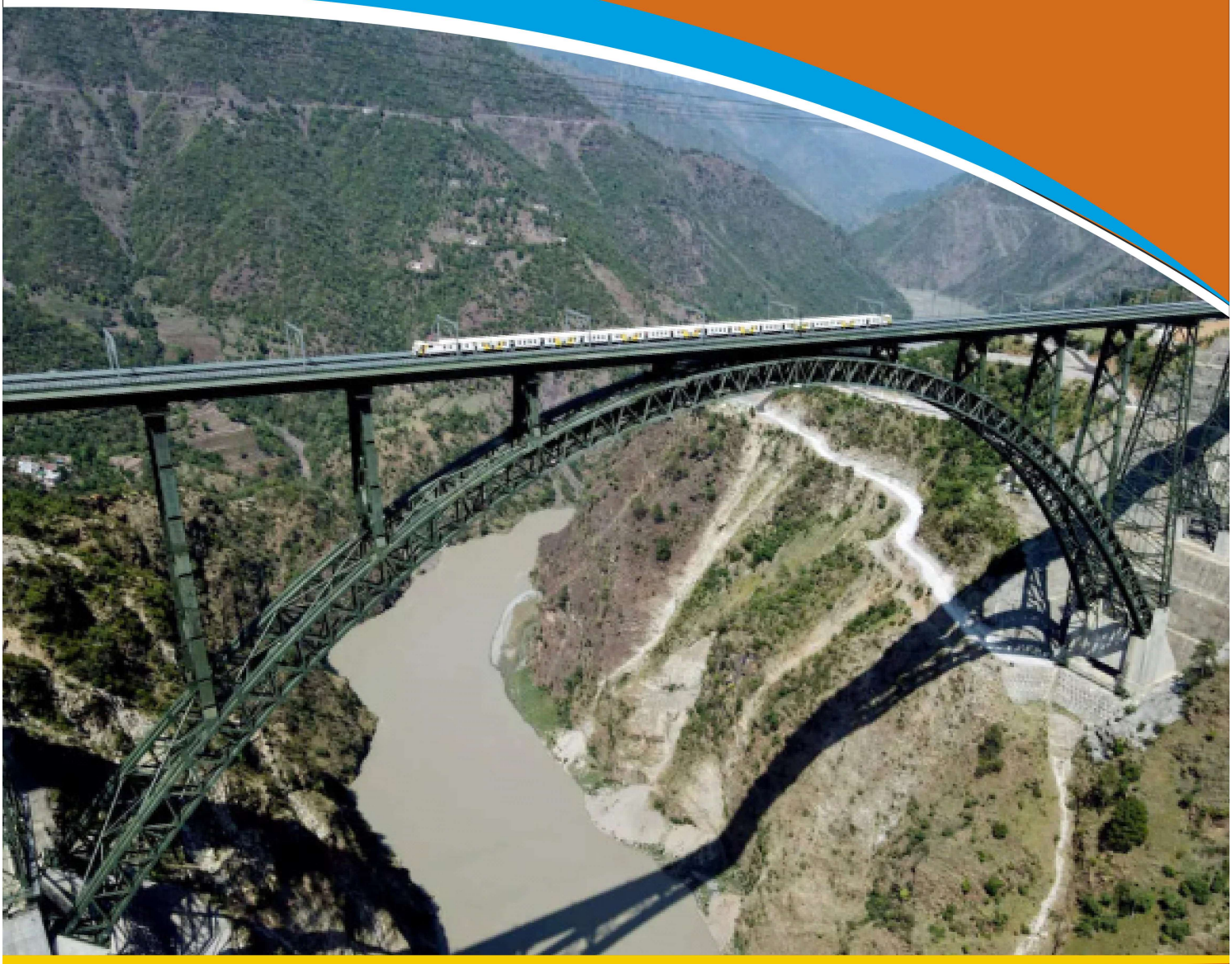
SAFETY BULLETIN

Jan- Mar
2025

Safety Department
Eastern Railways



संरक्षा पुनराश्वासन ◆ Sanraksha Punarashwasan


ER-92473

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Chief Patron's Message

मिलिन्द देउस्कर
महाप्रबंधक

Milind Deouskar
GENERAL MANAGER

सत्यमेव जयते

पूर्व रेलवे
महाप्रबंधक कार्यालय,
17, नेताजी सुभाष रोड,
कोलकाता 700001
EASTERN RAILWAY
Office of General Manager
17, Netaji Subhash Road,
Kolkata-700 001

1st May, 2025

MESSAGE

Safety in train operations and safety at worksite are critical to the efficient functioning of Railways. Our constant vigil and learning can avert unsafe situations. Train accidents can have serious repercussions on property and human life and this thought alone should motivate all of us to ensure compliance of laid down safety protocols, rules in letter and spirit.

It gives me great pleasure that Eastern Railway Safety Department is bringing out a new issue of Safety Bulletin. The safety bulletin contains valuable case studies and safety procedures to be followed during working at worksites by different departments. I am sure that this initiative would help further improving the safety standards of Eastern Railway.

(Milind Deouskar)

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Patron's Message:

राम बहादुर राय
प्रधान मुख्य संरक्षा अधिकारी
Ram Bahadur Rai
Principal Chief Safety Officer

सत्यमेव जयते

EASTERN RAILWAY
1st Floor, Fairlie Place
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Kolkata-700 001
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30th April, 2025

MESSAGE

Eastern Railways facilitates the daily transportation of a large number of passengers and essential goods. Ensuring safety is of utmost importance to protect the lives of passengers, prevent accidents, and avoid disruptions that may result in significant time and financial losses, especially in the case of goods trains.

This bulletin is issued as part of our continuous effort to emphasize critical and updated safety guidelines, fostering awareness and reinforcing a culture of safety among all employees. This also includes the drives carried out during that period and the unusuals found during the drives.

To achieve this, it is crucial to cultivate a strong sense of safety awareness among the staff and ensure they are well-informed about the latest safety protocols and instructions.

30/4/25

(Ram Bahadur Rai)
Principal Chief Safety Officer

EDITORIAL BOARD	
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	Sri Robert Marshal Lepcha Dy. Chief Safety Officer (Optg.)
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	Sri Rajesh Kumar Singh SC/Traffic
	Sri Tejnarayan Singh SC/Traffic
	Sri Sougata Santikary SC/Mechanical
	Sri Ravi Kumar SC/S&T
Clerical Assistance :	Sri Amal Krishna Biswas Chief OS/Safety
	Sri Niladri Shekhar Mondal Senior Clerk

OUTSTANDING ACHIEVEMENTS IN FIELD OF SAFETY

 **SRI Vineet Kumar** **LPG / ASN / ASN** **Dept: Electrical/OP**	On dated 24.01.2025 while working train no:- EC/SV hauled by Loco no- 27669/WAG - 7/ASN Loco Pilot Goods Sri Vineet Kumar/ASN done very good work. Loco Pilot started his train from ASN line no-4 at 09:35 hrs. While passing BCQ station section via Up M/L-2 Loco Pilot observed flashing light with blast sound near km no 216/23216/25. Then and there LP press BPEMS switch to lower Pantograph and open DJ and train stopped. On checking observed that jumper wire broken and hanging from OHE on crossover from Up M/L-2 to RCD-1&2. Pantograph of loco checked and found ok. Thus Loco Pilot save panto of his loco and save detention by sharp lookout and presence of mind.
 **Shri Nishant Kumar** **LPG/UDL/ASN** **Dept: Electrical/OP**	On dated 14.02.2025 while working train no:- EC/POCP-2 hauled by Loco no- 32412+38834/wag-9 (MU) Loco Pilot Goods Sri Nishant Kumar/ASN done very good work. Loco Pilot while working from UDL to PAW observed Gate signal of gate no- 04 on green condition but observed UKA Home Signal red. Loco Pilot applied emergency brake and stopped his train before Home Signal. Loco Pilot then informed the matter to PA/UKA. Thus an untoward incident was saved by sharp lookout and alertness of Loco Pilot.
 **Sri Suraj Kumar Sharma** **PM-B/UDL/ASN** **Dept: Traffic**	On 06.03.2025, Sri Suraj Kumar Sharma, PM-B/UDL, was performing his duty from 08:00 to 16:00 hrs at Marshaling Yard/ UDL. at about 11:30 hrs he noticed fire in dry grass near line no. 13 at Kalka End of the Yard, which was spreading rapidly towards Line No. 14 & 15. One BTPN/Ld was lying on the Line No. 15. He tried to control it with the nearby available materials, but the fire was spreading so fast, it could not be possible. Immediately Sri Sharma applied his quick sense and ran to the Cabin. He returned with a fire extinguisher hanging on the cabin and extinguished the fire by using it.
 **Sri Krishna Deo Mahato** **SM/DUMKA/ASN** **Dept: Traffic**	On 17.01.2025 while Sri Krishna Deo Mahato performing his duty at Dumka from 11:00 hrs to 21:00 hrs, he noticed some unnatural sound coming from Line no.3 where E. No. 33899/41617 BTPC Load was passing. Immediately he informed his higher authority. After checking the break van wheel skidding found on MT No 11118. Then TXR allowed the train to run in 30Kmph speed.

 **Sri Uma Sankar Jha** **SM/NPZ/ASN** **Dept: Traffic**	On 18.01.2025 while Sri Uma Sankar Jha, SM/NPZ was performing his duty at NPZ from 21:00 hrs to 07:00 hrs, during ARS he noticed that a train no. E/BCNMT/BSP DN was passing through NPZ with break binding at about 23:20 hrs. The position of wagon was middle from the Loco. Immediately he informed the Train Manager of the said train trough VHF and also informed to SM/MDP to stop and examine the train. At MDP the train was stopped and examined by C&W staff/MDP and break binding was rectified.
 **Kailash Prasad Pal** **(TM-III/RPH/HWH)** **Dept: Engg.**	Sri Kailash Prasad Pal (TM-III/RPH/HWH)was deployed to perform gate operating duty at LC/Gate no.20/C/E at OHE mast KM/No.93/28-30 from 06:00 hrs to 18:00 hrs. on date 23.01.25 . In course of his duty at about 12.50 hrs, He suddenly noticed smoke was coming out from wheel of coal loaded wagon, which was attached with Engine no. WAG-7, 28593 during passing that gate. After observation the smoke immediately informed the matter to SM/TPF and also to Sectional higher authority for further course of action. Detecting the smoke, he has saved the Rly to avoid any untoward incident.
 **Sri Jitendra Singh,** **Loco Pilot (Shunter)/HWH** **Dept: Electrical/OP**	Sri Jitendra Singh, Loco Pilot (Shunter)/HWH is diligent and sincere Loco Pilot (Shunting). He is always punctual and alert on his duty. On 11.02.2025 at 10:00 hrs. while shunting Loco No. 22242/HWH for working Train No. 13427 Up noticed that at KM-0/33/C one Cable wire is hanging on OHE wire from Bamkim setu near PF-5. He then and then reported to TLC/ HWH & matter informed TPC/HWH by TLC/HWH. Wire removed and Passenger service restored. Thus prompt action taken by Sri Jitendar Singh, LPS/HWH saved SAFE train operation and on line detention of Passenger train.
 **Sri ANARAS RAM,** **TM-II under SSE/PWAY/BMG** **Dept-Engg.**	Sri ANARAS RAM, TM-II, working as helper with Keyman on 26.01.2025 at about 7:17 Hrs. detected a rail fracture at location 5/13-5/17 LLH Stn. Limit CROSS OVER REV to UP M/L and further the truck fit given at 7:30 Hrs. He has done an exemplary work in the field of Safety by detecting Rail Fracture.
 **Sri Sanjib Mandal** **TM-IV under SSE/PWAY/** **NHT/HWH Dept-Engg.**	On date 20.04.2025, during patrolling duty, Sri Sanjib Mandal of HWP 13 was patrolling between km 130/17-19 on UP Main Line in MRR-BSBR section. During patrolling, he noticed suspicious activity and caught a person stealing loop clear board from the trackside. He immediately ensured safety of the location and informed the matter to the Station Master/MRR, JE/P.Way/MRR (Sec.) and RPF Nalhati also. Sri Sanjib Mondal performed their duty with alertness, courage, and responsibility. His presence of mind and quick action helped to prevent theft of vital railway material.

Shri Deepak Kumar
LPG/SBG/MLDT
Dept: Electrical/OP

Shri Pankaj Kumar-4
Sr.ALP/SBG MLDT
Dept: Electrical/OP

On 04.01.2025, LPG- Deepak Kumar, HQ-SBG and ALP- Pankaj Kumar IV, HQ-SBG was working in Train No- MKPR/SC, hauled by Loco No-70524/WDG-4D/SGUJ. While train was passing through MJP towards SLJ at 22:18 hrs, SLJ UP Home signal was given for them as "Yellow" along with Route Indicator for Line No- 05 for further weighment of load. When the train is about to enter in the line no 05, they had noticed that one light engine was already there in the line no - 05. They had applied Emergency brake instantly to stop the train immediately and they prevailed to stop the train prior to light Engine. They succeeded to save the train from an accident.

Shri Rajesh Kumar-II
LPP/JMP/MLDT
Dept- Electrical/OP

Sri Ravi Gupta
LPP/JMP/MLDT
Dept- Electrical/OP

On 13.03.2025 LPP-Rajesh Kumar-II/JMP and ALP-Ravi Gupta/JMP was working in train no.15733 hauled by Loco no. 37523/WAP-7/GMOE. After starting from KPTO, during approaching Gate Stop Signal (LC-52/C/E) he saw that a four wheeler vehicle was crossing from LC Gate & Gate was in opened condition even though Signal was given proceed aspect "Green" for this train. Then they had applied emergency brake and prevailed to stop the train and saved from severe train accident. They succeeded to save the train from an incident only because they had kept their eagle eyed attention on the track and signal.

Sri Ravi Kumar
SC/S&T/HQ
Dept-Safety

Sri Ravi Kumar, SC/S&T/HQ accompanied with Sr. Safety Officer in Multiple S&T Safety Audit and Safety Inspection apart from regular inspection some other important works are also carried out by him like Collection data of data logger simulation report. During Inspection of Bhagalpur and LKPR he identified Two Unauthorized trespassing of vehicle and public near by West Cabin Track at Bhagalpur and at LKPR/SDAH Some shopkeepers and bike stands have set up their shops very close to the railway track later all this encroachments are removed by the local authorities.

Sri Saikat Laha
Loco Pilot Mail/SDAH
Dept- Electrical/OP

Sri Biswajit Baidya
Sr. Assistant Loco Pilot/
SDAH
Dept- Electrical/OP

On 23.09.2024 Sri Saikat Laha, LPM/SDAH and Sri Biswajit Baidya, Sr. ALP were working Train No. 13113 UP(H/D Exp.). While the train was approaching to Non-Signaling Gate No. 92/E (near KM No. 141/27) between station DEB and PLY, they found the Gate No. 92/E in Open condition and a truck was passing through L/Crossing. Immediately both LPM & ALP applied emergency brake to stop the train. The train was stopped before the L/Crossing at 09:29 hrs. The above matter has been informed by LPM to Train Manager and TLC/SDAH. Thus, by vigilant eyes of LPM & ALP, an untoward incident was averted and many lives have been saved.

Sri Dipak Debnath
TM-III
Under SSE/PW/BNJ/SDAH
Dept-Engg

Sri Subharanjan Sarkar
TM-IV
Under SSE/PW/BNJ/SDAH
Dept-Engg

Sri Dipak Debnath, TM-III & Sri Subharanjan Sarkar, TM-IV under SSE/PW/BNJ is a very sincere, effective, experienced and loyal worker. They are punctual and very alert in his duty.
On 07.12.2024,They were booked at BNJ station limit for ERC greasing work, during their work They found that Diamond X-ing no. 56 at Km. 76/13-15 tongue rail is fractured about 09:10 Hrs.. On the same time SDAH-BNJ local was arriving at PF No.- 3/BNJ, he quickly protected the line and stopped the said train for further movement and rescued accident/derailment.

Details of unusual/accidents occurred over ER from Jan-March 25 reported to HQ

Division: HWH

Section: **BWN-RPH at KM 91/23A**

Date & Time : 18/01/2025 09:40 Hrs.

Type of Accident: Derailment

Details of Accidents:

Derailment of wagon no. ECoR/BOXNHL 22121561871, 19th from E-28451/27528 59 BOXNHL/L with MT APJG at TPF on 18.01.2025 at about 09:40 hrs.

Cause of Derailment:

Hot axle of right side bearing (R1) of leading Axle of leading trolley of the affected wagon occurred en-route due to the failure of the CTRB (grease seal). During continuous movement of the load, the hot axle symptoms, such as smoke emission, metallic noise, and screeching sound, were not noticed at different stations and LC gates. This resulted in the burst of the CTRB and its roller got dropped en-route, causing metal-to-metal contact of the axle journal with adopter and trolley side frame. Due to continuous metal rubbing, the thinning of the axle journal into a conical shape towards the wheel web occurred and ultimately the journal portion got broken from the axle and dropped en-route, leading to the derailment of the wagon.

Responsibility:

Primary:

ROH Depot Bhusawal /Central Railway & M/S National Engineering Industries Ltd (NEI/ Brenco) are Jointly Responsible for CTRB failure.

Secondary:

1. Sri Amit Kumar Mondal, Gateman, LC gate no-18/C/T of Mallarpur (MLV) who failed to detect the abnormality in the derailed wagon.
2. Sri Munna Kumar Yadav, Porter of GHLE (Gadhadharpur) who failed to detect the Hot Axle Wagon.
3. Sri Pranav Kumar, SM/ Mallarpur who failed to detect the Hot Axle Wagon.

Blameworthy:

1. Deepak Kumar Rawani, GTM/HQ-UDL who failed to detect the Derailed Wagon and Drag the load up to a distance of 2.5 Km.
2. Sri Bimal Kumar, LP(GOODS),HQ/UDL who run the train more than the specified Speed limit.

Lessons learned from the incident:

1. The current system of exchanging the "Alright" signal by the Station Master (SM) and Porter at stations where lines are occupied by Stable/Passing Trains is not effective. The issues identified include:
   a) Obstruction due to preoccupation of trains between the passing train and the cabin, or porters standing on the opposite side of the cabin.
   b) The presence of multiple trains passing simultaneously on several lines.
   c) Porters being engaged in other tasks.
   d) The Station Master being preoccupied with various duties while exchanging the "Alright" signal.
   e) Porter unable to check rolling of passing train due to high level platform
2. Whenever trains are controlled at a station due to scheduled stoppage or are placed in loop lines to allow another train to pass, the SM and porters are not paying adequate attention to the rolling examination of these controlled trains, this needs to be implemented that the Controlled trains to be also examined in slow speed.
3. Based on the above observations, the concept of exchanging/exhibiting "alright" signals at block stations needs to be reviewed.
4. OMRS are not designed to check for hot axle cases; modifications are required.
5. In OMRS, only one side has a camera provision to capture wagon photos of passing trains. Both sides should have camera provisions.
6. HABD needs to be commissioned at a distance range of 50 km.
7. Station staff, gatemen, and porter staff need to be sensitized to hot axle cases.
9. Ambush inspection to be conducted in regular interval to check alertness of train passing staff (SM, porter &LC Gateman), dummy Hot Axle indicator & missing tail lamp.

SAFETY SUMMARY

Accident Statistics for the year of 2023-24 & 2024-25

Name of the Division	Consequential (RB)		Indicative		Others / Unusual (Rly)		Yard (Rly)	
Year	2023 - 24	2024-25	2023 - 24	2024-25	2023 - 24	2024-25	2023 - 24	2024-25
HWH	2	00	5	04	-	01	-	04
SDAH	1	00	-	00	-	01	-	00
ASN	-	00	-	01	-	06	-	01
MLDT	1	00	-	02	-	01	1	00
Total	**4**	**00**	**5**	**07**	**0**	**09**	**1**	**05**

SAFETY SEMINAR HELD IN EASTERN RAILWAY

From January 2025 to March 2025, 134 Safety seminars have been conducted at various locations of Eastern Railway where in 3952 field staff, Sr. Supervisors and Officers of all disciplines participated.
Details are given below:

Month	NO. OF SEMINAR CONDUCTED	Staff Counseled
January / 25	52	1210
February / 25	41	1565
March / 25	41	1177
TOTAL	**134**	**3952**

Details of unusual/accidents occurred over ER from Jan-March 25 reported to HQ

SAFETY DRIVE

Railway Board	
1	Week long Safety Drive for the month of January from 23.01.2025 to 29.01.2025
2	15 days Safety Drive to check drunkenness on duty from 27.01.25 to 10.02.25.
3	15 day Special Safety Drive on SPAD covering all LPs, ALPs, Track Machine operators and Tower wagon operators at all locations from 07.02.25 to 21.02.2025.
4	15 day Special Safety Drive on Coach maintenance covering all coaching stock from 10.02.25 to 24.02.2025.
5	15 day Special Safety Drive on Shunting Precautions covering all shunting locations from 13.02.25 to 27.02.2025.
6	Week long Safety Drive from 18.02.2025 to 24.02.2025.
7	Extension of 15 day Safety Drive on SPAD covering all LPs, ALPs, Track Machine operators and Tower wagon operators at all locations from 22.02.25 to 08.03.2025.
8.	30 day Safety Drive on inspection of point & crossing covering all point and crossing from 05.03.25 to 04.04.2025
9.	Week long Special Safety Drive on securing of stabled rolling stock from 12.03.25 to 18.03.25.
10.	Further Extension of 15 day Safety Drive on SPAD covering all LPs, ALPs, Track Machine operators and Tower wagon operators at all locations from 09.03.25 to 23.03.2025.

Zonal Railway	
1	15 days Safety Drive to check LC Gates from 26.03.2025 to 09.04.2025

Summery of Railway Board Safety Drive on on Coach maintenance covering all coaching stock (Launched from 10.02.2025 to 24.02.2025)

Sl. No.	Division	Depot/Workshop	Holding	No. of coaches checked in Drive	No. of Coaches remaining to be checked	Major deficiencies Noticed
1	SDAH	SDAH(Coaching)	1346	1346	Nil	As per Annexure -1
		NKG(EMU)	281	281	Nil	
		BT(EMU)	420	420	Nil	
		SPR(EMU)	376	376	Nil	
		RHA(EMU+MEMU)	288	288	Nil	
2	HWH	HWH(Coaching)	1949	1949	Nil	
		HWH(EMU)	439	439	Nil	
		BDC(EMU)	298	298	Nil	
3	ASN	ASN(Coaching)	214	214	Nil	
		ASN(MEMU SHED)	399	399	Nil	
4	MLDT	MLDT(Coaching)	645	645	Nil	
		MLDT(DEMU)	60	60	Nil	
5		LLH workshop	92	92	Nil	
6		KPA Workshop (Coaching +EMU/ MEMU/DEMU)	132 (Coaching- 42 EMU/ MEMU - 90)	132 42/90	Nil	
		Total	6939	6939	Nil	25

Sr. No	DIVI-SION	DE-POT	DATE	COACH NO.	DEFICIENCIES
1	ASN	ASN	11-02-2025	235211	R6 & R8 primary damper leakage, new fitted
2	SDAH	NKG	11-02-2025	248535	TC 248535 axle-3 outer brake beam badly bent by external hit. Same changed by new one. TC 248568 axle 4 brake block is shifted towards flange that is misalignment of brake rigging. same attended by replacing brake beam and washer provided for adjustment of brake head position
3	SDAH	SPR	11-02-2025	502035	MC 502035, BG 1 centre pivot welding cracked. same changed by good one
4	SDAH	RHA	12-02-2025	238725	TC- 238725 Wheel No. 5 Outer brake block not fitted properly on wheel thread, Brake shoe key changed, and re-fitted made intact.
5	HWH	HWH	12-02-2025	4006D	T/C 4006D Pos L1 Air leakage from Air Suspension hose near crimping due to rubber surface damaged. Air suspension hose changed
6	HWH	BDC	12-02-2025	132036	M/C-132036 M/C 132080 Main reservoir drain cock handle broken. Drain cock changed by good one.
7	HWH	SYAE	02-13-25	197206	NO. 4,5 BRAKE CALIPER BRAKE PAD CHANGED.
8	MLDT	JMP	13.02.2025	112732	HWH END horizontal lever cutter rusted-changed
9	ASN	ASN	13-02-2025	221866	02 Nos. primary vertical damper leakage, new fitted
10	SDAH	SPR	13-02-2025	15209E	C-15209E, EP unit make ESK, leakage from stabilizing valve during brake application. Stabilizing valve changed.
11	SDAH	RHA	13-02-2025	199177	MC-199177, Wheel No. 2 tread wear 4.48 mm & Wheel No. 3 tread wear 4.47 mm, Wheel turning memo raised TDC:- 14-02-2025.
12	HWH	HWH	13-02-2025	3180	MC 3180 CT return earthing cable opened out from fixation. Fitted properly.
13	HWH	BDC	13-02-2025	238721	M/C 238721 Parking brake Position 01 found in uncouple condition. Mechanical coupling done of same Parking Brake.
14	SDAH	NKG	14-02-2025	112350	In Coach no. 112350 Leakage in shock absorber (OEM:IAI) was observed from bogie 2 left side and replaced with a good one (OEM: Gabriel)
15	SDAH	SPR	14-02-2025	132046	MC-132046, EP unit make ESK, leakage from EP safety valve during brake application. Inside pressure limiting valve changed

16	MLDT	MLDT	15-02-2030	236049	01 No Primary Damper Changed
17	SDAH	NKG	15-02-2025	78021	oil leakage was observed in LS1 vertical damper in TC 078021 and replaced with a good one
18	SDAH	SPR	15-02-2025	102974	TC-102974 BG-II, TC- 122369 BG-I, Leakage from flexible hose. Same hose changed.
19	SDAH	RHA	17-02-2025	112364	C-112364 Even wear of Wheel no. 8 found high, require wheel turning. Same done on 18-02-2025.
20	ASN	ASN	19-02-2025	101208	Found 13 no dashpot broken and advised placed at sick line for dashpot repair. –- Dashpot repaired
21	DNR	JAJ	19.02.25	188531	All four lower planks of both the bogies are highly corroded.
22	SDAH	SPR	20-02-2025	832037	TC- 832037, RS-II 'B' clearance high (51). Same attended.
23	ASN	ASN	21.02.25	213471	K.END S/S FIBA FP ISOLATING HANDLE BRO-KEN- NEW FITTED
24	HWH	TKPR	24-02-2025	194387	No. 2 & No. .7 BOTH SIDE BK PAD CHANGED
25	SDAH	RHA	24-02-2025	13001	M/C-13001E wheel no -3 inner brake block Out from wheel thread Same removed & New Block fitted Brake shoes key also changed due to low tension

Summery of Railway Board Safety Drive on on Prevention of SPAD (Launched from 07.02.2025 to 30.03.2025)

TOTAL NUMBERS OF LP, ALP, TWO & TMO AVAILABLE IN EASTERN RAILWAY				
	LP	**ALP**	**TWO**	**TMO**
SDAH	1021	359	41	41
HWH	1254	944	54	87
ASN	1134	1010	22	84
MLDT	550	665	14	47
ER	**3959**	**2978**	**131**	**259**

EASTERN RAILWAY POSITION

CATEGORY	DIVISION	FOOT-PLATE	BETWEEN SIGN ON & TAKING OVER TRAIN	OF-FLINE COUN-SELLING	ROAD LEARN-ING	CREW COUN-SELED ON SIGHT-ING OF APPRO-PRIATE SIGNAL
LP	SDAH	993	993	1131	993	993
	HWH	1231	1231	1240	1231	1231
	ASN	1126	1126	1155	1126	1126
	MLDT	545	545	738	545	545
	ER	**3895**	**3895**	**4264**	**3895**	**3895**
ALP	SDAH	339	339	403	339	339
	HWH	927	927	950	927	927
	ASN	997	997	1005	997	997
	MLDT	654	654	661	654	654
	ER	**2917**	**2917**	**3019**	**2917**	**2917**
TOWER WAGON DRIVER	SDAH	41	41	65	41	41
	HWH	54	54	65	54	54
	ASN	22	22	43	22	22
	MLDT	14	14	18	14	14
	ER	**131**	**131**	**191**	**131**	**131**

TRACK MACHINE OPERATOR	SDAH	41	41	43	41	41
	HWH	87	87	89	87	87
	ASN	84	84	86	84	84
	MLDT	47	47	49	47	47
	ER	**259**	**259**	**267**	**259**	**259**

Major Deficiency noted during SPAD drive

- At TITAGARH starter signal became fluctuated twice from double yellow to green.
- FSD giving wrong location of distant signal at KALYANI.
- 2 CMS Kiosks at BARASAT frequently link failure observed

- FSD was OFF due to battery discharge.
- Partial visibility at PURBSTHATLI DN main line starter signal S-4 obstructed by Platform shed.
- DUMURDAHA dismantle but FSD are call out the station remapping required for FSD.
- Automatic signal 40 between CHANDANNAGAR and BHADRESHWAR obstructed by tree branches.
- UP slow line SEORAPHULI starter signal s-41 visibility distance is less than 150 mtr.

- GODDA lobby signing On and signing OFF register not filled properly.
- BA token No. During breath analyser test not mentioned in the register.
- 31 Numbers Fog safe Device found defective.
- In CMS link failure register signal staff not acknowledged the link failure.
- No signature of witness /examiner in manual BA slip in JAMALPUR lobby.
- UP BLN intermediate starer visibility issue when there is goods train on the left track.
- A manual sign-on was found with remarks stating "link failure," but upon cross-checking the link failure register, no such issue was found.
- Only one BA Machine was available in addition to CMS Machine having Sr.No. RDSO2542 with Mfg in Mar'22. But there was no register maintained for day-to-day testing of this machine.

Eastern Railway.
Safety Circular No. ERHQ/18/2025.

TG.257/2/Safety Circular/01/25 Kolkata, Dated: 06.01 2025

Sr. Divisional Operations Manager,
Eastern Railway,
HWH, SDAH, ASN, MLDT.

Sub.: **Safety Circular for the month Jan. 2025.**

3.62. Placing of detonators in case of obstructions: -

Whenever in consequence of an obstruction of a line, it Is necessary for a railway servant to stop approaching trains, he shall proceed, plainly showing his Stop hand signal, to a point 400 metres from the obstruction and place on the line one detonator and then proceed to a point 800 metres from the obstruction and place on the line three detonators, about 10 metres apart, at such place.

Provided that on the broad gauge the first detonator shall be placed at 600 metres and three detonators at 1200 metres from the obstruction about 10 metres apart from each other.

If the said railway servant is recalled before the obstruction is removed, he shall leave down three detonators and, on his way back, pick up the intermediate detonator.

3.63. Replacement of detonators on the line:-

Every railway servant placing detonators on the line shall see that they are, when necessary, replaced immediately after a train has passed over them.

16.06 Defects at level crossings —

If any gate or the fastenings thereof, or any fixed signal pertaining to the gate becomes out of order, the Gateman shall –

[a] take action to close the gates, if possible, against road traffic.

[b] after closing the gates, hand signal the train movements past the level crossing.

[c] if the gates cannot be so closed put the banner flag or level crossing flag in such manner as to warn the approaching train to stop short of the gate and thereafter hand signal the train.

[d] report the fact to his superior or the nearest Gang-mate.

16.07 Obstructions at level crossings —

Every Gateman, on noticing any obstruction on the line, shall at once remove it or, if unable to do so, shall-

(a) Take action to ensure that the fixed signals, if any, protecting the gate are kept at on

(b) Show Stop hand signal and do his best to stop approaching trains, and

(c) Shall protect the obstruction as per Rule 3.62.

SR.16.07 — In case of an obstruction at the level crossing, the Gateman should maintain the Gate Signals, if any, in the 'ON' position and if unable to remove it, protect the line as follows —

On double line, if both lines are obstructed during day, he shall plant a red flag at a distance of 5 metres on the line on which a train is expected to arrive first. Then attach another red flag to the staff and fix it on the other line at the site of obstruction He shall then pick up the first danger signal and showing it proceed on that line to a point 600 metres on Broad Gauge and 400 metres on the Narrow Gauge from the level crossing and place one detonator on the line after which proceed further to a distance of 1200 metres on Broad Gauge and 800 metres on Narrow Gauge from the level crossing and place three detonators on the line about 10 metres apart Having thus protected the line on which a train is expected to approach first, he should return to the level crossing, picking up the intermediate detonator on his way back, remove from the other line the staff with the red flag and plant it on the line towards the direction protected with detonators. He shall then proceed on the other line showing the danger signal, place detonators similarly and return to the site of obstruction to warn the Loco Pilot of an approaching train.
On single line, if the line is obstructed during day, he shall plant a red flag towards the direction from which a train is expected to arrive first, then attach another red flag to the staff and fix it towards the opposite direction at the site of obstruction. He shall then pick up the first danger signal and as in sub-paragraph[i], protect the line in the direction from which a train is expected to approach first return to the site of obstruction, re-fix the staff to show the danger signal on the side the line is protected and proceed with all haste in the other direction to protect the line. Having protected the line on both sides, he should station himself at the place of obstruction to warn the Loco Pilot of an approaching train.
At night the Gateman should light the two hand signal lamps and take action to exhibit red light and protect the line/lines as in sub-paragraphs [i] and [ii].
Immediate steps to protect the line/lines, as detailed above, must be taken in case control of the level crossing gate is forcibly taken over by outsiders such as — snatching the gate key etc.
Suitable instructions to this effect must be embodied in the SWR / GWR.

In view of above, divisions are advised that above G&SR para given in the G&SR books of Eastern Railway should be followed strictly.

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(A.K. Biswas)
Secy to PCOM

Safety Circular No. : ERHQ/19/2025.

TG.257/2/Safety Circular/02/25 Kolkata; Dated : 07.02.2025.

Sr. Divisional Operations Manager,
Eastern Railway,
HWH, SDAH, ASN, MLDT.

Sub.: **Safety Circular for the month Feb. 2025.**

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4.42. Exchange of signals between Loco Pilot, Guard, and station staff -

(1) The Loco Pilot and the Guard of a train shall exchange signals with each other, at such times and in such manner as may be prescribed by Special Instructions.

(2) The Loco Pilot and the Guard of a train shall, while running through a station, look out for and, except under special instructions, acknowledge the 'all-right' signals which the Station Master and such other staff at the station as may be specified by special instructions shall give if the train is proceeding in a safe and proper manner. If the train is not proceeding in a safe and proper manner, the Station Master or the other staff shall exhibit a Stop hand signal, on receipt of which the Guard and the Loco Pilot shall take immediate steps to stop the train.

SR. 4.42. [i] Exchange of signals between Loco Pilot and Guard –

[a] For ensuring that all is correct for a train to proceed and also that the Guard is in his brake van, 'all right' signal shall always be exchanged between the Guard and the Loco Pilot in circumstances as detailed below –

[i] When a train starts after stopping at a station.

[ii] When a train starts after stopping outside station limits.

[iii] When a Goods train, or a train not fitted with vacuum brake throughout runs through a station.

In case [i] and [iii] the 'all right' signals shall be exchanged as soon as the rear brake van has cleared the station platform and in case of [ii] as soon as the train has started.

[b] 'all right' signal referred to above, is a manual signal made by the Guard from the brake van by waving green hand flag by day and green hand light by night or during thick or foggy weather impairing visibility which shall be exchanged by the Loco Pilot by repeating it. If the Loco Pilot does not get the 'all right' signal from the Guard, he shall sound his engine whistle and if there is no response even then, he shall stop the train and ascertain the cause.

[c] 'all right' signals shall always be exchanged from the left hand side of the engine and brake van on the straight road and on a curve from that side where from they can best be seen.

[d] In the case of EMU/Push Pull/DMU and Rajdhani Express/Satabdi Express trains and other trains worked with SLRs having Air Conditioned Guard Compartment, the exchange of 'All Right Signals' between the Loco Pilot and the Guard shall be by ringing bells in their cabs, as per code laid down is SR 4.51 or by walkie-talkie or if these means of communication are defective, 'All Right Signals' will be exchanged between Loco Pilot and Guard by waving green hand flag by day and green hand light by night/thick, foggy or tempestuous weather impairing visibility.

[ii] Exchange of signals by Diesel/Electric engine hauled trains –

[a] Loco Pilot and Guard of all trains irrespective of traction shall exchange signals with the station staff or cabins whenever their trains run through station as an assurance of having noticed the signal indicating that all is right with his train. In addition, the Loco Pilots of such trains shall also whistle while running through station. they should observe Stop hand signal displayed by station staff under SR 4.42[iii][a], they shall take immediate steps to stop the train.

[b] Assistant Loco Pilot shall remain alert since his assistance may be required by the Loco Pilot in exchanging the 'all right' signal.

[c] The Diesel/Electric Loco Pilot's Assistant should not be in engine room but should remain in the engine cab when the engine is approaching a station or a site where restriction is in force, since his assistance would be required by the Loco Pilot in exchanging the 'all right' signal.

[d] The Guard of a train, whether stopping or non-stopping, shall also look back after his train has passed a station including a 'Halt' and shall satisfy himself that no danger signal or any other indication is exhibited by any of the station staff.

While running through a station, the Guard must appear at the door or on the verandah of the brake van and watch for such signals.

[e] The Guards of Rajdhani Express and Satabdi Express and other trains worked with SLRs having air-conditioned Guard compartment are not required to acknowledge hand signals given by the station staff but a sharp look out must be kept by them for enabling them to stop the train, should a danger signal be exhibited by the station staff.

Note – In case the Loco Pilot and the Guard do not receive the 'all right' signal at a station while running through, they shall exercise extra caution to ensure that 'all is right' for the train to proceed. The Guard and the Loco Pilot shall report such failure of the station staff to display the signal in the Joint Train Journal and also at the nearest station/cabin where the train is next stopped.

[iii] [a] Exchange of signals by station staff with train staff when trains run through –

In the case of train running through a station, a 'green' hand signal shall be exhibited to the train staff by waving it from the signal cabin and from the station platform [except station exempted by the Divisional Railway Manager]. If the view of the passing train is obstructed by another train or vehicle or by any other obstruction, the 'green' hand signal shall be waved from such position from where it can clearly be seen by the Loco Pilot and Guard of the train concerned, who shall be on the look out for such signals. For ensuring that the train is running safely, the train passing staff exhibiting such 'green' hand signal shall remain vigilant and watch the condition of the vehicles passing and if anything wrong endangering the safety of the train is noticed, he shall promptly display 'red' hand 'Danger' signal to attract the attention of the Loco Pilot and Guard to enable them to stop the train.

Where cabin/cabins and station building are on the same side or where no cabins are situated and at all panel interlocked stations, the Station Master shall depute one of his competent staff on duty with hand signals to the other side of the passing train to observe the same and assist the Station Master in doing his duty as laid down in GR 4.42 [2].

Wherever Gate lodge of a Level Crossing Gate is situated on opposite side, nearest to SM/Panels office, in the station section, if authorized as per SWR, Gateman shall exchange 'All Right Signal' with the Guard and Crew of the train running through a station. In such case, the Station Master shall not depute other competent railway servant to exchange 'All Right Signal' from off side with the Guard and crew of the train running through a station.

[b] Keeping a flag or a hand signal lamp showing 'green' on the window seat of the cabin is not adequate – the Cabinmaster/Cabinman must lean out of the window holding the flag or lamp in his hand when exchanging signals.

[c] Cabins in large yards, where shunting is performed by pilots, shall not exhibit any flag or light to trains running through when there is nothing wrong with the train., however, they should find anything wrong with the train; they must display a danger signal to Loco Pilot and the Guard of the train.

[d] In the event of Guard/Loco Pilot of a train running through a station [Except Guards of Rajdhani Express, Shatabdi Express trains and other trains worked with SLRs having Air conditioned Guard compartment] failing to exchange 'all right' signal with the station staff or cabins, the failure shall be reported at once to the Controller on duty who shall have the train stopped at the next station and have a written warning handed over to the Guard/ Loco Pilot by the Station Master. This irregularity shall be mentioned in the Station Diary by the Station Master of both stations and reported to the concerned Officers by the Controller. In case Control is not working, the station staff shall contact the next station ahead directly and arrange to stop the train and take similar action as indicated above.

[iv] Exchange of signals between Guards in between stations, except suburban section

Guards of running trains will be responsible to watch any train passing on the adjacent line and to attract the attention of the Guard or the Loco Pilot of the latter train, by exhibiting danger hand signal, should any condition be noticed on that train which may endanger its safety. In case of trains running in opposite direction, as on double line or twin single line etc., the Guards of the two trains [except in suburban section] will exchange green hand signals, after having examine each other's train. In case anything unusual is noticed, a danger hand signal shall be exhibited to attract the attention of the Guard and the Loco Pilot of the other train.

In view of above, divisions are advised that above G&SR para given in the G&SR books of Eastern Railway should be followed strictly.

Copy to:

Secy. to PCOM: for kind information to PCOM.

(S. C. Jain)
Dy. Chief Operations Manager/Rules

Eastern Railway

Office of PCOM
17 N. S. Road, Fairlie Place
Kolkata-700001

SAFETY CIRCULAR NO. ERHQ/20/2025

TG.257/2/Safety Circular/03/25 Dated: 12.03.2025

Sr. Divisional Operations Manager,
Eastern Railway,
HWH, SDAH, ASN, MLDT.

Sub.: **Safety Circular for the month March 2025**.

3.77. Defective or damaged points etc :-

(1) Whenever points, crossings or Guard rails are defective or damaged, the railway servant in charge of operation of points shall protect them and immediately arrange to report the circumstances to the Station Master.

(2) The Station Master, on becoming aware of such defective or damaged points etc., shall -

(a) Immediately arrange to have the defect rectified by the railway servant responsible for their maintenance.

(b) Arrange to ensure the safe passage of trains, and

(c) Keep the signal or signals concerned at 'ON' until the defect is rectified.

SR.3.77:

[a] Whenever points, crossings or Guard rails are damaged the Station Master shall arrange the necessary subsidiary signals to temporarily protect working, and report all damages to the JE/SSE (P.Way), and in the case of interlocked points to the JE/SSE(Signal) and also to the Divisional Railway Manager, and latter should be advised again when the required repairs have been effected.

[b] If interlocked points go out of order or become defective in any way, no train or vehicle is to be allowed to pass over them, no signal is to be taken off for a train to run over them and no train is to be permitted to approach such points, within a distance sufficient to ensure safety until they have been inspected and -

[i] The defect has been rectified, or

[ii] The points have been secured by a clamp or bolt and cotter and pad lacked In the case of [ii] speed shall be restricted to 15 Kilometers an hour over the defective points and Caution Orders issued in accordance with **Appendix — 'A'** until the defect has been remedied by the interlocking staff.

[iii] AS soon as repairs are completed, all concerned shall be notified by wire, that the repairs have been carried out and that the station is again being worked as an interlocked station, also that the restriction imposed need no longer be observed.

[c] In the event of any points being burst through, the Loco Pilot shall immediately bring his train to a stand, and shall not move until ordered to do so by the Station Master. The Station Master shall, if necessary, order the train to move in order to clear the points and shall not permit any movement to be made in a facing direction until the points have been correctly set and secured.

Divisions are advised to follow the G & SR Para strictly.

Dy. Chief Operations Manager/Rules

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Eastern Railway

Joint Procedure Order for Movement of Track Machine and Route Learning.

1. Immense growths in traffic demand and heavy track structures have been necessitated for mechanization of track maintenance and track renewal works. Working of Track Machine involves in dally movement from Its base station to worksite and back. Track Machines are also shifted from base station to depots for major repair, IOH, POH etc. These Involve in Intra-divisional, Inter-divisional and Inter-Zonal movement of Track Machines.

2. The Track Machine operators are essentially SSE/JE(TM) deputed mainly for their technical skill in operating the machine during block working. As operation of machines is a very complicated and it needs continuous and undivided attention by the operator as any Inadvertence may result in either bad track quality or accident at the worksite. The operators observe daily work schedule of 8-hrs which's with daily inspection & maintenance of machine and remain engrossed with proper functioning of machine and its troubleshooting as and when a problem arises. **Also, the medical category of the SSE/JE(TM) is A-3 whereas the medical category of loco pilots is A-1.**

3. In Eastern Railway, even though there is distribution of Track Machines over the divisions, still to cater to the requirement of the specific divisions, machines are shifted from one division to the other and to Construction from time to time. Even in one division, machines work over a *number of routes. Due to such diversity of working jurisdiction of Track Machines, it does not become feasible for the machine operators to become conversant with the signals of all the routes. This problem can be overcome by deploying a competent railway person belonging to P.Way or an LI/ LP/ALP/DTI, who is conversant with the signals of a particular route to accompany the Tack Machines for sighting of signals.

   Note: The said JPO shall not infringe or override any provisions of existing codes/Manuals and G&SR.

4. **Classes of Track Machines:** For the purpose of movement and working, track machines are classified into two categories:

4.1 **Track Machines Hauled by Locomotive :** This class of Track Machines, although are self- propelled during their working, these may be hauled by locomotives/Couple with the other machine for their placement at the work site/work station. Rates for movement of material trains will apply to these categories of machines. The following machines fall in this category-

Type of Track Machines	Name of Track Machines	Movement of Track Machines Hauled by Locomotive
Track Laying Machines	TRT	The TRT consist Is hauled by dedicated loco under charge of LP, ALP and Train Manager for movement.
	PORS/SQRS	For movement between stations, PQRS/SQRS and T-28 machines are loaded on wagons and the machine consist Is hauled by a dedicated loco under charge of LP/ALP/ Train Manager who works from brake-van.
	T-28	
	MDU	Machine Is hauled by dedicated loco under charge of LP & ALP for movement.

4.2 Self-propelled Track Machines -

This class of Track Machines are self-propelled during their working as well as shifting from one location to other. However, depending upon situations they may be hauled by locomotives (worked by competent LP & ALP) on rare occasions. SSE/ JE(TM) is competent to operate the machines and he should possess adequate knowledge which is imparted during Initial and scheduled refresher courses. The competent authority shall duly certify his competence as per pro-forma given In Annexure 7.3 of IRTMM 2019. Following Track Machines fall in this class-

Type of Track Machines	Details of Track Machine	Movement of Self-propelled Track Machines
Track Maintenance Machines	3x, HOT(3X), CSM, BCM, Duomatic, Unimat, MFI, SBCM, BRM, DGS, UTV,RBMV,RGM etc.	Track Maintenance Machines are single unit self-propelled machines and are used for RBMV, RGM, TV, purpose of track maintenance. SSE/JE(TM) shall be competent to operate the machine 'and he should possess valid competency certificate as per proforma given in Para 703(5) of IRTMM 2019. These machines can run as single unit as a train or in convoy during work or coupled with each other during base shifting according to the extant guidelines. The knowledge of the same should be the responsibility of the SSE/JE(TM).

Note: These Track Machines, when attached with the train/locomotive, will also fall in the first category mentioned at 4.1 above.

4.3 Inspection of track machines should be carried out by the Engineering Department officials as per the laid down schedule. Inspection registers should be maintained in the track machines for this purpose.

5.0 Route Learning of Machine Operators:

5.1 In terms with Para 703(4) of IRTMM 2019, It will be the responsibility of the SSE/JE(TM) working in the machine to acquaint himself with the system of working, location of signals and other local conditions affecting running of trains on a section(s) of the railway over which he has to work and If he is not so acquainted with any portion of the railway over which he is to wok, obtain the services of qualified railway servant who is conversant with it to assist him by 'requesting the office of Dy,CE/TM/Line or Sr.DEN/ Co-ordination of the division,

5.2 In terms with Para 103(1)()(v) the IRTMM 2019, It will be under the Duties of Executive(XEN)/Assistant Executive Engineer (AXEN)/TM/Line to ensure that all the SSE/JES and other staff working under him possess necessary medical, competency and other certificates, receive route learning and proper training in maintenance practices, safety and protection rules.

5.3 Route learning of SSE/JE(TM) shall be coordinated by AXEN/TM/Line and Sr.DEN/CO- ordination of the division concerned who shall be responsible for arranging this Route Learning for SSE/JE(TM) working machines on the division. The procedure for route learning of SSE/JE(TM) should be as per extant rules.

5.4 For each division, there should be one nominated Li who will periodically counsel and test the knowledge of this 55E/JE(TM). LI will also Issue Competency Certificates initially as par as route learning is concerned. The responsibility for monitoring the validity of the route learning will lie with the SSE/JE/TM/DI (Depot-in-Charge and also in-charge of track machines fleet of the division).

5.5 If any SSE/JE(TM) after having Initial route learning of the section, has not operated on a section for a period as specified In G&SR, he could be given refresher route learning trips as specified in the G&SR.

5.6 In terms with GR 3.78, If an SSE/JE(TM) is not so acquainted with any portion of the railway over which he has to work, he will obtain the services of a qualified railway servant who is conversant with it to assist him. The qualified railway servant can be the sectional SSE/JE (P. Way) or a competent LI/LP/ALP/DTI or any other authorized railway servant as per extant Rules.

5.7 Each SSE/JE(TM) should have a record of validity of LR of each section. This should be followed while booking a track. machine-operator to work with a machine in a particular section otherwise he will be assisted a qualified railway servant as mentioned in Para 5.6 above.

5.8 The SSE/TM/DI shall, before booking any track machine operator to independently work with any track machine without any LR, satisfied

himself that the concerned staffs is acquainted with the section over which he is required to work. Otherwise, the movement will be done under supervision of LI/CLI or SSE/TM.

6.0 Working in 25KV AC Territory

Certificate (25 KV AC traction) for working In electrified section as per ACTM Para 31200 & 31201 shall also be included In Transportation (Safe Working) training certificate. This training can be Incorporated with Transportation (Safe Working) training at ZRTI/Bhuli.

7.0 Procedure for movement of Track Machines in various situations

Following procedure for movement of Track Machines is to be followed catering to different conditions especially during movement of track machine/machines, the set route should not be altered until confirmation regarding clearance of the portions of the track has been received by on duty station master through either In available means of communication or in written memo from concerned SSE/JE(TM), SSE/JE(TM) should also be responsible to convey the same.

7.1 **Shunting Movement as a train or in convoy as per SWR:**

For shunting movement of Track Machines, the procedure as laid down in SWR of concerned station should be followed.

7.1.1 G&SR Para 5.13 for Control of shunting, reproduced at Annexure A-1

7.1.2 G&SR Para 5.14 for Responsibility of shunting, the relevant part of which is reproduced at Annexure A-2.

7.1.3 **Securing of On Track Machine/Machines when stabled:**

i) On Track Machine/machines shall, as far as possible, be kept stabled at a point nearest to the site of work so that unnecessary and Idle running of machine/machines is/are avoided.

ii) On Track Machine/machines shall not be stabled on a running line at a station, except in unavoidable circumstances.

iii) When On Track Machine/machines is/are stabled at a station, the same shall be protected in the following manner and the Station Master shall ensure that.

a) The machine/machines has/have been properly secured by applying the Mechanical Hand brake / Parking brake by the Operator and by applying chain and are not fouling any points/crossings.

b) All necessary points have been set against the line on which the machine/machines is/are stabled and such points have been secured with clamp and padlock.

c) Keys of such padlocks are kept in his personal custody of SM until the machine/machines is/are ready to leave the siding.

d) In case the machine/machines, under unavoidable circumstances, is/are stabled on a running line, precaution as envisaged in G&SR 5:19, have been taken.

iv) Jr./Sr. Section (P. Way) In-charge shall not relinquish the charge until he is satisfied himself the machine/machines has/have been protected as prescribed above. (Authority; SR 4.65 (5))

7.1.4 G&SR Para 5.10 for Reception of train on a non-signalled line, reproduced at Annexure A-5. 7.1.5 G&SR Para 5,11 for Departure of a train on a non-signalled line, reproduced at Annexure A-5.

7.2 Movement for block work as a train or in convoy

7.2.1 G& SR 4.65 and Para 705 & 707(4) of IRTMM 2019 have described in detall the procedure of working and movement of heavy duty Track Machines,

The Station Master shall Issue Form T/806 which shall be signed by the JE/ SSE (TM) and the TMO/Loco Pilot for shunting of all trains from a running line to a siding, from one running line to another or on the same line if such shunting fouls the facing and trailing points at either ends, unless such, movements can be governed by the fixed signals. When, however, one fixed signal governs, movements from more than one line or siding, Form T/806 must be issued.

As per Para 707(4) of IRTMM 2019, "The minimum distance between the machines when working in a group shall be 50 m to avoid collision between machines and danger to life of machine and P. Way staff working with machine. While the track machines are moving in the block section in group, it will be the responsibility of SSE/JE/TM of these machines to maintain a minimum safe distance of 120 m and above up to 200 m from each other. The speed of movement of track machines shall be the lowest of the permissible speed among all track machines. The leading track machine shall observe this speed. If any of the machines is required to slowdown or stop due to some reason, SSE/JE/TM driving the machine should ensure that red hand signal is displayed by waving vigorously. Where visibility is poor such as on curves and in cuttings, appropriate speeds and safe distance should be maintained to ensure safety. While approaching the level crossings, SSE/JE/TM driving the track machines shall keep a vigil for any obstruction and whistle freely till the machine passes the level crossing".

During day or night hours, when the view is clear and adequate lighting arrangement have been made, up to 5 numbers of On Track Machines may be allowed under one authority to proceed for working within the block section as per SR 4.65; 8(iii).

7.2.2 Sighting of the signals, while going for block work, will be the responsibility of the accompanying in-charge JE/SSE (P Way) who will be travelling in the leading track machine of the group.

7.2.3 IRTMM 2019, Para 706 3(b) & 4(b) and G-& SR Para 4.65,4 (II) for work and proceed by the wrong line, On completion of the work-machine/machines shall proceed to the station at the other end accompanied by the eJ/ Section/Sr Section (P. Way) in-charge in the rearmost machine and on

approaching the station the Operator shall be stopped on Hand Danger signal displayed by a Railway servant in uniform at the foot of the First Stop signal pertaining to the right line or the Last Stop signal pertaining to the wrong line and thereafter shall be piloted into the station. In case the Operator finds that no Railway servant in uniform has been deputed at the foot of the signal to pilot the train into the station GR 4.44 shall be observed.

7.3 Shifting of Track Machines as a train or in convoy within the jurisdiction of same JE/SSE (P.WAY)

7.3.1 This situation arises when after completion of targeted mechanized working in one block section, the machines shift their base with/without camping coaches from one nominated station to other nominated station falling under the supervision of the same JE/SSE(P. Way) with each movement.

7.3.2 Para 4.65 of G & SR and Para 705 (4 & 6) of IRTMM 2019 has described in detail the procedure for movement of heavy duty Track Machines. Absence of LI/LP/ALP, the above should be followed by concerned JE/SSE(P Way)/ TM In- charge.

7.4.4 During shifting, the track machine(s) shall move either In coupled condition or in group in the line with precautions mentioned as under:

While the track machines are moving in the block section, it will be the responsibility of SSE/JE(TM) of these machines to maintain a minimum safe distance not less than 120m up to 200 m from each other. The speed of movement of track machines shall be the lowest of the maximum permissible speed among all track machines. The leading track machine shall observe this speed.

If any of the machines is required to slowdown or stop due to some reason, SSE/JE/TM driving the machine should ensure that red hand signal flag/ Light is displayed by waving vigorously. Whistle code as prescribed in SR 4.50 is also to be followed.

Where visibility is poor such as curvature etc appropriate speeds and safe distance should be maintained to ensure safety. Whistle of prescribed code as per SR 4.50 to be followed.

While approaching the level crossing SSE/JE(TM) driving the track machines shall keep a extra vigilant short of any obstruction and whistle frequently till the machines pass the level crossing.

7.4.5 Timely controlling of the track machine will be the responsibility of SSE/ JE(TM) track machine operator while accompanied competent Railway Man as per above para 5.6

7.4.6 While working in ghat/graded section un braked shall not be attached with machine and precautions as per Para No712 of IRTMM should be followed.

7.4.7 As per Para No.712 (t) of IRTMM “No run through movement shall be

done in convoy while moving in Ghat section. Only one machine shall be allowed to move for run through movement in ghat section at a time".
Special emphasize is to be given on the following items:

- Before offering readiness, brake power, hand brake & emergency brake shall be tested.
- SSE/JE(TM) shall not leave driving/working cabin of track machine in ghat section.
- While going in steep down gradient, a loco shall be attached/coupled in front/leading direction of track machine and loco shall control all movements.
- While going in steep up gradient, a loco shall be attached/coupled in rear/trailing. direction of track machine direction and loco shall control all movements.
- SSE/JE/P, Way shall be responsible to arrange a banking locomotive/ banker before readiness of track machine,

7.4.8 During Communication fallure and foggy weather when visibility is poor, movement of track machines from one block section to other will not be carried out.

8. Brake Power of the Rolling Stocks:

When the track machines move with attachment of other rolling stocks, then It shall be ensured that the rolling stocks are fit in all respects and have valid Brake Power Certificate (BPC) on End-to-End basis. In case the BPC become Invalid, Brake Power will be revalidated by a flying gang of TXR having jurisdiction at the place of testing. Testing of brake power of the rolling stocks will be done on End-to-End basis without requiring them to be emptied /unloaded.

9. Responsibility of the Section Controller

9.1 The controller will allow movement of Track Machines as per demand of SSE/JE(TM) considering the other movement and safety aspect after sunset for base shifting and block working. Track machines will be accompanied by a qualified railway servant as mentioned in Para 5.6. All movements of track machines should generally take place within the roster hours of the SSE/JE(TM).

9.2 Line clear of the track machine will be considered on the basis of feasibility/ availability of path- and other train movements after receiving memo from Engg. Side.

10. Further review of the JPO will be taken up as per need.

(Om Prakash)	(R Kumar)	(S.Vijay)	(Vijay)
CE/TM	CTPM	CRSE/F	CEE/OP

SUMMER PRECAUTIONS FOR CONVENTIONAL AC ELECTRIC LOCOMOTIVES

Sl. No.	Activities
1.1	Temperature checking of axle box, MSU and TM bearing through contact less digital temperature meter of each locomotive during shed/out pit visit. Proper record should be maintained for timely detection of any abnormality and to arrest failure of bearings on line.
1.2	All TMs to be checked for proper fitment of inspection covers. Acyclic check to be conducted on all locomotives for ensuring proper pressure in commutator chamber of all TMs.
1.3	Acyclic check should be done on all locomotives for ensuring proper cleaning of side body filters. Monitor depression inside loco by a manometer and it should not be more than 6 – 7 mm.
1.4	Transformer oil cooling radiator of all locomotives should be cleaned by blowing air, checked for proper cleaning and air suction through MVRH one cycle.
1.5	One cyclic check of SL coils cleaning and blowing to be ensured and intactness of SL covers both top and bottom properly must be ensured.
1.6	All relays must be provided with covers along with proper gasket to ensure dust free environment For relay operation–one cyclic checking to be conducted.
1.7	A cyclic check to be taken in all locomotives to ensure modified oil dipstick/cap on suspension bearing oil pump of all TMs.
1.8	All Trip sheds must be strictly instructed to top up suspension bearing oil up to maximum mark and for this purpose availability of oil in Trip sheds must be ensured at the level of Sr.DEE/TRS.
1.9	Nil oil leakage through suspension bearing must be ensured. One cyclic check to be conducted.
1.10	All blowers must be checked for delivery of rated air out put. In case of malfunctioning of blower relay, case should be properly investigated and working of blower properly shall be ensured.
1.11	Proper working of all blower relays in the locomotive must be ensured.
1.12	RSI block Elmex and SBs at different locations must be checked for dust freeness to avoid any chances of tracking.
1.13	WAG7 locos fitted with compact RSI blocks with 3 bridge design should preferably be utilized in MU formation. SimilarlyWAG5 locos for freight operation should work only in MU configuration.
1.14	SIV fan bearing should be replaced as per specified schedules. Ensure implementation of Reliability Action Plans for different manufactures of SIV.

1.15	Working of cab fans must be ensured in all locomotives.
1.16	All locos fitted with Cab-air conditioning should be in working condition.
1.17	All types of rubber hoses must be closely examined for their physical condition and should be changed on condition basis.
1.18	SB oil pump to be opened, sump to be cleaned on all locos.
1.19	Re-greasing of MVMT bearing during IC to be ensured.
1.20	Loco interior to be thoroughly cleaned of accumulated oil and dust.
1.21	Drivers must be alerted to feel the axle boxes as often as possible
1.22	There should be no leakage of grease from Axle box front cover and rear dust guard. Axle boxes should be thoroughly examined.
1.23	Earthing shunts should be intact.
1.24	Gear case half ring and half ring felt should be properly fitted.
1.25	Sun visors in both cabs should be secured.
1.26	Roof insulators should be cleaned thoroughly.
1.27	Clean oil bath filters of CP & ensure proper fittings.
1.28	Fuses with covers should be secured.
1.29	Apply petroleum jelly on reverser contacts.
1.30	Cab heaters to be disconnected by providing insulating plate in fuse box.
1.31	Inspection covers, terminal covers and bellows of traction motors should be checked for proper fitting and tightened by providing necessary gasket.
1.32	Secure and properly clean Traction Motor expanded metal protective screens.
1.33	Transformer sealing gasket should be checked and replace if need be to avoid dust ingress.
1.34	No leakage of transformer oil from transformer GR MPH circuit and other accessories and proper Cleaning in its vicinity.
1.35	Ensure transformer oil in gauge glass and oil level in tap changer not more than 20 deg. C
1.36	Battery boxes should be cleaned.
1.37	Top up batteries with distilled water.
1.38	Petroleum jelly to be applied on battery connections.
1.39	There should be no leakage of compound from gear case & half ring.

1.40	There should be no oil leakage in the loco from CP.
1.41	Ensure cyclic check of cables, dressing, bunching, provision of grommets by March.
1.42	Check battery charger and adjust voltage/current.
1.43	RSI blocks should be checked & there should be no dust accumulation.
1.44	Secure dust proof transparent covering of Aux. Interlock assembly, RS assembly.
1.45	Ensure proper greasing of all TMs in IC schedule.
1.46	TM leads should be checked for proper cleating.
1.47	Proper greasing of bearings of all Aux. Motors to be done during inspections schedules.
1.48	Ensure that all the Aux. Terminal covers are intact.
1.49	Ensure no over-aged battery in service. Acyclic check to be completed.
1.50	Ensure availability of fire extinguisher in locos.

SUMMER PRECAUTIONS FOR THREE PHASE AC ELECTRIC LOCOMOTIVES

Sl. No.	Activities
2.1	Blowing of all filters during every schedule from 15th March to end of July.
2.2	Washing and blowing of radiators during every schedule from 15th March to end of July.
2.3	Reverse blowing of radiator in working condition of OCB 1and2 in one cycle.
2.4	Checking and washing of MRB-1 and 2 filters by removing in every schedule from 15th March to End of July.
2.5	Ensure working of churning fan in CEL-1 & 2, SR-1 & 2 and BUR electronics.(Record to be maintained Loco wise)
2.6	There should not be any air leakage from duct joints of blowers.
2.7	Checking of over heating of 35sq. mm cables and 70sq.mm cables in HB-1&2 panels.
2.8	Checking of oil leakage in capacitors of DC link of SR-1&2, BUR-1,2&3 and FB panels.
2.9	Washing of OCB-1&2 filter by pressurized water until clean water delivering from filters from 15th March.
2.10	Check BA cables male and female contacts for any sign of flashing/ overheating.
2.11	Ensure availability of 100% ceramic filters in batteries.
2.12	Clean vent plugs of Batteries. All vent plug holes should be clear.
2.13	Check oil leakage at following points: a. All flange joints of pipe, radiator, pumps, and conservators. b. Near SR-1+ 2pumps i. At isolating cocks ii. At sensor joint iii. At bellow of pipes iv. At conservators c. All gate valves and pipes at under-frame. d. All pressure sensors/temperature sensors fitting points, gauge glass of SR-1&2, conservator1&2.
2.14	Carry out a cyclic check on all locomotives for ensuring proper cleaning of TM blower filters.
2.15	Ensure Gear Case oil to ½ mark.
2.16	Check all blowers for delivery of rated air output.

2.17	Closely examine all types of rubber hoses for their physical condition and should be changed on Condition basis.
2.18	Thoroughly clean loco interior for accumulated dust.
2.19	Ensure securing of sun-visors in both cabs.
2.20	Clean filters of compressors (CP) and ensure proper fittings.
2.21	Check terminal covers and bellows of traction motors for proper fitting and also check bellow Plates and bolts.
2.22	Ensure no leakage of transformer oil from transformer, converter, MPH circuit and other accessories And also ensure proper cleaning in its vicinity.
2.23	Ensure no oil leakage from gear case.
2.24	Ensure no over-aged battery in service.
2.25	Ensure sealing gasket of doors, windows, filters etc to avoid entry of dust inside Machine room.
2.26	Ensure transformer oil and SR oil in gauge glass between minimum and maximum level.
2.27	Check working of fire detection unit. In FDU one cycle check of potentiometer output value shall be done. Check RR section during pre testing and get it corrected from Relay section if required.
2.28	Ensure intactness of earthing wire connection with Traction Motor.
2.29	Carry out blowing of Harmonic Filter Resistance on roof.
2.30	Ensure proper cleaning of inter/after coolers of main compressors by compressed air.
2.31	Ensure cleaning of battery boxes.
2.32	Ensure instructions contained in RDSO's letter no.EL/3.2.1/3-PH dated 30.07.09 for arresting oil leakage cases from transformers i.e. a. Oil leakage from Bushings and Bushing plates. b. Oil leakage from the Stuchi coupling & rubber hose pipe of conservator tanks. RDSO Technical circular No. ELRS/ TC/ 0076 dtd. 17.09.2002 on "Oil leakage from the transformer bushings and cover in three phase locomotives" may be referred.
2.33	Ensure provision of modified cooling radiators for better cooling of traction converter control electronics. (Ref: RDSO letter no. EL/11.5.5/5 dated 15.02.10). Refer RDSO purchase specification No. RDSO/ 2009/ EL/ SPEC/ 0100 Rev. (0) dtd Nov, 2009 for procurement of modified cooling radiator.
2.34	Ensure removal of interlocks of control circuit contactors No.126 from MCPA circuit (Ref: RDSO/ 2011/ EL/ MS/ 399 Rev. 0. dated 08.08.11)

2.35	Ensure partial blocking of opening duct of back side of auxiliary converter of three phase electric locomotives as shown in figure1. Ref: RDSO MS. no. RDSO/2009/EL/MS/0385 (Rev.0), Dated 15.12.2009.
2.36	Ensure implementation of modification sheet for shifting of the termination of 4GKW,1.8 KV, 70 mm^2 cable and 2x2.5mm^2 cables housed in lower portion of HB-2 panel and provision of Synthetic resin bonded glass fiber (SRBGF) sheet for three phase locomotives as per MS RDSO/2011/EL/ MS/0400 Rev.'0' dated. 10.08.11.
2.37	Ensure implementation of modification sheet for relaying of cables in HB-2 panel of three phase locomotives to avoid fire hazards as per MS of RDSO/2011/EL/MS/0401, Rev.'0'dated10.08.11.
2.38	Ensure implementation of modification sheet for auto switching of machine room/ corridor lights to avoid draining of batteries in three phase electric locomotives as per MS of RDSO/2011/EL/ MS/0403,Rev.'0' dated. 30.11.11.
2.39	Carry out measurement of cable continuity for all four earthing brushes.
2.40	Ensure completion of modification for closure of two central ventilators in WAP-7 and WAG-9 locomotive in order to avoid ingress of dust, as per RDSO modification sheet No. RDSO/2009/EL/ MS/0380(Rev0) dated 06.07.2009.
2.41	Modification in Auxiliary circuit of locomotives for isolation Air conditioner circuit, in case ofearth fault in the air conditioning unit to avoid SIV tripping as per RDSO modification sheet No. RDSO/2011/EL/ MS/0394 Rev'0' Dated: 09.02.2011.
2.42	Ensure cleaning of Oil Cooling Radiators in 3 phase electric locos, as a pre- summer activity prescribed by RDSO vide letter No. EL/3.1.35/16, dated 05.06.13.

In addition to the above instructions contained in ACTM, some of the other important measures also to be taken for maintenance of electric and diesel locos are as under:

Sl. No.	Activities
3.1	Check for any oil leakage from transformer, Tap Changer (GR), MPH circuit, traction converter, oil pump and other accessories & ensure appropriate oil levels in all these equipment between minimum and maximum levels.
3.2	Ensure topping up of water in batteries.
3.3	Prescribed type and number of fire extinguishers should be provided on each locomotive and loco crew are trained to operate these when required.

Besides above, following instructions are also to be followed by homing sheds and Loco Pilots working on electric locos to curb the loco failures on line:

Sl. No.	Activities
4.1	Fire prevention measures for three phase locos issued by RDSO vide letter No. EL/3.1.35/2 (Elect), Dated 29.01.2013 should be implemented along with modification to provide mechanical locking arrangement in primary over current relay of 3-phase locomotives as per modification sheet No. RDS0/2013/EL/MS/0420 Rev", dated 23.01.13, issued by RDSO should be ensured. Compliance of RB letter No. 2008/Eiect (TRS) I113/5/Pt. dated 08.12.2016 on fire prevention shall be ensured.
4.2	Ensure temperatures strips of range 40-70°C and 60-100°C pasted on DE side bearing incompliance to the comprehensive maintenance instructions advised by RDSO vide SMI No. RDSO /2013/ EL /SMI/0278 (Rev.'0'), dated 24.12.2013 for fitment of traction motor (6FRA6068) Drive End bearings NU2236 used in 3- phase locos during overhauling to avoid WAP7/WAG9 locos traction motor bearing failure.
4.3	Air delivery measurement in 3-phase locos to ascertain proper cooling and pressurization of machine room advised by RDSO vide SMI No. RDSO/2009/0255 (Rev."0") dated 06.05.2009, to avoid dust ingress and proper cooling of electronic cards as a schedule activity.
4.4	Filter cleaning as per RDSO SMI No. RDSO/2016/EL/SMI/0286(REV.'0'), Dated 09.06.2016 shall be carried out.
4.5	Improvement measures to maintain pressure in the machine room and make it dust free as per RDSO guideline circulated vide letter No. EL/3.1.35/10 dated 11.04.16.
4.6	Removal of dust from machine room by industrial vacuum cleaner and plugging leak holes by rubber grommet / gasket / RTV.
4.7	Provision of roof clamp shall be ensured.
4.8	Condition of air filters and OCU gasket to be ensured.
4.9	Application of conductive grease on knife switch contact of BUR.
4.10	Implementation of RDSO modification No. RDSO/2018/EL/MS/468 (Rev. "0") dated 06.02.18 for Hotel Load Converter.
4.11	Modification to avoid cab changing in case of failure of processor cards of VCU as per RDSO/CLW's guideline.
4.12	Implementation of RDSO's modification sheet no. RDSO/2018/EL/MS/0475 for switch OFF/ON of control electronics.
4.13	Regulated use of sander (PSA) instead of continuous use is recommended. Continuous use of sander is not only ineffective but could also lead to MR drop.

4.14	Any fault message in DDS should not be acknowledged without reading and follow up as suggested. Once acknowledged, the message gets lost.
4.15	Any such messages requiring train to stop, efforts should be made to clear the block section in coasting and then attention to the message can be given.
4.16	If one auxiliary converter is isolated, then as per TSD, switching OFF & ON electronics is advised once for normalizing the working of auxiliary converter. Since the isolation of auxiliary converter reduces the ventilation level, it is prudent that, in summers, switching OFF & ON of electronics should be tried again later on during stops, to normalize the working of auxiliary converter.
4.17	Priority-I message have to be immediately acted upon & course of action is also available in DDS. P-II message need not be acted immediately except for battery voltage low /MCB 100 tripped. P-I message come with a red flashing of LSFI in addition to BPFA.
4.18	Timely attention to Priority-II battery messages so that loco does not shut down with PI message later on. Tripping of battery charger MCB 100 invariably leads to Priority-II battery messages. Switching ON MCB 100 has to be done with VCB in OFF condition.
4.19	In case Angle transmitter goes defective, immediately switch over to manual mode using switch 152 in running condition. There is no need to stop.
4.20	Configuration switch 160 restricts loco speed to 15 kmph & can be corrected without switching electronics OFF/ON in much lesser time. However, the loco has to be stopped before operating switch 160.
4.21	Zonal Railways are also advised to follow the latest TSD of 3-Phase locos issued by RDSO and counsel all running staff in lobbies, training schools, online etc. accordingly.

In addition to above, in order to prevent fire hazards in locomotives, thorough blow outs, cleaning of under slung power equipment, removal of spillages from engine areas and functioning of fire safety equipments may also be ensured.

SUMMER PRECAUTIONS FOR DIESEL LOCOMOTIVES

Sl. No.	Activities
5.1	No leakage of Lube oil and Fuel oil.
5.2	Fuel cross over pipe is properly secured and is not rubbing with Engine block.
5.3	Engine room must be maintained oil free and no foreign material like cotton waste, etc are lying there.
5.4	The electrical cables should be adequately protected, covered from leaking diesel oil, which could spill on these cables.
5.5	Oil spillage from diesel engine into the Alternator/Generator room to be prevented.
5.6	Leakage of oil through partition plate and leakage of oil from crankcase exhauster pipe shall be checked.
5.7	IR values of power and control cables shall be checked.
5.8	To avoid sparks, wiring at junctions/interfaces should be tightened properly.
5.9	Tightness of terminals and sealing at terminal box to be checked and dust particles shall be cleaned periodically.
5.10	Carbon brush condition, brush spring pressure, freeness of carbon brush, arcing horn gap and commutator surface cleanliness shall be checked periodically.
5.11	Milli volt drop shall be checked across the WSR with traction motors in serious and parallel conditions.
5.12	To prevent oil entry in to the traction alternator connection box, adequate sealing arrangement should be maintained.
5.13	Power and control cables shall be converted to e-beam irradiated type during POH/Rebuilding as per the extant instructions.
5.14	It must be ensured that thermal insulation is provided on exhaust manifold and compressor intercooler pipes
5.15	A drive may be launched to conduct ambush checks to sensitize field maintenance & running staff & keep records of the progress made on cyclic checks. Feedback may be communicated to Board on completion of the same.

The above points are not exhaustive and any other instruction, issued time to time, may be incorporated in the drive to ensure safety and reliability of electric and diesel locomotives.

SUMMER PRECAUTIONS FOR EMU/MEMU

Sl. No.	Activities
6.1	Cleaning of Radiator, Rectifier blower, Fan net, Mio filter net, top cover of SL, DL, & TL.
6.2	Proper earthing of TFP and TM through earthing brush.
6.3	Cleaning of roof insulator.
6.4	Cleaning of BA box, BA Charger and adjustment of BA voltage and current frequently.
6.5	Checking of overheating sign at power cable connection.
6.6	Ensuring of no leakage of oil from TFP, MCP and Cardium compound from Gear case.
6.7	Proper cleaning of Suspension housing, sealing of Axle box, observation of temperature of Axle box and Suspension housing including monitoring of traction motor bearing temperature.
6.8	Checking of TM and Aux. Motor junction boxes, checking of tightness of connections.
6.9	Checking of validity of Fire extinguisher, refilling if required.
6.10	Checking of temperature setting of transformer thermostat relay.
6.11	Ensure of 100% running of coach and cab Fans/cab AC
6.12	Cleaning of under frame equipments particularly at difficult location where the oily substances accumulates to prevent fire hazards.
6.13	Special checking for e-beam cables (control & power both) regarding ant bite and insulation damage etc.
6.14	Ensure of Rolling- in & Rolling -out checking of rakes at all out stations/ Car sheds.
6.15	Checking of any other vulnerable items based on the experiences gathered by individual sheds.

SUMMER PRECAUTIONS FOR ENGINEERING DEPARTMENT

1. PRECAUTIONS DURING SUMMER:

No maintenance work except under traffic block should be undertaken between 10:00 hrs and 16:00 hrs.

2. Maintenance of LWR/CWR:

No maintenance work should be undertaken except that of emergent nature on LWR/CWR during rising temperature including machine tamping. As per Para 345 of IRPWM-2024, regular track maintenance works should be confined when the rail temperature is between (t_d+10) to (t_d– 30)and shall be completed well before the onset of summer. At no time, not more than 30 sleeper spaces in a continuous stretch should be opened under normal maintenance and at least 30 sleepers kept fully boxed up in between two openings. Lifting of track for the purpose of packing and creation of cushion must not be done. It should be ensured that the track is not kept open during lunch interval. Before end of day's work, it shall be ensured that ballast is boxed up.

3. At location of work site (deep screening, through sleeper renewal) destressing at prevailing temperature to be ensured before starting of work

4. Maintenance of SWR:

SWRS shall be maintained as per provisions of Para 324 of IRPWM-2024. Regular maintenance of SWR track should be carried out only when rail temperature is below (tm+25) in Zone-I & II and (tm+20) in Zone-III & IV as per Para 324 (1) of IRPWM 2024. Opening of track more than the recommended length for maintenance purpose should be avoided. When rail temperature exceeds temperature range as stipulated above, not more than 30 sleepers in one continuous stretch should not be opened leaving at least 30 fully boxed sleeper spaces between adjacent lengths opened up. Before end of day's work, it shall be ensured that ballast is boxed up as per Para 324 (2) of IRPWM-2024.

5. Speed restrictions in LWR/CWR during consolidation:

If rail temperature after maintenance, exceeds (t+20) during the period consolidation as per Para 337(5) of IRPWM 2024, a suitable speed restriction shall be imposed as per Annexure 3/8 of IRPWM-2024. On concrete sleeper track, if rail temperature after maintenance exceeds (t+20) during period of consolidation then speed restriction of 50 kmph shall be imposed if shoulder and crib contraction has been done and speed restriction of 30 kmph shall be imposed if shoulder and crib contraction has not been done. However, no speed restriction is required after one round of stabilization of track by Dynamic Track Stabilizer (DTS) machine.

6. Gaps at SEJ:

Measurement of gaps at SEJ should be done by SSE(P.Way)/In-charge/

Sectional and ADEN as per prescribed schedule in Chapter 1 of IRPWM -2024. Proforma of recording of such gap and movement of central portion of LWR is already available in respective 2020. The detailed inspection Annexures 3/14 & 3/15 of IRPWM procedure have already been laid down where SSE (P.Way)/In-charge and Sectional JE/SSE should record the gap of the SEJ at every fortnight, during two hottest months at the time of the day when rail temperature remains maximum i.e. between 13:30 hrs to 14:30 hrs. Initial gaps in SEJ should be as per Para 338(b) of IRPWM 2024 and such gaps should not differ from theoretical range given in Annexure - 3/9 of IRPWM. Gap at SEJ should not exceed maximum designed gap of SEJ.

7. Inspection:

ADEN and JE/SSES(P.Way) should carry out to push trolley inspection during hottest part of the day. (Sr.)DEN should carry out footplate inspection during hottest part of the day. They should also look for presence of JE/SSES(P.Way), Mates and Hot Weather Patrolmen in the section. If any unusual behaviour is noticed during such inspections then actions as per Para 1005(2) of IRPWM 2024 shall be taken and also to be relayed to the Divisional Engineering control.

8. Recording of rail temperature:

Continuous Recording type Thermometer should be used for recording rail temperature continuously throughout the day and season. In absence thereof, other RDSO recommended type rail thermometer should be used. Special watch should be kept to see when rail temperature is reaching (t+20). Rail temperature of all locations should be furnished to HQ with details of hot weather patrolling, footplate/trolley inspection with report thereof in the following format:

Date	Maximum rail temperature at salient locations	Sections where hot weather patrolling introduced	Section wise Officials on footplate	Section wise Officials on trolley

9. HOT WEATHER PATROLLING

9.1 Hot Weather Patrolling:

Period for hot weather patrolling shall be laid down by the Sr.DEN(Co) for each section and patrol charts prepared where necessary. Patrolling shall be organized by JE/SSE (P.Way) accordingly. In addition, the JE/SSE (P.Way) and the Gang mate shall be vigilant during summer and on hot days. Patrolling will be introduced, when the rail temperature rises above:

(a) $\mathbf{t_d}$ +30°C on wider base PSC sleeper track with sleeper density 1660 nos. per km.

(b) t_d+25°C on PSC sleeper track with sleeper density 1540 nos. per km and above In terms of IRPWM, Para no. 1005 (1)(a) [CS 17 dtd.01.03.2024]

Hot weather patrolman should have prescribed adequate equipments for track protection. The detailed procedure of such hot weather patrolling has been enumerated in Para 1005(1 & 2) of IRPWM 2024. Some of the important provisions are reiterated here also.

9.2 Patrol beat for Hot weather patrolling will be as follows:-

(i) On single line or where only one road in a double line section is having LWR/CWR- One patrolman for 2 km.

(ii) On double line section when LWR/CWR exist on both roads- One patrolman for 1 km length of UP and DN road. The beats of each hot weather patrolman will thus be restricted to 2 km.

9.3 Duty rosters of patrollers would be from 9.00 hrs, to 17.00 hrs. They should walk at a speed to cover the patrol beats at least four times in a day.

9.4 Hot Weather Patrolman should carry the following equipments:

a. H.S. Flag (Red)	- 2 nos.
b. Staff for Flags	- 1 no.
C. Detonators	- 10 nos
d. Canne-a-boule fitted with rubber ball	- 1 no.
e. Keying Hammer	- 1 no.
f. Whistle	- 1 no.
g. Umbrella	- 1 no.
h. Water bottle	- 1 no.
i. GPS tracker	- 1 no.
j. Shoulder carry bag to keep above	- 1 no.

9.5 The patrolman shall be provided with a GPS tracking device to monitor his movements and sectional (Sr.) DEN shall analyze exception record of the same on daily basis so as to ensure effective patrolling.

9.6 Patrolman shall patrol the track during the hottest part of the day, to look for prominent kinks, incipient buckles or tendency towards buckling. He shall protect the track at the site of the prominent kinks, incipient or actual buckles and report the same to nearest Station Master and JE/SSE/P.Way immediately.

He will walk over his beat slowly over one rail/on sleeper non gauge side of rail in one direction and on the other rail/on sleeper non gauge sleeper side of rail in the return direction. On double lines, he will repeat this procedure alternately on UP and DN tracks. He will be vigilant and look out for kinks in

the rail especially during the hottest part of the day. When a kink is observed, he shall immediately examine at least 100 sleepers ahead and in the rear of the kink for any floating condition of track. He should meticulously sound each and every sleeper, 100 sleepers on either side of the kink, to determine any floating condition.

The amount of rebound will be noted by dropping a Canne-a-boule on each end of the sleeper to determine the extent of void under the sleeper. Should the amount of rebound reveal a floating condition, under which a buckle may be anticipated or the patrolman has detected actual buckling of track, he will take immediate steps to protect the affected portion by display of hand signals as per rules in force. After protecting the track, the patrolman will arrange to advise the Gangmate, JE/SSE/P.Way of his apprehension of a buckle/actual buckle.

The Gangmate on receipt of advice of a danger of buckle will proceed to the site quickly with all available men. On arrival at site, he will first ensure protection of affected portion. He should then inspect the condition of track 100 m on either side of this suspected zone and commence heaping of surplus ballast, if available, on the shoulders and upto the rail head and keep on compacting the ballast with available tool. No attempt should be made to slew or align the track or disturb the existing ballast section.

The rail temperature will also be noted by one of these officials at the place of apprehended/actual buckle. The rail facing the Sun will be covered up to the level of rail head on the outside by ballast or leaves etc. to bring down the temperature of the rail.

9.7 In the event of detection of actual buckling, traffic should be immediately suspended by putting detonators and displaying H.S. Flag and all concerned should be intimated. No attempt should be made to slew or align the track or disturb the existing ballast section.

9.8 Gang Mate, JE/SSE(P.Way) on knowing the buckling, will arrive at the site and ensure protection of track first of all. He should then inspect 100 metres on either side, simultaneously start heaping of surplus ballast on the shoulders and upto the railhead on outside or leaves etc. to bring down rail temperature.

9.9 Engineering control of the respective Divisions, should know the programme of footplate for hot weather precaution.

10. Summer precautions for Track Machine Working:

a. No block for working of BCM, CSM &Duomatic machine in LWR territory should be taken. between 11:00 hrs. to 16:00 hrs. during summer months due to increase in rail temperature during afternoon hours. The block should either be taken during morning hours or after 16:00 hrs. Provisions of Para 345(1)(a & b) & (2) and 868 of IRPWM - 2024 shall be observed strictly.

b. Lifting of the track by tamping machine should be restricted to minimum preferably within 50 mm general lift for concrete sleeper. It should particularly be ensured that tightening of loose fittings, replacement of broken fitting and consolidation of ballast in between sleepers are done as post tamping operation.

11. VULNERABLE LOCATION - following vulnerable locations should be kept under special watch:

a. Junction of tracks having different track structure one liable to creep and the other fixed against creep.
b. Locations of jam joints or creep accumulation locations such as approaches of Level Crossings, Points & Crossings, Bridges etc.
C. Location of work such as where track opened for more length, lifting done, machine packing done etc.
d. Deficient track structure such as LWR having discontinuity, missing/broken/ineffective fittings etc. - speed restriction need to be imposed until rectification.
e. Location of ballast deficiencies such as pedestrian crossings, cattle crossings etc.
f. Horizontal and vertical curves.
g. Track on shrinkable soil.
h. SEJ's/breathing lengths.

12. IMPLEMENTATION OF SUMMER PRECAUTION:

(a) Inspection: ADEN and (Sr.)DEN should also carry out frequent footplate/trolley inspection to monitor observance of all precautions. The JE/SSE, Mate, Gangman& keyman should be intensively counselled during course of such inspection in the matter of precautions to be taken during summer, need and procedure for immediate protection of track in case of any abnormality and actions to be taken during such cases. They should specially look for the deficiencies and arrange to make good the same as soon as detected.

(b) Intensive Summer drive: When rail temperature is likely to go beyond (t+20), intensive special summer drive should be launched by Sr.DEN (Co-ordination). Push trolley/foot plate inspections should be intensified covering hottest part of the day. Detailed programme should be made with a copy to HQ specifying for each section nominating individual officer and supervisor who will remain on footplate with train no., those who will remain on push trolley/motor trolley with timing and those who will cover the stretch on foot with time. They should also look for presence of JE/SSES, mate, Keyman and hot weather patrolmen in the section. Each such nominated person will report their finding to the Divisional Engineering Control with subsequent detailed written report. Such programme should be strictly monitored by Sr.DEN/C who will inform concerned CHOD and HO/Engg control about any untoward happening on phone and will send detailed report after his scrutiny.

Necessity of positivity in workplace

Working in a hazardous environment can be challenging, but you can navigate it by focusing on what you can control, building a support system, and seeking professional help if needed. Prioritize self-care, set boundaries, and consider your long-term goals, as staying focused on your aspirations can help you persevere through difficult situations.

1. Focus on What You Can Control :

- **Your Reactions :** Don't take toxic behaviours by your seniors personally. Remember that their actions reflect their issues, not your worth.
- **Your Boundaries :** Establish clear boundaries regarding your work hours, workload, and interactions with toxic individuals
- **Your Work :** Focus on completing your tasks to the best of your ability and avoid getting drawn into office drama or negativity.
- **Your Well-being :** Prioritize self-care, including taking breaks, exercising, and engaging in activities that bring you joy

2. Build a Support System :

- **Trusted Co-workers :** Find colleagues with whom you can confide in and who can offer support and understanding.
- Friends and Family: Reach out to your personal network for emotional support and a different perspective.
- Professional Help: Consider seeking guidance from a therapist or counsellor if you're struggling to cope with the toxic environment (specially if you are feeling to commit suicide).

3. **Consider Your Long-Term Goals :**

- Career Path : Evaluate whether the toxic environment is affecting your career aspirations and whether it's time to consider a change.
- Personal Well-being: Prioritize your mental and emotional health, and don tt hesitate to make changes if the environment is negatively impacting your overall well-being.

4. **Other Tips:**

- **Communicate Calmly:** If you choose to address the toxic behaviours, do so calmly and professionally, focusing on the specific actions and their impact.

- **Avoid Drama:** Refrain from engaging in gossip or participating in office drama.
- **Find Humour :** Sometimes, finding humour in difficult situations can help you cope and maintain your perspective.
- **Focus on Positivity :** Actively look for positive aspects of your work and try to cultivate as positive mindset.

By implementing these strategies, you can navigate a toxic work environment and protect your wellbeing while considering your long-term career and personal goals.

Sources: The abstract is collected from Internet through Al by Dy. CSO/ Mechanical/ER

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EASTERN RAILWAY

SAFETY RULES

- Report any unsafe condition immediately.
- Always use equipment /tools/ machinery safety and property.

- You are responsible for your own safety and safety of others.
- Never wear loose clothes or slippery footwear. Wear proper PPEs.
- Report all injuries, however small they may be.
- Always use equipment /tools/ machinery safety and property.
- Don't take shortcuts. if you are not trained for it, don't do it.
- Keep your work area clean up spills immediately.