beyond the permissible limits and caused mounting of wheels on the RH rail and RRH wheel derailed outside the track and LH wheels inside the track.

Responsibility:

Primary: SSE/P.Way/CLX/Sectional

Secondary: Staff of SSE/P.Way/CLX at site.

Blameworthy: SSE/P.Way/CLX(SW) and Staff of SSE/C&W/ROH/JTJ/MAS

Matters brought to light:

1. While taking the traffic block, in block requisition memo it should be mentioned clearly regarding point portion or track circuit portion going to be attended in addition

to KM no.s for having proper knowledge to the SM regarding the exact location of the working and to demand disconnection if required.

2. SSE/P.Way who has to execute the block should have clear knowledge of Kilometerage at which the block is going to be executed and it should be informed to machine operator. If the block is going to be executed at point zone that is also to be discussed among Optg and S&T.
3. The UNIMAT Operator is not convergent with English and circuit diagrams of the UNIMAT he expressed his inability to understand the proceedings in English. As he has to go through many operations manuals of UNIMAT and circuit diagrams. Only operators with proper knowledge may be posted for handling complicated machines like UNIMAT.
4. The staff of ROH / JTJ are not grouping the springs as per the provisions given for BCACBM wagons of Appendix-IX of wagon maintenance manual — 2015. There are grouping the springs as per the conventional CASNUB bogies.

Suggestions and Recommendations: As the safety is the paramount in track maintenance the block required may be given as per ESO-62. Staff are to be counselled to take adequate time and attend the track to safe limits.

3. **Brief of the accident (Yard derailment):** On 26.04.2022, at TPTY yard of GTL division, while backing Coaching empty rake consist of 18 coaches from R & D line no.3 to PF No.3, 2nd coach leading axle two wheels and 3rd coach leading axle all wheels from TE derailed between point no. 166 and 167..

Prima facie Cause of the Accident: Entanglement of buffers of three coaches with buffers getting interlocked..

Responsibility: Accident report awaited/

BI-MONTHLY SAFETY AUDIT INSPECTION OF NIZAMABAD STATION OF HYDERABAD DIVISION ON 24.01.2022 FOR THE PERIOD NOVEMBER & DECEMBER 2021

Irregularities noticed in the working of Operating Department

SM OFFICE.

- Two S&T Failures registers are being maintained at NZB station Viz for NZB (HYB division) and NZB (SC division ie for Armour side). In NZB (SC Division) S&T Failure register there are 15 failures from Oct'2021 to Jan'2022 till date. All the failures pertain to B/I between NZB-ARMU. Special attention to be given in this regard to minimize the failures
- Checked Assurance Register for Rule Books and found staff assurance for WTT-76 is not obtained till date.
- Checked Joint Inspection of Points & Crossings, found in III rd Quarter inspection 13 deficiencies recorded. Out of 13, 10 deficiencies were attended and remaining 03 were neither attended nor brought forwarded into next (4th Qtr) inspection conducted on 31.12.2021.
- Point safety alarm not available
- Checked Station Diary and found, GL1 is under Disconnection from 12.00 hrs of 16.01.2022 received by Sri Harikrishna, Dy SS. Except Sri K Ravi, Dy SS, no one is recording the same in the Station Diary including the person who has accepted the disconnection memo, while handing over duty. All Dy SS to be counselled in this regard by TI/SMR.
- ART and MRV siding Tracks (Non-Track circuited) were removed for construction of Pit Lines and kept ART & MRV in shunting neck temporarily. But in VDU there is no indication since there is no track circuit and no Axle counters. Relevant entries were not made in station diary by Dy SS while handing over the duty. All Dy. SSs to be counselled in this regard by TI/SMR. Advised SMR to arrange clamping and pad locking the point Nos 29A & 32B duly setting against the ART/MRV lines.

Irregularities noticed in the working of Engineering Department

- **SEJ/LWR at KM 454/3-4 between JKM-NZB:**
 - a. 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).
 - b. No chisel marks on the reference posts. Reference posts are far away from the track.
 - c. SEJ/LWR particulars display board not provided
- Divisional Engineering official need to be ensured to follow the schedule of inspections by the JE/SSE/P.Way not in overall charge or section; but working as in-charge of assigned Gang(s); or of special Works, is responsible for Regular inspection of all assets as per laid down frequency as per **Table 1-C (para 110)of IRPWM** and maintenance of track in the assigned jurisdiction (section of gang/Yard) in safe and satisfactory condition for traffic.
- **Checked Point No.13B at JKM, 1in16, FSL, 60kg PSC sleeper with 60kg rail, laid on 21.08.21:**

- a. Gauge at station no.3 is -5mm on main line and turn-out side is -10mm. Gauge at crossing nose on loop line side is -8mm. Gauge, needs to be attended.
- b. Throw of switch (opening) on LH side is 109mm against 115±3mm. Needs to be attended.
- c. 'J' type ERCs are to be provided at prescribed locations.
- d. LH side housing only 3 sleepers only. The same to be attended.
- e. Versines on stock rail at station numbers 3, 4, 5 and 10 need to be attended.

Stn.	3	4	5	6	7	8	9	10	11	12	13	14
Ver. (mm)	8	24	11	10	11	10	14	9	8	11	9	11

- f. CMS crossing joint gaps are 10mm & 4mm as against zero/gap less. Need to be attended.
- g. In turn-out portion, GFN liners on non-gauge face side of outer rail are crushed, broken/missing. These should be replaced.
- h. Sleeper no.80 at crossing portion is in broken. Same to be replaced.
- i. Exothermic bond wires at CMS crossing joints of Point No.13A are provided which is not permitted. Same to be removed.
- j. Marking of sleeper numbers on the rail & proper maintenance of sleeper spacings in PSC turn-outs to be done/followed as per PCE/SC. Letter No.W.506/P.Vol.X of dated 20.05.2016.

Irregularities noticed CREW LOBBY/NZB.

- ✓ Average PDD of the depot is 80 minutes. This should be reduced.
- ✓ Average PRs given to crew are below 4 in a month. It should be ensured that all crew should get minimum 4 PRs of 30 hrs in a month.
- ✓ 9 hours implementation of crew needs to be improved.

Month	Percentage
Oct'21	57.4
Nov'21	69.0
Dec'21	72.9

- ✓ Cases of crew worked more than 12 hrs in last 3 months are more. This should be brought down to 0.

Month	Percentage
Oct'21	13.4
Nov'21	8.7
Dec'21	8.5

- ✓ Booking of Crew in "Fetch as per rule" in CMS needs to be improved. It has decreased from 98.7 % in Oct' 21 to 98.2 % in December' 21.

Month	Fetch As Per Rule percentage
Oct'21	98.7
Nov'21	98.3
Dec'21	98.2

- ✓ There are 2 cases of CMS failures in Dec'21, duration of 60 to 160 minutes due to cable cut and CMS application down and 3 cases in Jan'22 duration of 15 to 150 minutes due to CMS application down. Such failures will result in booking of Crew in manual mode.

Division to take necessary action to avoid such failures.

Irregularities noticed in the working of Mechanical Department/NZB.

NZB Freight Depot

- Staff is working with hand held LED lights. Sr.DME informed that two Battery operated trolleys with lighting arrangement are being procured. Same may be expedited.

SPART

- Wheel profile recorded tested and staff were counseled on this aspect of recording wheel profile practically, but no system is available for verification of traced profile. It is advised to train all the nominated staff in operation of all the vital equipment.
- Safety Chains and wire ropes after testing should be tagged with testing details;
- All the staff should be trained in operation of control stands. During monthly inspections all the control stands should be covered for inspection of operation.
- Items are checked are per Scale check and found to be as per checklist, Except for 3 core cable found to be 300 metre as against 1000 meter. It was informed that in lieu of 700 metre PVC insulated and sheathed circular cable, 3 core flat cable is maintained.
- 700 meter of Insulated sheathed circular conductor to be recouped.
- Portable Inflatable Tower lighting system checked and found to be functioning properly.
- For Earth Discharge rod Clamp to be provided at terminal end in place of lug.

ARME SCALE-I

- ✚ It is learnt that one LP for each shift is nominated for MRV. It should be ensured that Competency certificate for MRV drivers should be issued
- ✚ Inspected the working of Portable Air Plasma cutting equipment with Generators. Some more staff should be trained in handling Plasma cutting equipment
- ✚ It should be ensured that equipments, tools and consumables are available as per the latest list circulated by CAMTECH.
- ✚ DG set Panel meters are not Available and found dummied in Coach No: 15409 i,e Tool room SP MRV
- ✚ Earth discharge rod length is insufficient
- ✚ Cable of ED rod to be changed.
- ✚ Insulation Tape rolls whose life has expired are to be replaced.

ATTENTION

STATION MASTERS

S.R.5.14.3. While shunting wagons loaded with petrol, kerosene oil, liquid fuel, spirit and other highly inflammable liquids, the speed should be restricted to 8 KMPH.

S.R.5.14.4. Carriages containing passengers shall not be moved for shunting purposes without the personal orders of the Station Master and also the Guard of the train concerned, who will jointly be responsible for taking all precautions, to warn passengers and to prevent accidents either to the passengers in the carriages or to those attempting to get into or out of them under the impression that the train is being started. The Guard shall have the vacuum brake connected up and ensure that the shunting is performed safely.

ATTENTION

LOCO PILOTS / ASISTANT LOCO PILOTS/GUARDS

6.03. Protection of trains stopped between stations.— (1)

(ii) On a double line section where trains on the two lines run in the opposite direction. – (a) As soon as the Loco Pilot comes to know that his train has met with an accident he shall at once switch on the flasher light and switch off the head light and thereafter either go himself and send his Assistant Loco Pilot or some other competent person to protect the adjacent line in front in the manner prescribed in clause (i) above.

(b)The Guard shall himself first immediately proceed ahead to assist and ensure protection of the adjacent line in front in the manner prescribed in clause (i) above and if a competent person is available send him to protect the train in the rear in the manner prescribed in clause (i) above.

ATTENTION Engineering

S.R. 15.26.1. Working of Trolleys without block protection:— S.R. 15.26.1.2. On the single line, a Flagman shall follow and another Flagman shall precede the Trolley at a distance of not less than 800 metres plainly showing a Stop hand signal. On the double line, a Flagman shall either follow or precede a Trolley at a distance of 800 metres in the direction from which trains will approach plainly showing a Stop hand signal. S.R. 15.26.1.3. The distance of 800 metres mentioned above is the minimum, which shall be increased on steep gradients and sharp curves or wherever the view is restricted, to such an extent as will be adequate to ensure the removal of the Trolley before the arrival of the train.