SOUTH CENTRAL RAILWAY

VIGIL

QUARTERLY SAFETY BULLETIN NO.3

SEPTEMBER - 2020

INDEX

My dear Railway men

- In the second quarter of this financial year 2020-21, there was no consequential train accident, 6 other than consequential train accidents on this Railway when compared to nil and 17 respectively in the previous financial year for the same period i.e. July to September. Every field Official shall take all preventive measures to sustain this performance
- Number of indicative accidents has decreased from 4 during second quarter of 2019-20 to 2 during 2019-20 second quarter. Out of two indicative accidents all cases are 'SPAD' cases
- The number of Yard Accidents has decreased from 16 during second quarter of 2019-20 to 2 during 2020-21.
- For the month of July, there was no consequential train accident, one other train accident and one yard accident.
- For the month of August, there was no consequential train accident, no other than consequential train accident and only one yard accident.
- For the month of September, there was no consequential train accident, no other than consequential train accident, two SPAD cases and one yard accident.
- In regard to the safety performance of Divisions, accidents / unusual incidences in SC-5, BZA – Nil, GTL – 1, HYB – Nil, NED – Nil, GNT – Nil.

I hope that this booklet which contains important RB letters that are helpful in updating the knowledge of all field Officials, contribute for understanding the details of accidents, test your knowledge with key statistics etc.,

(M.Ravindranath Reddy)
Principal Chief Safety Officer

Section "A" KNOWLEDGE
Extracts of Railway Board letters

No.2020/Safety/DM/6/14 New Delhi, dated 20.07.2020

Sub: Disaster Management Plan - Standard Operation Procedure (SOP) of Fire accidents.

A number of fire incidents in coaches/trains occurred during 2019-20. There is thus a need to prepare a proper Standard Operation Procedure (SOP) for better handling of fire accidents in coaches /trains (freight and passenger). Availability of a proper SOP on handling of fire accidents would help in stream lining actions in a coordinated way so as to reduce the possibility of loss of life and property.

2. It is requested that a detailed SOP to deal with various fire accidents in railway coaches/running trains (both passenger as well as freight) may be prepared. A copy of the same may be mailed at sosafetydm@gmail.com or anupam.verma@gov.in or edsm@rb.rail net.gov.in

(Dimpy Garg)
Executive Director/Safety(M)
Railway Board

No. 2008/Safety(DM)/Che./6/3 Pt. New Delhi. dated 27.08.2020

Sub: Safety concerns relating to manufacturing, storage, transportation and handling of hazardous chemicals.

Member Secretary, National Disaster Management Authority (NDMA) vide letter No. 5-29/2020/Mit-II dated 07.08.2020 (copy enclosed) has reiterated the existing guidelines on the above mentioned subject.

2. It has inter-alia been advised that the storage area of hazardous chemicals must be equipped with safety equipments, security systems and advanced fire fighting systems. Mock drills should be held regularly to check preparedness. It has further been advised that materials remained stored for long time be given special attention and all the necessary approvals/efforts be taken for their disposal.

3. It has been advised that vigilance may be stepped up and all preparedness measures taken for safe storage, transportation and handling of hazardous chemicals.

4. it is thus requested that necessary action may kindly be taken and a compliance report in this regard may be sent to this office.

(DIMPY GARG)
Executive Director/Safety(M)
Railway Board

No. 2020/Safety(A&R)/2/N New Delhi, dated :--28-8-2020

Sub: Consequential Accident - Collision of BCM (353) + Dumatic (8094) and DGS (439) + Unimat (8292) at Km 1185/13-15 between Chataini and Beohari stations on 20.06.2020.

On 20.06.2020, the incident of collision of BCM (353) + Dumatic (8094) and DGS (439) + Unimat (8292) occurred at Km 1185/13-15 between Chataini and Beohari stations.

The inquiry in this case was carried out by a Committee of SA Grade officers of West Central Railway.

As per the findings of the Inquiry Committee, Tech-III(TM) did not have any competency certificate regarding operation of track machines but he operated the track machine. The Inquiry Committee has held staff of WCR responsible for the above incident of collision.

Accident Inquiry Report duly accepted by competent authority has been uploaded in SIMS

Zonal Railways are requested to go through the details of accident in SIMS and issue necessary instructions to concerned officials to prevent recurrence of such accidents.

(Tej Prakash Agrawal)
Executive Director/ Safety
Railway Board

No.2009/Safety(DM)/Eq.Fail/6 New Delhi dated 26.09.2019

Sub: Defects reported by crew.

Instructions exist that crew of trains, after completing nominated duty while signing off, should report any irregularity noticed during run including those of track and signal. Track and signal defects/deficiencies reported by the crew are to be acted upon immediately as these may affect safety of next train in the section. It has been observed that the defects/deficiencies reported by crew, especially of track and signal, are not attended in a timely manner and the comments thereon are not of desired level.

2. In view of the serious consequences that any potential defect in track and signals reported by the crew can have, it is imperative that immediate action is taken by the Divisions to alert maintenance supervisors/officers and ensure that corrective action is taken on an urgent basis. This will ensure that even a small defect is rectified before it can lead to serious consequences.

3. Board desires that immediate action be taken by the Divisions to ensure that there is no laxity on this front and all defects and deficiencies reported by the crew are attended to on priority. This will go a long way in ensuring safe train operations.

4. Action taken on the above may be advised to Board.

(N.C.GOEL)
Principal Executive Director/Safety
Railway Board

Section "B"

***Some important instructions – G.R/S.R.* 4.19** **

4.19. Guard's and Loco Pilot's equipment.—
(1) Each Guard and Loco Pilot shall have with him, while on duty with his train, the following equipment-
(a) a copy of these rules or such portions thereof as have been supplied to him under Rule 2.01,
(b)a copy of the Working Time Table, and all correction slips and appendices, if any, in force on that section of the railway over which the train is to run,
(c) a hand signal lamp,
(d) a whistle (for Guards only),
(e) a red flag and a green flag,
(f) a stock of detonators sufficient to comply with the relevant rules as may be prescribed by special instructions,
(g) a first aid box (for Guards of passenger carrying trains only), and
(h)such other articles as may be prescribed by the Railway Administration in this behalf.
(2) If any Guard or Loco Pilot is not in possession of any article mentioned or referred to in sub-rule (1), he shall report the fact to his superior who shall make good the deficiency.
(3) Each Guard and Loco Pilot shall have with him while on duty with his train, two pairs of such spectacles as he is required to wear under medical advice. *Note:* Each Guard and Loco Pilot should also be in possession of a

watch in addition to the equipment prescribed in sub-rule (1).

S.R.4.19.1.1.The Guard while working a passenger carrying train shall be in possession of the following personal equipment.

1	Hand signal lamp	11	Working Time Table
2	Hand signal flags (Green - 1; Red - 2)	12	Guard‘s Certificate Book
3	Tail lamp/Flashing tail lamp	13	Rough Journal Book
4	Tail Board	14	Hand book on G&SR for Loco Pilots and Guards
5	First aid box	15	Whistle
6	Detonators - 10	16	Spectacles, if required
7	Washers – 3	17	CBC operating Handle key
8	Padlocks - 4 (50mm - 2 and 35mm-2)	18	Private number book(s)
9	Chain for securing the box	19	Universal key for opening and closing Guard's compartment of SLR
10	Reference books & Stationery		

S.R. 4.19.1.2. Equipment of Guards working freight trains: In addition to the list given for Guards working passenger carrying trains, the following shall be included.

1	Book of T/609 forms	3	BP Pressure Gauge with Adapter
2	Vacuum Gauge	4	FP Pressure Gauge with Adapter

However, First Aid Box and Guard Certificate are excluded.

S.R. 4.19.2. Items of personal equipment and stores for Loco Pilots:

1	Hand signal lamp	6	Working Time Table

2	Hand signal flags (Green - 1; Red - 2)	7	Hand Book on G&SR for Locopilotsand Guards
3	Detonators – 10	8	One electric head light bulb and one cab light bulb
4	Washers	9	Spectacles, if required
5	Rough journal book, reference books and stationary	10	CBC operating handle key

S.R. 4.19.2.1. Assistant Loco-pilot shall be in possession of the following personal equipment along with a hand bag to carry the equipment issued to Assistant Loco-Pilot, while working a train (Unified SR):

1	Tri-Colour Torch;	3	Hammer-cum-Screw Driver
2	Red & Green flags	4	Working Time Table

S.R. 4.19.3. Brakesman shall be in possession of the following personal equipment. –

1	Hand book on G&SR for Loco-Pilots and Guards	6	A carriage key
2	Working Time Table	7	Sufficient number of padlocks
3	Ten detonators in a tin case	8	Guard‘s memo book
4	Two red flags and a green flag	9	Two pairs of spectacles with the name engraved thereon, if required.
5	Hand signal lamp -	10	

S.R.4.19.4. Brake-van equipment in Coaching Trains originating in South Central Railway should be provided as given below:-

S.R. 4.19.4.1.Loading of Brake-van Equipment

(i) The BV Equipment would be loaded at the platform of the primary maintenance station in both SLRs (i.e. Front and Rear SLR), or in some trains three SLRs (i.e., Front, Centre and Rear SLRs) inside a cupboard / cabinet which shall be locked with One-Time Lock (OTL) and sealed jointly by the SE/JE-C&W and Dy.SS.

(ii) In case of EMU/MEMU, the brake van equipment shall be loaded in Low Tension Compartment in the Motor Coach. In case of DEMU/DHMU, the space available in Driving Trailer Cab shall be utilized for loading the brake van equipment.

(iii) All two / three SLRs shall be checked in the return direction at the platform jointly by the SE/JE-C&W and Dy.SS of destination station.

(iv) The following in-charges mentioned against item shall arrange for initial loading of BV Equipment in working condition in the dedicated cabinet provided in the SLR. Dy.SS should co-ordinate loading in two / three SLRs on the platform.

a	Portable Control Telephone 2/4 wire type as required	1 set	SE/JE-Tele
b	Portable Train lighting equipment	1 set	SE/JE-TL
c	Fire extinguisher (DCP type)	2 Nos.	SE/JE-C&W
d	Wooden Wedges/Skids	2 Nos.	SE/JE-C&W
E	Stretcher in good condition -	1 Nos	Dy.SS

(v) After full complement of BV equipment is loaded, SE/JE-C&W s tie with necessary tape/cord and seal the same.

(vi) The SE/JE-C&W of train-originating station shall also keep one spare OTL in unlocked condition in the cabinet for use by the Guard en-route, whenever required.

(vii) After initial loading and sealing is done, SLRs, shall be continuously monitored on each and every trip both outgoing and incoming rakes by SE/JE-C&W at the Platform and maintain record of the BV Equipment available in the SLRs.

S.R. 4.19.4.2. Painting of details inside SLRs and securing:

(i) On the cabinet containing the BV Equipment are loaded, painting/sticker shall be provided, indicating SLR No., details of BV Equipment with serial number and due date of testing.

(ii) Instructions to Guards on usage of OTL should also be painted or pasted in the form of sticker.

(iii) Cabinet containing BV Equipment shall be provided with clamping/locking arrangement to facilitate locking with the use of the OTL.

(iv) Wire mesh/weld mesh shall also to be provided to see the availability of BV Equipment, to facilitate at the time of handing over / taking over the BV Equipment without having to open the cabinet door. Necessary lighting arrangements inside thecabinet with control switch outside the cabinet shall be provided. New ICF SLRs are turned out with toughened glass windows for the cabinet.

S.R.4.19.4.3. Procurement of BV Equipment:The SEs/JEs of concerned Departments and Dy.SS at the primary maintenance station of the rake shall be in possession of the required number of BV Equipment + 10% extra for initial provision in all SLRs of all the rakes primarily maintained at that station.

S.R.4.19.4.4. Handing over & Taking over charge of BV Equipment:

(i) Dy.SS/TNC of the originating station shall record the intactness and the availability of the BV Equipment/seal in the register specially maintained for this purpose. They shall obtain acknowledgement of the Guard in the register apart from Vehicle

Guidance (VG).

(ii) Both the incoming and outgoing Guards shall make entries in the VG and the Rough Journal Book, and acknowledge about the intactness of seal and OTL.

S.R.4.19.4.5. Replacement of OTL & BV Equipment:

(i) In case of seal missing or OTL broken or BV Equipment missing, the Guard of the train shall give a message to the Station Master of the station with a copy to the Station Master of the train originating station indicating the train number, SLR number, missing BV Equipment serial numbers, along with date, location etc.

(ii) The Station Master of the originating station in turn shall advise the concerned SEs/JEs for recouping the item/s.

(iii) Concerning SE/JE should replace/recoup BV Equipment after testing.

S.R.4.19.4.6. Due date for replacement / testing of BV Equipment:

(i) Fire-Extinguishers: Replacement shall be done once in a year. Due date shall be stenciled on each fire-extinguisher for easy identification and replacement as and when required.

(ii) Portable Telephone: The 2/4 wire telephone will be tested once in six months by SE/JE-Tele. The sticker indicating the due date should be pasted (eg., Due – Nov.06).

(iii) The practice of issuing PT sets to Guards at the time of signing ON and collecting back while signing OFF will continue.

(iv)Portable Train Lightning Equipment: Each box be serially numbered on the cover and inside the EL Box for easy identification. Contents of the EL Box shall be tested once in six months by the SE/JE-TL and the next due date should be written on the sticker.

S.R.4.19.4.7. No SLR in the formation shall be detached en-route on Traffic account.

S.R.4.19.4.8. Duties of Guard:

(i) The Guard of the train shall ensure before departure of the train that the BV Equipment is correctly available, OTL is in locked condition and the seal is put on. When the seal is broken, but OTL is intact, the Guard shall advise the Station Master of the originating Station for providing rexine cover and seal.

(ii) The cabinet seal containing the BV Equipment shall be broken by the Guard of the train for use during accidents/emergencies.

(iii) After usage of the equipment, the Guard shall give a message to the SE/JE – C&W and the Dy.SS of the originating station indicating date, time and place of usage so as to facilitate recoupment of equipment if required.

(iv)He shall also check for its intactness en-route.

(v) Whenever, cabinet/cupboard is opened in emergency, he shall intimate the same to the Dy.SS under a written message. He shall pass a remark on the VG and Rough Journal Book as to where the equipment was taken out; he shall lock the equipment with the spare OTL.

(vi)He shall also give a message to the Dy.SS of the originating station for providing the rexene pouch and seal.

(vii) He shall obtain the acknowledgement of the Dy.SS of SE/JE-C&W in the VG/ Rough Journal Book at the destination station about the intactness of OTL and seal.

S.R.4.19.5: Brake van equipment, Loco Pilot/Motorman's and Guard's equipment in MEMU/ EMU/DEMU/DHMU trains: S.R.4.19.5.1: Brake van equipment The following brake van equipment in working condition shall be loaded in low tension compartment in each motor coach of MEMU/EMU by the

MEMU/EMU shed and in the space available in each Driving Power car of DEMU/DHMU by DSL sheds responsible for primary maintenance. In- charges of the sheds are

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Section "C"
Latest Amendments

Amendment Slip no. 35 to G&SR - 2008 of SCR for amendments to SR 3.23, 3.24, 3.36, 3.38 and 3.49.

The following amendments have been given for implementation:

Item No:1
SR nos. 3.23.1, 3.23.1.1.1, 3.23.1.1.2, 3.23.1.1.3, 3.23.1.2.1, 3.23.1.2.2, 3.23.1.2.3 are deleted.

Item No:2
Existing SR 3.23.1.3 is renumbered as 3.23.1 and amended as under:
Miniature Signal repeaters are provided on Station Master's Control Panels/VDUs to repeat the aspect displayed by each signal.

Item No:3
SR nos. 3.23.1.4.1 & 3.23.1.4.2 are deleted.

Item No:4
SR nos. 3.23.2.1 is amended as under.
At stations, where signal repeaters are provided, the Station Master shall satisfy himself by observing indications of the repeaters that the signals are working properly. Whenever any signal repeater is not in working order, the relevant fixed signal need not be treated as defective, if it is possible for the Station Master to observe personally

the position of the signal by proceeding to a convenient place outside his office from where it can be seen. If it is not possible for the Station Master to personally ensure that the signal is in the correct position by proceeding to a convenient place outside his office. At stations provided with cabins at either ends of the yard, the Station Master at the station shall ascertain from the Station Master of the cabin concerned that the signal is working properly and exchange private numbers.

Item No:5
SRs 3.23.2.2 and 3.23.2.3 are deleted and existing SR no. as 3.23.2.4 is renumbered as 3.23.2.2.

Item No:6
SR no. 3.24 is deleted.

Item No:7
S.R.3.36.2. is amended as under:
The Station Master shall assure himself, in all cases either personally or by means of the repeater that the concerned signals, governing the movement of a train, are taken ‘off ‘ for the train correctly and such signals are put back to ‘on’ immediately after the train has completely passed the signal. However, the position of the points shall not be changed, until the whole train has either come to a stop at the station or run through the station, except where sectional route release facility is provided.

Item No:8
S.R.3.36.3.1. is amended as under:
Testing of Reception signals:

At interlocked stations with two cabins, one on either side, where signal reversers are provided and the taking 'off' of the reception and dispatch signals controlled by means of control knobs in the Station Master's office and slot knob control in the cabin, the Station Master shall daily, during day time, when no train is due to arrive or leave the station, test the working of the reception signals in one direction for one line as for a stopping train. For example, at a station with two running roads the signals shall be tested as under-

Item No:9
S.R.3.36.3.1.1. is amended as under:
The Station Master shall arrange for the taking 'off' of the Up reception signals for road No.1. He shall then put back his control knob and personally see whether the reception signals have gone back to 'on' position. The Station Master at the station shall again arrange for the taking 'off' of the Up reception signals for road No. 1 and instruct the Station Master in the Cabin to put back the cabin slot knob to normal and personally see whether the reception signals have gone back to 'on' position.

Item No:10
S.R.3.36.3.1.2. is amended as under:
The Station Master at the Station shall similarly test on the second day, the Down reception signals for road No. 1 and on the third day, the Up reception signals for road No. 2. On the fourth day, the Down reception signals for road No. 2 and so on, every day repeating the procedure laid down in para 3.1.1. above.

Item No:11
S.R.3.36.3.2. is amended as under:

The Station Masters shall immediately after each test, record the results of the test in the Station Diary. If the signals do not go back to 'on' position when the Station Master's control knob/button or cabin slot is restored to its normal position, the signal shall be treated as defective and immediate action taken as laid down in the General Rules 3.68 and 3.69 and Subsidiary Rules there under.

Item No:12
S.R.3.36.3.3. is amended as under:
This procedure of testing the reception signals shall also be adhered to at stations provided with a central cabin with Station Master's control knobs/buttons in the Station Master's office. At stations where Cabin Station Masters are in-charge of cabins, the Station Masters of such stations shall similarly test the working of the reception signals daily and record the results of the tests in the Station Diary maintained in the cabin.

Item No:13
S.R.3.36.6. is amended as under:
Certificate of competency – Shunting Master/Pointsmen. Every Shunting Master/ Pointsmen shall be tested after completion of initial/refresher training course and be issued with a certificate of competency by the in charge of the training centre in the form No. T.336 before he is put to work independently. The certificate of competency will be valid for a period of 3 years from the date of issue.

Item No:14
S.R.3.38.5.1. is amended as under:
Line Blocked/Power Block caps are provided for the Control Panels at stations and cabins. These Line Blocked/Power Blocked caps

shall be placed on the Signal/Point/Routeknobs/ buttons to prevent the operation Signal/Point/Route knobs/ buttons and to give a visual warning to the Station Master. In VDU Panels facility to block a line is provided through a pop-up
message.

Item No:15
S.R.3.38.5.2. is amended as under:
Line Blocked Caps bearing the words “line blocked” painted in white on in red colour caps are intended for placing on the concerned Signal/ Point/Route knobs/buttons of a line on which a train or vehicle is left standing or otherwise obstructed. These Line Blocked caps shall also be used when a train stops at a station to cross and/or to give precedence to another train or trains. Power Block, Caps bearing the words “Power Block” painted in red on Yellow colour caps, are intended for placing on the concerned Signal/Point/Route knobs/ buttons of a line on which Power Block is given. The Power Block caps shall be removed only when the Power Block has been cleared.

Item No:16
S.R.3.38.5.3. is deleted:

Item No:17

S.R.3.38.5.4. is renumbered as 3.38.5.3 and amended as under: Detailed instructions regarding the use of Line Block/Power Block caps in knob/button operated panels or application of line block/power block reminders in VDU panels shall be incorporated in the Station Working Rules.

Item No:18
SR no. 3.38.5.5 is deleted:

Item No:19
SR nos. 3.38.7.4 is amended as under:
Handing over Emergency Crank Handle of motor operated points to S&T staff for maintenance work etc—
If the emergency crank handle is required by the S&T staff for maintenance work or for the purpose of testing, disconnection and reconnection notices should be issued in accordance with procedure laid down. Whenever the emergency crank handle is handed over to the S&T staff, an entry should be made in the emergency crank handle register showing the points on which the emergency crank handle is required to be used. At the same time the 'Line Blocked' caps should be put on the relevant point knobs/buttons. During the time of the emergency crank handle is in use, the reception/dispatch of trains or any shunt movement should be arranged in accordance with the rules. In case of VDU operated panels, procedure to ensure the concerned point is locked to prevent its operation shall be given in the Station Working Rules.

Item No:20
S.R.3.38.7.5. is deleted:
Item No:21
S.R.3.49.1. is amended as under:
Whenever reception signals become blank or not in 'On' position, the Station Master shall not grant Line Clear unless he has initiated action in accordance with the procedures prescribed in G. R. 3.68 and 3.69.

Item No:22

S.Rs.3.49.2, 3.49.3, 3.49.3, 3.49.4.1, 3.49.4.2, 3.49.4.3, 3.49.4.4, 3.49.4.5, 3.49.4.6, 3.49.5.1. 3.49.5.1.1, 3.49.5.1.2, 3.49.5.1.3, 3.49.5.1.4, 3.49.5.1.5, 3.49.5.1.6, 3.49.5.1.7, 3.49.5.2, 3.49.5.3. 3.49.5.4. 3.49.5.5, 3.49.5.5.1. 3.49.5.5.2, 3.49.5.5.3, 3.49.5.5.4 are deleted.

Amendment Slip no. 36 to G&SR - 2008 of SCR

Following amendments to GRs 1.01 (1), 1.01 (2) and 4.10 (1) that have been notified by the Government of India vide Extraordinary Gazette notification under reference-1, have been notified for implementation in SCR.

Item No:1

GR 1.01 (1)in page no. 1 are amended as under:

These rules may be called the Indian Railways (Open Lines) General Amendment Rules**, 2020**.

Item No:2

GR 1.01 (2) in page no. 1 are amended as under:

They shall come into force on the date of their publication in the Official Gazette.

Item No:3

GR 4.10 (1) in page no. 100 is amended as under:

The speed of trains over non-interlocked facing points shall not exceed **30** kilometres an hour in any circumstances and the speed over turn-outs and crossovers shall not exceed its **permissible speed or 30** kilometres an hour whichever is less,

unless otherwise prescribed by approved special instructions, which may permit a higher speed.

Item No:4

Add the following as SR 4.10.3:

The speed over non-interlocked points can be raised to 30 kilometres per hour subject to the compliance of the following conditions:

1. Clamping and padlocking of the points by using suitable clamps;
2. Integrity of point shall be checked by Operating Staff and normal detection of facing points shall be proved in the concerned signal by suitable circuit wiring;
3. Physical verification of track shall be done by Station Master physically;
4. Necessary safety directions should be incorporated in temporary working instructions for non-interlocking at 30 KMPH under approved special instruction with suitable infrastructural support as deemed necessary;

Note: No separate temporary panel is needed and only free home signal shall be given.

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Section "D"
Checklist – Civil Engineering

A PERMANENT WAY (TRACK)

1. Inspection of Track

S.No.	Item to be inspected	Remarks	Reference
1.	Whether condition of Rail is good? a) Vertical wear of rail is within 13/8 mm (60/52 kg) b) Lateral wear of rail is within i) 6/8 mm (A&B / C,D,E routes on straight track)	Yes/No	IRPWM Para 302(iii)&(iv)
2.	Whether condition of Sleepers specially under rail seat is good and their spacing is correct? (60/65 cm c/c for 1660/1540 sleeper density)	Yes/No	
3.	Whether all track fittings are completed and tightened?	Yes/No	
.4	Whether ballast available is sufficient and properly boxed?	Yes/No	IRLWRM para 4.2
5.	Whether oiling and greasing of fishplate joints is being done as per annual schedule? (once in 12 month)	Yes/No	IRPWM Para 241(3)

6.	Whether there is any blowing/ pumping joint?	Yes/No	

S.N/	Item to be Inspected	Remarks	Reference
7.	Whether knowledge of staff regarding safety of track is up to the mark?	Yes/No	
8	Whether proper protection is resorted to at track work site as per prescribed norms?	Yes/No	IRPWM Para 806,807,808
9	Whether P.Way material is properly stacked and is away from running track and marked wherever required?	Yes/No	
10	Is the Machine tamping overdue (in Mechanised maintained track)?	Yes/No	
11	Whether “Location needing Inspection” are being regulated by field official?	Yes/No	
12	Whether all field officials are entering their irregularities in Track Management System (TMS)?	Yes/No	
13	Whether resources/work planning has been done with respect to “Location needing attention” as per TMS?	Yes/No	

2. Gang Inspection

1.	Whether gang is working under proper track protection?	Yes/No	IRPWM Para 806,807,808
2.	Whether all the Trackmen are in uniform?	Yes/No	
3.	Whether Gang charts, Mates diary, attendance sheet are available with gang?	Yes/No	IRPWM Para 232(1)
4.	Whether all equipments i.e. Gang tools, first aid box, Safety equipments are available and in working condition? (In good condition /Not in good condition)		
4.1	Powrah (Spade)	Yes/No	
4.2	Crowbar	Yes/No	
4.3	Pan mortar	Yes/No	
4.4	Pick Beater	Yes/No	IRPWM Para 232(2)(c)
4.5	Pick Axe	Yes/No	
4.6	Shovel	Yes/No	
4.7	Ballast Rake	Yes/No	
4.8	Bar Straightening	Yes/No	
4.9	Bar Claw	Yes/No	
4.10	Tommy Bar	Yes/No	
4.11	Wire Claw	Yes/No	
4.12	Punches	Yes/No	
4.13	Wire Basket	Yes/No	
4.14	Spanners	Yes/No	

4.15	Hammer	Yes/No	
4.16	Rail drilling Ratchet	Yes/No	
4.17	Track Bond Drill/ Drill Twist	Yes/No	
4.18	Chisel	Yes/No	
4.23	Rail Shunt-Cable (Jumper)	Yes/No	
4.24	Cutting Blowpipe	Yes/No	IRPWM Para 232(2)(c) (c)
4.25	De-stressing Roller	Yes/No	
4.26	Rail Roller	Yes/No	
4.27	Rammer	Yes/No	
4.28	Ballast Profile Template	Yes/No	
4.29	Hump Cord	Yes/No	
4.30	Wooden Mallet	Yes/No	
4.31	Hand Signal Flag	Yes/No	
4.32	Staff suitable for exhibition of red		
	lamp or red flag	Yes/No	
4.33	Detonators	Yes/No	
4.34	Whistle thunderer	Yes/No	
4.35	Battery operated LED based Torch		
	Light-cum Hand-Signal Lamp	Yes/No	
4.36	Safety Helmet	Yes/No	
4.37	Safety Jacket	Yes/No	
4.38	Safety Gloves	Yes/No	
4.39	Shoes	Yes/No	
4.40	First aid box	Yes/No	
4.41	Safety goggle	Yes/No	
5.	Whether previous day work is as per data entered in Gang chart/ diary? Is it as per	Yes/No	IRPWM Para 232(1)

	expected quality?		
6.	Knowledge of Mate and Gang regarding safety and quantity of work is adequate?	Yes/No	IRPWM Para 232 (3)
7.	Whether PME of Mate, Keyman and Trackman is being done regularly as per norms? (On attaining the age of 45 years and thereafter at the termination of every period of five years)	Yes/No	IRMM Vol I Para 514(B)
8.	Whether compliance of various points noted during last inspection have been made?	Yes/No	
9.	Whether Gang Progress/work is being entered in TMS?	Yes/No	

3. Checklist for Curve

S. N.	Item to be inspected	Remarks	Reference
1.	Whether curve board is properly provided at both ends of curve with adequate details of Degree, Radius, Super Elevation (SE) etc.?	Yes/No	IRPWM Para 409(1)
2.	Whether marking of cant & stations no. and versines is indicated on rail and is legible? (10 m apart on inside of web of inner/outer rail)	Yes/No	IRPWM Para 409(3)
3.	Shoulder width on outer rail on LWR track. (350/500 mm shoulder ballast on straight and inside of curve/ outside of curve)	Yes/No	LWR Manual Para 4.2
4.	Whether rail posts are available at Transition Tangent Point (TTP) and Common Tangent Point (CTP)?	Yes/No	IRPWM Para 409(2)
5.	Whether extra clearances for curves have been provided? 1.On platforms - Inner side of curve – 27330/R + 5L/4 –51 mm Outside of curve – 29600/R – 25 mm 2. Adjacent Track 27330/R+29600 R+2L/4 mm	Yes/No Yes/No	IRPWM Para 417 & Appendix of SOD

	Where R is radius of curve in meter and L is Lean		
6.	Whether compliance of various points noted during last inspection have been made?	Yes/No	IRPWM Para 122(l)
7.	Whether the inspection of curve has been done as per schedule by ADEN SSE(P.Way)/ JE(P.Way) (one curve every quarter in each SSE/JE (P.Way) jurisdiction for ADEN/ once in 6 months by rotation for SSE/JE(P.Way))	Yes/No	IRPWM Para 107(4), 124 (4)
8.	Whether Curve Inspections are being entered by SSE/P.Way in TMS	Yes/No	
9.	Does the curve require local complete realignment? (20% or more stations are having versines variations beyond limits as per speed band) <140 - ≥ 110 kmph :- 10 mm (15mm for 110kmph) or 20% of average versines whichever is more ;<110 - ≥ 50 kmph :- 20 mm or 20% of avg. versines whichever is more ; < 50 kmph :- 40 mm or 20% of avg.	Yes/No	IRPWM Para 421(2)

	versines whichever is more;		
10.	Permissible Gauge on curve - radius ≥ 440 m :- radius < 440 m :- -6 to +15 mm upto +20 mm	Yes/No	IRPWM Para 224(2)(e)(v)

4. Points & Crossings

S.No.	Item to be inspected	Remarks	
1	Whether entries are recorded in Points & Crossing's register by SSE/JE as per their inspection schedule? (once in 3 months on running lines and once in 6 months on non- running lines by rotation)	Yes/No	IRPWM Para124(3)
2	Whether condition of stock rail and tongue rail of switch is damaged or worn out?	Yes/No	IRPWM Para237(2) & 302
	a. Tongue rail is chipped/crack within200 mm length in 1000 mm from ATS	Yes/No	
	b. Vertical wear of Tongue rail is within 8/5 mm at 13 mm head width and level	Yes/No	

	point (60/52 kg)		
	c. Lateral wear of tongue rail at Q point and Level point is within 8/6 mm(60/52 kg)	Yes/No	
	d. Vertical wear of Stock rail is within13/8 mm (60/52 kg)	Yes/No	
	e. Lateral wear of Stock rail is within i. 6/8 mm (A&B / C,D,E routes on straight track) ii. 8/10 mm (A&B / C,D,E routes on curved track)	Yes/No	
3	Whether tongue rails are out of square?	Yes/No	
4	Whether tongue rail houses properly against stock rail?	Yes/No	
5	Whether throw of switch is within tolerance limit? (Straight switch95mm, Curved switch-115mm, Thick web switch-160mm)	Yes/No	SOD Ch.2 Item 16
6.	Whether correct gauge and cross level is maintained at toe of switch in both the settings i.e., Normal and Reverse? (nominal gauge + 6 mm for T/out having SEA> $0^0$20'00" & nominal gauge for T/out having SEA ≤$0^0$20'00")	Yes/No	IRPWM Para237(1)(g)

7.	Whether all tongue rail fittings are intact and effective?	Yes/No	
8.	Whether correct gauge and cross level is maintained in lead portion?	Yes/No	IRPWM Para237(8)
9.	Wear at Actual Nose of Crossing(ANC) is within the Permissible limits? (Rajdhani/Shatabdi route- Built Up Xing: 6mm, CMS Xing:8mm; Other routes all xings:- 10mm).	Yes/No	IRPWM Para237(3)
10.	Whether proper clearance between vee and wing rail at nose of crossing is maintained properly? (44-48 mm in B/Up xings)	Yes/No	SOD Ch.2 Item 14 &15
11.	Whether correct clearance of check rail opposite the crossing is maintained? (41-45 mm for Fan shaped T/out; 44-48 mm for other T/ outs)	Yes/No	SOD Ch.2 Item 12 &13
12.	Whether correct gauge and cross level is maintained at nose of crossing?	Yes/No	IRPWM Para237(8)
13.	Whether proper packing is given in switch and crossing portion?	Yes/No	IRPWM Para237(1)

14.	Whether length of turnout is standard or not? (28613 mm for 1 in 8.5 &39975 mm for 1 in 12 Fan shaped T/ out)	Yes/No	RDSO Drg. No.- 4865,4218& 4732
15.	Whether compliance of various points noted during last inspection have been made?	Yes/No	
16.	Is Machine tamping overdue?	Yes/No	
17.	Whether inspections are entered regularly in TMS as per laid down schedule?	Yes/No	

5. Insulated Joints (Conventional), Glued Joints and Rail Joints

S.N.	Item to be inspected	Remarks	Reference
1.	Whether condition of rails, sleepers and packing of Insulated Joints/Glued Joints is satisfactory?	Yes/No	IRPWM Para280 & 281
2.	Whether there is metal flow on the Insulated/Glued Joint rail ends?	Yes/No	
3.	Whether rails at joint are battered/ hogged?	Yes/No	
4.	Whether drainage is good on the Insulated/Glued Joints?	Yes/No	

5.	Whether inspections are entered regularly in TMS?	Yes/No	

6.. Deep Screening

S. N	Item to be inspected	Remarks	Reference
1.	Whether work is being done under competent supervisor? (JE/P.Way or PWS now a days, redesignated subject to competency certificate issued by CTE)	Yes/No	C.S. 128 of IRPWM
2.	Whether stipulated speed restrictions are imposed at work site?	Yes/No	IRPWM Para238(2)(f)
3.	Whether level pegs are provided for initial/final rail level restoration? (At every 30 M)	Yes/No	IRPWM Para238(2)
4.	Whether screened muck is thrown away from running track?	Yes/No	IRPWM Para238(2)(e)
5.	Whether proper wooden blocks and other packing are used for passing the trains?	Yes/No	IRPWM Para238(2)(e)
6.	Whether cess is cross-sloped and repaired?	Yes/No	IRPWM Para238(2)(e)
7.	Whether Deep screening is	Yes/No	

	being entered in TMS?		

7. Lifting of Track.

S.N.	Item to be inspected	Remarks	Reference
1.	Whether SE/P.Way is present at the site of lifting of track?	Yes/No	C.S. 128 of IRPWM
2.	Whether proper speed restrictions are imposed at site?	Yes/No	IRPWM Para233(3)
3.	Whether track protection is done at site?	Yes/No	IRPWM Para806,807, 808
4.	Whether level pegs are provided for finalising the required level? (At every30M)	Yes/No	IRPWM Para233 & 234
5.	Whether lifting is being done from down-hill end?	Yes/No	IRPWM Para233(4)
6.	Lifting of track should not more than75mm at a time. Whether these instruction followed?	Yes/No	IRPWM Para233(3)
7.	Whether work done is being entered in TMS?		

8. Drainage in Station Yards/Block . Sections

S.N.	Item to be inspected	Remarks	Reference
1.	Whether all drains were cleaned before monsoon and its silt was taken away from track?	Yes/No	IRPWM Para 239 & 240
2.	Whether cleaning of shoulder ballast, and removal of vegetation/weeds has been ensured before monsoon?	Yes/No	IRPWM Para 239 & 240
3.	Whether all side drains, catch water drains are intact and desilted before monsoon?	Yes/No	IRPWM Para 239 & 240
4.	Whether work done has been entered in TMS?	Yes/No	

9. Ballast Depot

S. N.	Item to be inspected	Remarks	Reference
1.	Whether adequate leveled spacious ground is available at specific ballast depot?	Yes/No	IRPWM Para266(2)
2.	Whether all testing equipments are available and in working order at depot laboratory?	Yes/No	
3.	Whether all records including registers, challans are	Yes/No	

	updated and intact?		
4.	Whether all qualitative and quantitative measures are being followed?	Yes/No	IRS-GE-1 2004
5.	Whether adequate space is available between the stacks?	Yes/No	
6.	Whether unloading facilities are adequate?	Yes/No	

10. Long Welded Rails (LWR)

S. N.	Item to be inspected	Remarks	Reference
1.	Whether all inspections are done by SSE/JE as per laid down stipulations and properly recorded in LWR register? (Fortnightly in 2 hottest & 2 coldest months individually by SSE/JE ; once in 2 months by rotation by SSE/JE in other months)	Yes/No	C.S. 15, LWR Manual
2.	Whether gaps of SEJ are within permissible limits? (should be within10 mm from specified value as per Annexure V of LWR Manual)	Yes/No	Para LWR Manual
3.	Whether conditions of SEJ i.e. tongue rail, stock rail,	Yes/No	

	sleepers & fittings are good?		
4.	Whether speed restriction imposed as per condition of track?	Yes/No	Annexure III LWR Manual
5.	Whether destressing is done at stipulated periods, date and temperature are recorded on LWR board?	Yes/No	LWR Manual Para 8.2.2
6.	Whether staff is aware about rules?	Yes/No	LWR Manual
7.	Whether Hot/Cold Weather Patrolling is being practiced at prescribed temperatures? t_d + 25 for HWP on LWR with PSC sleeper & density 1540 or more t_d + 20 for LWR in other cases for HWP t_d - 30 for Cold weather patrolling	Yes/No	Annexure X A & X-B of - LWR Manual
8.	Whether Hot Weather Patrolmen is equipped with all stipulated tools mentioned in LWR Manual?	Yes/No	Annexure X-A, LWR Manual
9.	Whether the condition of sleepers is O.K?	Yes/No	
10.	Whether all fittings are available and tight?	Yes/No	
11.	Whether reference posts are available?	Yes/No	Para 5.9 of LWR

			Manual
12.	Whether temperature record is being maintained on daily basis in SSE/ P.Way office?	Yes/No	Para 5.2, LWR Manual
13.	Whether LWR needs destressing?	Yes/No	Para 6.4.1, LWR Manual
14.	Whether all inspections, work done and changes are being entered in TMS?	Yes/No	
15.	Whether cold/Hot weather patrolling introduced?	Yes/No	Para 1.17 LWR Manual

11. Complete Track Renewal (CTR) Work

S. N.	Item to be inspected	Remarks	Reference
1.	Whether work is being done as per approved plan, estimate, tender conditions, and location section?	Yes/No	IRPWM Para 309A
2.	Whether Railway Supervisor is available at site of work?	Yes/No	IRPWM Para 826
3.	Whether SR is imposed at the worksite?	Yes/No	IRPWM Para 308

4.	Whether track is adequately protected?	Yes/No	IRPWM Para 806,807,808
5.	Whether all material is kept ready before commencement of traffic block?	Yes/No	
6.	Whether inventory of released material is being ensured?	Yes/No	
7.	Whether all track-parameters within permissible limits work at the end of the day ?	Yes/No	IRPWM Para 319(2)
8	Whether there is any infringement of new/released material with running track?	Yes/No	
9.	Whether quality of laying is as per stipulated rules?	Yes/No	
10.	Whether a thermit welding done in situ is joggle fish platted with two clamps till tested as good by USFD?	Yes/No	Para 8.10 of USFD
11.	Whether all work is being entered in TMS?	Yes/No	

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Section "E"
Accident cases

1. **Brief of the accident** (Derailment): On 03.07.20 between MYL-DHNE stations of GTL division, Train no. SA while passing through caution order location between MYL-DHNE 6th wagons from Train Engine was derailed at 09.35 hrs.
   Cause of the Accident: due to track unevenness.
   Responsibility:
   Primary: Sri. Vijay Chandra Gusain, SSE/P.Way/DHNE for not maintaining the track as per the standards.
   Secondary: Nil
   Blameworthy: Sri. AS Rama Kumar SSE/P.Way/DHNE for not ensuring competency of his subordinate supervisor.

2. **Brief of the accident** (Unusual incident): On 22.07.20 at 11.28 hrs between CTF-VKB stations of SC division, 3 bridge maintenance engineering staff (1 lookout men and 2 working staff) while performing duty on bridge No.123 at KM 113/7-1 between CTF – VKB stations. Diesel coupled light engines (70399+12951) run over the bridge staff and killed. 3 bridge staff died in this incident.
   Cause of the Accident: due to failure of imposition of suitable caution order (Men working on bridge whistle continuously).
   Responsibility:
   Primary: Sri. Binay Kumar Samal, SSE/Bridges/SC

Secondary: Sri. N. Pratap reddy, Errector-II

3. **Brief of the Accident** (Derailment): On 15.08.2020 at about 12.25 hrs. at VHGN station of SC division, while doing shunt movement of Tower Car at VHGN station from DN Loop line to Up main line towards BPA, tower car passed shunt signal No.21 at ON.
   Cause of the accident: Tower car driver failed to stop the tower car before shunt signal No.21 which is at ON.
   Responsibility:
   Primary: Tower Car Driver
   Blameworthy: SS/VHGN

4. **Brief of the accident** (Derailment): On 27.08.2020 at 18.20 hrs at FCI siding/CHZ of SC division, while grouping of BCN loaded wagons from Rd-3(23 wagons) to Rd-6(19 wagons) at FCI/CHZ siding 3 wagons derailed while negotiating over Point No.9 leading to Rd-6 which is of 1 in 8 ½ 52kg steel turnout due to fittings ineffective.
   Cause of the Accident: Spread Gauge due to ineffective track fittings and perished long wooden sleepers beyond CMS crossing of Point No.9 and also working out of keys and cotters of CST-9 sleepers on plain track, inner rail on curve portion got completely titled and wheel has run on the web of inner rail.
   Responsibility:
   Primary: FCI siding/CHZ authorities for poor maintenance of track.
5. **Brief of the accident** (SPAD): On 15.09.2020 at 08.54 hrs at PDPL station of SC division, Train No. Up BCN 'E' Goods with Loco No.27380 +28304 left KOLR station at 08.26 hrs and

arrived at Home signal(S-1) of PDPL at 08.38 hrs. Home signal was danger due to Up loop line occupied with 02805 express and on Up main line Duamatic machine. On clearance of up main line, home signal take OFF at 05.2hrs for BCN empty Goods. Loco pilot of BCN empty goods while approaching main line starter signal (S-3) failed to control his train and passed the starter signal at "ON" and stopped after passing at a distance of 179.6 meters.

Cause of the Accident: Both LP & ALP were not alert before the starter signal and failed to ensure stopping short of the signal.

Responsibility:

Primary:

1. Sri. Deepu Kachhap, LP/G/KZJ
2. Sri. Supriya chatterjee, ALP/RDM

Matters brought to light: The ALP was busy in writing loco log book while train was on run instead of looking out the signal aspect and repeating the same with LP.

6. **Brief of the accident** (SPAD): On 23.09.2020 at about 12.15 hrs at ALER of SC division, Train No. Up DGS-418 machine arrived ALER. Station Up main line at 12.04 hrs. Machine regulated on main line for precedence of Up 07201 Exp & Up SNAG Goods. Up 07201 Exp passed ALER via Up loop line at 12.13hrs. Up SNAG goods given through signal on Up loop line at 12.24 hrs. Mean while Up DGS machine operator started his machine from Up main line and passed Up main line starter signal S-28 at 'ON' and trail the point No.13 and entered into block section without proper authority and stopped at IB signal.

Cause of the Accident: DGS-418 machine operator was not alert and assumed loop line starter signal which was taken off for up SNAG/NMG goods as for his train and passed up main line starter signal at danger.

Responsibility:

Primary: Sri. M.Ramu, JE/TM/KZJ

Blameworthy: Sri. M. Narasimha Rao, SSE/TM in charge/KZJ for booking Sri. M.Ramu to work in that section without LR of that section.

Matters brought to light: The CUG phone of DGS machine operator was kept 'ON' even though he was driving machine on main line.

7. **Brief of the accident** (Derailment): On 23.09.2020 at about 15.45 hrs at RDM shunting neck of SC division, BOXN empty rake consisting of 55 wagons with one BV with Loco No.16579, while performing shunt movement by pushing from shunting neck to M-14line in RDM marshalling yard, leading wheel set of leading trolley of Loco(L6-R6 wheel set) derailed on curve location in shunting neck.

Cause of the Accident: excess ballast heaps at rail level.

Responsibility:

Primary:. Smt. M. Pushpalatha, Gangmate

Blameworthy: Sri. Subhamoy Taralder/SSE/RDM

Section "F"
Test Your Knowledge

1. AC immunity volume of IRS 24 Point machine is _____.
2. Analog Axle counter Transmitter coil frequency is _____
3. While energising 3 phase loco , if UBA meter is showing '0' and corridor lights also not glowing, check MCB No_____.
4. In 3 phase loco for charging of BP pressure _____COC to be kept open
5. On arrival at the station , the official in-charge of following motor trolley will hand over the T.1525 with an endorsement that the motor trolly arrived complete with date and time and sign in the _____
6. Any modification in the layout of passenger lines should be carried out the with the sanction of the _____
7. The service life of 60kg rails(90 UTS rails)_____GMT
8. Air spring damaged in LHB rake in enroute, speed is to be restricted to _____
9. Wheel base of casnub rake is _____
10. The Competency certificate shall be issued to the staff permitted to use motor trolly, in the first instance, only after the staff or officer is subjected to a _____test regarding the rules relating to Motor Trollies

KEY

1. 160 V
2. 5 KHz
3. 112
4. 70
5. TSR
6. Commissioner of Railway Safety
7. 800
8. 60 kmph
9. 2000 ± 5 mm
10. written

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Section "G"
Safety drives launched

Month	Details	from	to	No. of days
July -20	Maintenance of track, Points and Crossings in yards as well as strict observance of rules in shunting	22.07.20	05.08.20	15
Aug – 20	Prevention of fire accidents	28.08.20	11.09.20	15
Sep - 20	Prevention of SPAD	24.09.20	08.10.20	15
In addition to above safety drives following calendar safety drive was also conducted.				
July-20	Short cut methods	01.07.20	15.07.20	15
Aug-20	Stabling and securing precautions	01.08.20	15.08.20	15
sep-20	SINGLE CAR TEST OF A COACH:	01.09.20	15.08.20	15

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Section "H"
Accident Statistics

- In the second quarter of this financial year 2020-21, there was no consequential train accident, 6 other than consequential train accidents on this Railway when compared to nil and 17 respectively in the previous financial year for the same period i.e. July to September. Every field Official shall take all preventive measures to sustain this performance

- Number of indicative accidents has decreased from 4 during second quarter of 2019-20 to 2 during 2019-20 second quarter. Out of two indicative accidents all cases are 'SPAD' cases

- The number of Yard Accidents has decreased from 16 during second quarter of 2019-20 to 2 during 2020-21.

- For the month of July, there was no consequential train accident, one other train accident and one yard accident.

- For the month of August, there was no consequential train accident, no other than consequential train accident and onlyl one yard accident.

- For the month of September, there was no consequential train accident, no other than consequential train accident, two SPAD cases and one yard accident.

- In regard to the safety performance of Divisions, accidents / unusual incidences in SC-5, BZA – Nil, GTL – 1, HYB – Nil, NED – Nil, GNT – Nil.

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