

EAST CENTRAL RAILWAY

CORRECTION SLIP No.-14

[ACCIDENT MANUAL, Edition-2007]

The following Correction/Addendum to Chapter- IV & Appendix-A of Accident Manual (English edition- 2007) has been made and being sent for necessary compliance.

ITEM No. 1

On page no.42, the existing para 4.14 to be re-numbered as 4.14 (A) and following new para to added as 4.14 (B) -

(B) Points to be carefully noted during detailed investigation :-

- (1) Permanent Way particulars shall be recorded jointly with the SSEs/Officials of the other concerned departments as per Annexure -11/1B of IRPWM(JUNE/2020. These records will inter alia include particulars of the track structures, the condition of the track components, track geometry and other relevant details.
- (2) Particulars with respect to Rolling Stock and signaling – Engineering representative should associate himself with the concerned representative of the other departments in recording measurements of–
 - (a) The locomotive as per Annexure – 11/1C IRPWM(JUNE/2020.
 - (b) Carriages and wagons measurement as per annexures of Board's letter no. 2018/ Safety (A&R) /1/8 Dated 25.01.2019; and
 - (c) Signalling, Interlocking and Telecommunication equipment-
 - (i) Position and condition of stretcher bars, its type, whether it is hugging the stock rail.
 - (ii) Last movement done over the points just before the accident and whether signalled or un-signalled.
 - (iii) How the points are being worked, method of locking of points, its connection with signal. Position, setting and locking condition of points and condition of switches.
 - (iv) Condition of motor point.
 - (v) Whether the crank handle is sealed, when was it last used and for what purpose.
 - (vi) Emergency operation of points, emergency route release etc.
 - (vii) TRS (Train Signal Register)/log book should be taken into custody to verify entries of last three movements in either direction.
 - (viii) SM's Control panel shall be frozen till the time position of the knobs, switches, points & crossings etc. are jointly recorded.
 - (ix) Whether Panel was sealed and relevant record for last operation was made and what were the indications shown on panel.
 - (x) Whether the relay room is in double locked condition.
 - (xi) Any S&T gear is under disconnection.
 - (xii) Data logger- Analysis of event recorded in the data loggers.
 - (xiii) Position of block instrument in details including its handle, commutator, dial indication, locking tec. In the case of electrified section, the block filter unit attached to the block instrument is checked.

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- xiv) If any manipulation in any signaling and interlocking gear.
- (xv) Locking of cabin basement
- (xvi) Date of last overhaul of block instruments, date of last overhaul of lever frame, SM's control frame.
- (xvii) Date of testing the block instruments and other interlocking gears by Inspectors/officers prior to the accident. Results of their test and action taken.
- (xviii) Any interference with any signaling and interlocking gears.
- (xix) Details of unsafe failures during last three months.

Note: As a precautionary measure, the relay room, cabin basement, block instrument, device for crank handle/emergency operation of points/emergency route release, etc. should be locked immediately after the accident and the key kept in the safe custody of the Station master/responsible officials at site till joint observation and functional test of S&T gears are completed.

(3) Operating particulars— The following operating particulars should also be recorded wherever relevant—

- (a) Speed— The actual speed at the time of derailment, from the speedometer graph or if the locomotive is not provided with the speedometer graph, by referring to inter-station timings.
- (b) The direction of the locomotive i.e., Short-hood or Long-hood leading.
- (c) The brake power of the train.
- (d) The marshalling of the train with reference to orders applicable on the section.
- (e) Whether there has been sudden application of brakes.
- (f) Whether there was sudden opening of regulators.
- (g) Condition of loading in wagons, especially unequal loading, light loading, empties between loaded vehicles, over loading, moving loads and any infringement to standard dimensions.
- (h) Particulars of Caution Orders issued to the Driver/Guard.
- (i) Caution order Register.
- (j) Block ticket.
- (k) Authority to proceed without line clear.
- (l) Use of lever collars and slide collars
- (m) Shunting Authority
- (n) Station diary
- (o) Private Number Book
- (p) Securing of vehicle.

(4) In Case of level crossings:

- (a) Km of Level Crossing and station in between.
- (b) Class of level crossing
- (c) Manned /unmanned and number of GKs posted.
- (d) Location within station limits/outside station limits.
- (e) Whether interlocked.
- (f) Availability of telecom facilities and their working order.
- (g) Availability of speed breakers, Road signs.
- (h) Visibility of gate from road and from Rail line.
- (i) Whether on curve, cutting and gradient of Rail line and as also for road.

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- (j) Normal position of gate and status at the time of accident.
- (k) Position of gate signal, lever, panel at the time of Accident.
- (l) Bio data of GK and whether as per roster.
- (m) Number and type of road vehicle, its loading condition, Loco Pilot's name, registration details, license etc.
- (n) Numbers of trains and road vehicles passing through the level crossing on an average per day and last census taken.
- (o) Weather condition at the time of accident.

Note:- The object of recording all available data at site and of evidence is to ascertain the cause of the accident with a view to prevent its recurrence, and where the cause is due to negligence, to fix responsibility

The joint measurement as per annexed proforma submitted by senior supervisors shall not be complete till all the measurement of rolling stock and track have been recorded. Only completed joint measurement w.r.t. rolling stock and track shall become a document to be relied upon by the inquiry committee for drawing conclusion regarding cause of accident.

No inquiry shall be completed before the complete measurement of rolling stock and track is available and made part of the inquiry report. Inquiry Committee may get additional measurements done as per requirement of the derailment case.

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ITEM No. 2

On page no.43, the existing para 4.15 to be re-numbered as 4.15 (A) and following new para to added as 4.15 (B)


(B) Special scrutiny of the first point of derailment and the first pair of derailed wheels:-

- (a) In all instances in which the means taken for the restoration of communication are likely to obliterate marks on the road and other evidence needed at a joint enquiry, the senior official who arrives first on the spot should carefully examine the track, train or vehicle and as soon as possible make notes, sketches etc. and hand over the same to his superior or produce them at the enquiry. He will, when the nature of the accident is such as will involve the question of eye-sight of any of the staff, verify (in case of those permitted to wear glasses) that they had worn glasses at the time of the accident and had carried a spare pair of glasses with them.
- (b) In all cases of accidents, the cause of which might possibly due to sabotage, it is essential that the clearance and restoration operations are not commenced till the Police officials arrive at the site and intimate their agreement to the commencement of clearance and restoration work, after, making thorough investigations.

A factual note of the conditions obtaining at the site prior to restoration work should be prepared and signed jointly by the senior-most Police and Railway officials at the site. In the event of any difference of opinion between the Police and the Railway officials, such difference of opinion may be recorded on the joint factual note.

This should not, however, be allowed to interfere with rendering of first aid to the injured, which is the first essential in all accidents.

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- (c) In other cases, clearance and restoration operations can commence even before the arrival of the Police and it is not necessary that all the rails, sleepers and fastenings involved in an accident should be preserved, but only those, whether serviceable or otherwise, which bear wheel marks, etc., especially between the points of mount and drop. In all cases of serious derailments, these are essential for a later reconstruction of the scene and should be preserved and/or recorded by the first responsible official to reach the site of the accident, as these would be valuable evidence to ascertain the cause of the accident.
- (d) The senior most Railway Officers at the site of the accident should arrange to record the preliminary statements of the staff concerned, immediately after the injured persons have been attended to and arrangements made for the onward journey of the stranded passengers, as any delay in recording statements, might result in suppression of some facts or fabrication of some evidence during subsequent enquiries.
- (e) In case sabotage is suspected, the procedure as outlined in clause (ii) above should be followed. In addition, it should be ascertained promptly from the CRS if he would like to inspect the site etc., before the commencement of clearance and restoration work and then action should be taken in accordance with his wishes. Before clearance and restoration operations are commenced all relevant clues, materials and damages and the deficiencies on Rolling Stock etc., must be noted and preserved. In other serious accidents, however, the same procedure as outlined in Clause (iii) above should be strictly followed.

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ITEM No. 3

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On page no.43, the existing para 4.17 (Preparation of Sketches and plans) to be re-numbered as 4.17 (A) and following new para to be added as 4.17 (B)

(B) Preservation of clues :-

- (a) Nominated ART staff shall be responsible for taking photograph or recording video.
- (b) Photographs /Videos showing the details of damage to Permanent Way and Rolling Stock at the site of accident should be taken wherever necessary; in case of suspected sabotage, the photographs of the site of the accident showing the damage and possible clues should invariably be taken.
- (c) While taking photograph /video the principle of 'whole to part' must be followed; i.e. the first shot (long shot) should cover the entire site along with OHE Mast No. / Hectometer Post No. and the entire coach /wagon with coach /wagon number. The 2nd shot (medium shot) should cover closer view showing particular bogie and track structure. The 3rd /4th shot (close shot) and so on should cover further closer view with finer details and specific components.
- (d) Photography /Videography should cover all the important locations on track and affected parts of rolling stock. It should show inside view of driver and guards' cabin and position of various switches, knobs, brakes, handles etc.
- (e) At station photograph /video should cover Panel and Block instrument, sealing of Relay room, various signaling and interlocking instruments.
- (f) Engineering officials should advise in writing or through electronic communication to divisional safety officials for preserving evidences or clues identified at site.

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- (g) In case of a suspected sabotage, Tell-tale sign must be preserved and recorded.
- (h) In case of rail/weld failure WILD data for preceding few trains must be collected and analyzed.
- (i) Record of data logger should be preserved and analyzed in all accident cases.
- (j) Speed recorder and event recorder of locomotive shall be frozen by the concerned controlling/ safety officials.

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ITEM No. 04

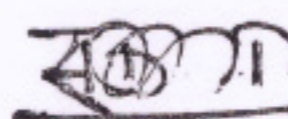
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On page no.146, existing columns in H-1 and H-2 of Appendix-A is deleted and substituted as under-

H-1	XR	GM, PCOM/PCSO, DRM & concerned Br. Officers, TI(M), LF, LF(Diesel) (i), SE(RS)(ii), SE/S&T.	(i) To be included when Diesel Loco is involved. (ii) To be included in cases Involving electric rolling stock.	Sr. Scale or Jr. Scale officers
H-2	XR	GM, PCOM/PCSO, DRM & concerned Br. Officers, TI(M), LF, LF(Diesel)(i), SE(RS)(ii), SE/S&T.	(i) To be included when Diesel Loco is involved. (ii) To be included in cases involving electric rolling stock.	

(Authority:- Railway Board's letter No. 2005/Safety(A&R)/6/4 Pt. Dated 17.10.2017)

All concerned will correct Accident Manual, Edition-2007 accordingly and the same to be brought to the notice of all officials concerned.



(Salil Kumar Jha)

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Date: 01.04.2021