

e~Safety Bulletin Operating Department



**Eastern Railway
Kolkata**

**April to June
2025**

Chief Patron's Message

Dated; 31.07.25

Head Quarter operating department has introduced quarterly "e-Operating Safety Bulletin" to facilitate all safety category Staff on current safety issues, based on comprehensive analysis of recent Accidents of ER. In light of 2nd edition of the Safety Bulletin, hands-on practices needs to be demonstrated to all bottom line staff.

I am confident that the bulletin will undoubtedly prove to be an effective guide in the efficient working of Railwaymen.

Saumitra Biswas

Principal Chief Operations Manager.

Editorial Team :

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महत्वपूर्ण निर्देश Important Instructions

- ❖ एम.एस.डी.ए.सी या एस.एस.डी.ए.सी. को हार्ड रीसेट करने से पहले या पैनल/ वी.डी.यू. से आपातकालीन प्वाइंट/रूट संचालन से पहले, भौतिक रूप से ट्रैक की निकासी सुनिश्चित करें।
Before hard resetting M.S.D.A.C. or S.S.D.A.C. or Emergency Point/ Route operation on Panel/ V.D.U, ensure clearance of track physically.
- ❖ स्टेशन/यार्ड पर स्थिर भार वैगन/ कोचिंग रैक सुरक्षित करने के लिए मौजूदा नियमों के अनुसार सभी निर्धारित प्रक्रियाओं का पालन करें।
Comply all laid down procedure as per extant Rules for securing of stabled load/rake at Station/Yard.
- ❖ ट्रेन की आवाजाही/परिचालन के दौरान किसी भी शॉर्ट कट प्रक्रिया का पालन न करें।
Don't adopt any short-cut procedure during train movement/operations.
- ❖ किसी भी असुरक्षित स्थिति की तुरंत रिपोर्ट करें।
Report any unsafe condition immediately.
- ❖ अपने कार्य क्षेत्र को साफ सुथरा रखें।
Keep your work area neat and clean.
- ❖ ट्रेन के साथ ऑल राइट सिग्नल का आदान-प्रदान करते समय सुनिश्चित करें कि ट्रेन सुरक्षित रूप से चल रही है।
Ensure train is running safely while exchanging ALL RIGHT Signal with a train.
- ❖ सभी रिकॉर्ड/रजिस्ट्रों का उचित रखरखाव करें।
Maintain all records/registers properly.
- ❖ एस.डब्ल्यू.आर के अनुसार सभी आवश्यक उपकरणों की उपलब्धता और उनकी कार्यशील स्थिति की जांच करें।
Check availability of all Essential Equipments and their working condition as per SWR.
- ❖ सभी नवीनतम सर्कुलर, आदेश, शुद्धिपत्र, तथा टेक्नोलॉजी से अवगत रहें।
Keep updated with latest Circulars, Orders, Corrigendum Slips, Technologies.
- ❖ सभी सुरक्षा श्रेणियों के कर्मचारियों को नियमित सुरक्षा काउंसलिंग प्रदान करें/ निश्चित समय अंतराल पर सुरक्षा बैठक की व्यवस्था करें।
Provide regular safety counseling/ arrange safety meeting in frequent interval to all safety categories staff.
- ❖ हमेशा याद रखें कि एक छोटी सी गलती बड़ी आपदा का कारण बन सकती है।
Always remember that a small mistake may cause big disaster

*** Safety is the utmost priority ****

Periodical drill of Crank Handle operations and testing of Emergency cross overs by Field staff.

- ❖ Periodical drill of Crank Handle operations should be conducted once in a calendar month including maximum numbers of field Staff.
- ❖ Details of the Crank Handle Operations should be mentioned in concerned Station Working Rules.
- ❖ All points in the Station/yard may be utilised during these drills.
- ❖ Record of this periodical drill must be kept in the "Crank Handle Register".
- ❖ The competency of Station staff regarding CH Operation should be verified by the supervisors/officers during their inspection.
- ❖ Emergency crossover should be tested in each Day from Panel/VDU. Record of this testing must be kept in a register.



**Opening of Relay Rooms.
(JOINT PROCEDURE ORDER No. 64 ~Revised)**

Dated February 24th 2011

- Necessity for opening the relay rooms should not be frequent.
- Relay Rooms are opened for very short duration for scheduled maintenance, construction activities, and failures rectification.
- For attending failures, the SM of the affected station should issue Signal failure Memo to the Signal Maintainer in prescribed format.
- In case, the relay room is required to be opened for attending failure, the Signal Maintainer should issue Disconnection Memo in prescribed format & the SM should accept the same.
- After rectification of the failure, the Signal Maintainer should issue Re-connection Memo. However, during any failure, concerned relay room should not be opened when T/369(3b) or T/369(1) have already been issued and the movement have not completed.
- Counseling of the supervisors shall be ensured regarding content of JPO 64 (Revised) and obtain their signature on a register as a token of acknowledgement.

Detonators

- ❖ Known as fog signals or detonating signals.
- ❖ Alert train crews regarding obstructions or Accident or to intimate about approach stop signal in case of dense fog.

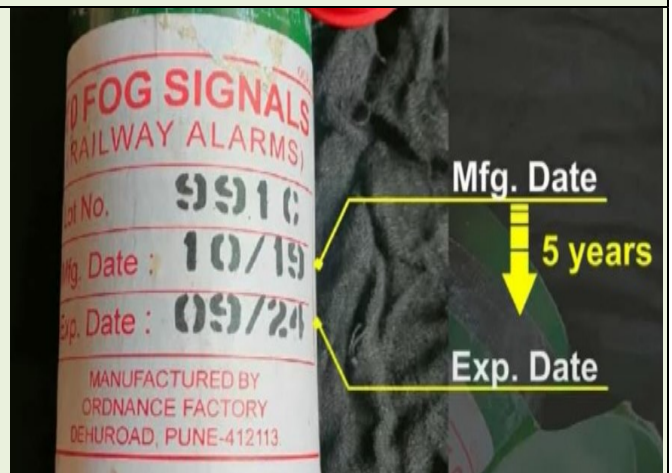
METHOD OF USING DETONATORS: -

- ❖ Fixed on the rails, bending the clasps around the head of the rail.
- ❖ Detonators should not be placed on rail joint and sleeper spacing,



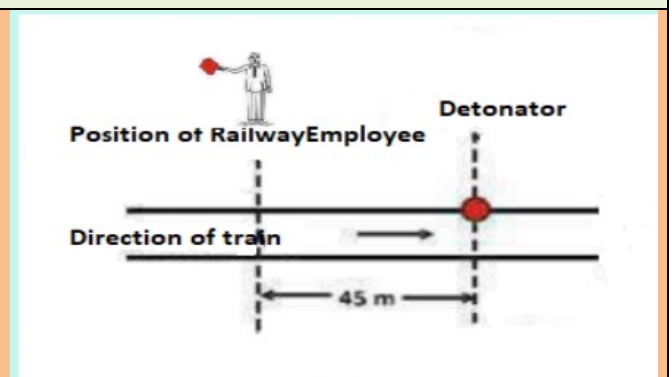
LIFE OF DETONATORS:-

- ❖ The life of detonator is normally 5 years reckoned from the month of its manufacture.
- ❖ It can, however, be extended further for a maximum of 3 years provided that detonators which are more than 5 years old are effective.



Safety range from detonators :-

- ❖ When a railway servant has placed detonator/s on the line, he must stand beyond the safety radius of 45 meter from the detonator or detonators before they are exploded by an approaching engine or train.

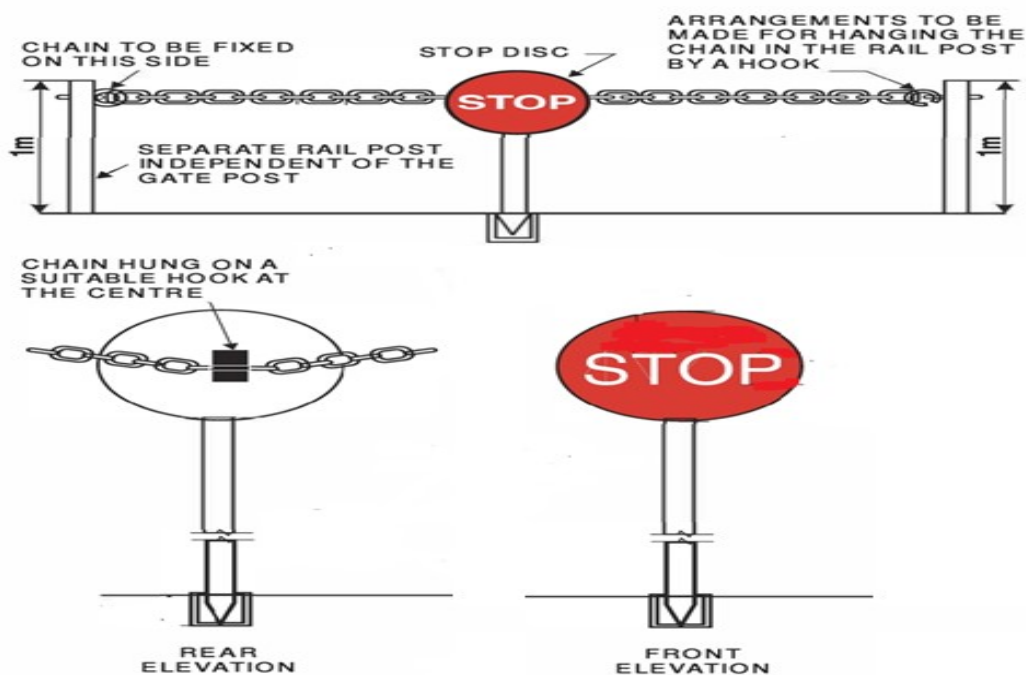


LC Gate Counseling:

Some important instructions on LC Gate Operations:

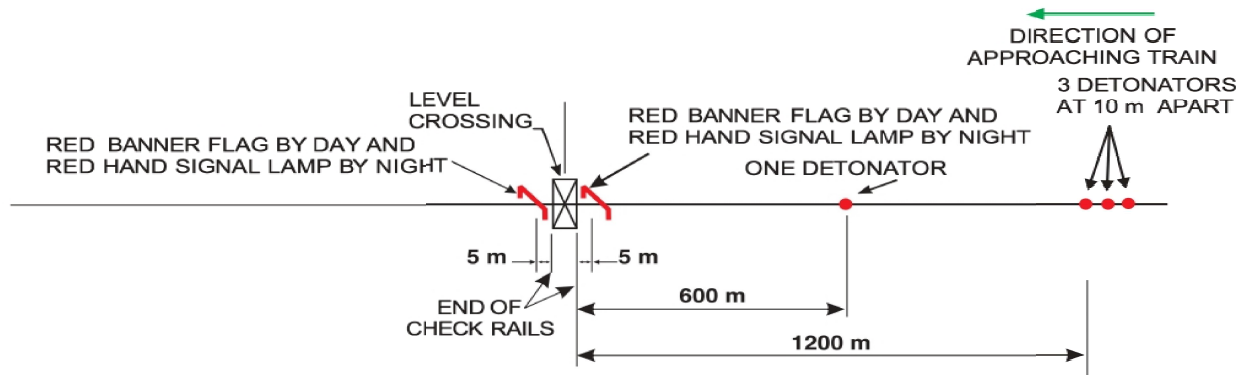
- ❖ The Emergency key must not be used during normal working of the level crossing.
- ❖ After rectification of defect/ failure of interlocked gear by S&T staff, normal working will resume only after getting reconnection / fit memo from S&T staff.
- ❖ If it is necessary to leave the gate in an emergency, Gateman must close and lock the gate against road traffic, before leaving the gate lodge.

Stop Disc to be Provided Along with Safety Chain at Level Crossings.



PROTECTION DIAGRAM FOR LEVEL CROSSINGS

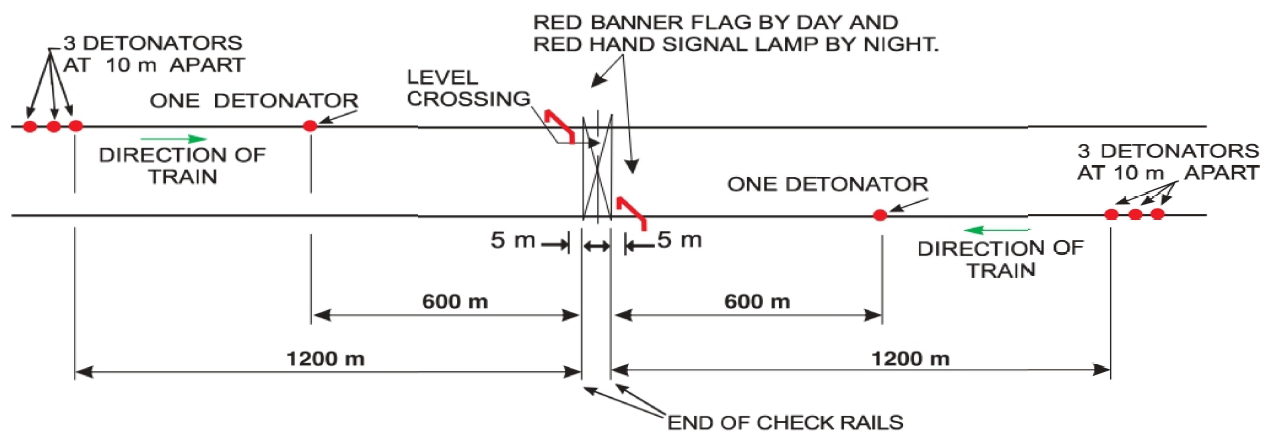
Single Line



Note -

Protection for the direction opposite to that of approaching train to be repeated on the other side also

Double Line



Duty of Gateman in case an obstruction at the level crossing:

- ❖ Immediately inform to SM on duty under exchange of private numbers.
- ❖ If no response received from SM after 2-3 attempts.
- ❖ He shall first protect the LC gate against Road Traffic by fixing safety Chain through Stop Board at both Sides.
- ❖ Plant a Red banner flag on same and adjacent line/s at a distance of 5 meters away from obstruction.
- ❖ He shall rush with detonators and red flag by day and red hand signal lamp by night in the direction of the approaching train.
- ❖ Protect the line with detonators, where the train will come first, and then the other adjacent Line/s.
- ❖ Protect line/s by placing Detonators 600-1200-1210-1220 m away side.
- ❖ Pick up intermediate Detonators (i.e. of 600m) on his way back.
- ❖ If a train is approaching before gateman reaches the protection site, detonators shall be placed on the line at a distance as far away he can go.
- ❖ Keep alert at LC Gate lodge with Hand Signal Flag to warn the approaching train with Red flag/ tri-color torch.

Duty of Gateman in case train parting:

- ❖ Gateman shall attempt to attract the attention of Crew and Train Manager by whistling continuously, shouting, gesticulating.
- ❖ In case of train parting, Gateman shall never show stop hand signal to Train Staff.

~ Symptoms of hot-axle & seizure of roller bearing. ~

Hot Axle:	
 <i>Nose</i>	❖ Smell of burning oil and jute
 <i>Ear</i>	❖ Sound (Whistling)
 <i>Eye</i>	❖ Smoke (Black) ❖ Fire
 <i>Hand</i>	❖ Feel by Hand (Hot)

SEIZURE OF ROLLER BEARING	
 <i>Nose</i>	❖ Smell of burning grease.
 <i>Ear</i>	❖ Metallic Sound
 <i>Eye</i>	❖ Mark of splash of Grease on wheels. ❖ Dis-colourisations of Axle box. ❖ Red glow at night. ❖ Skidding of wheels. ❖ Tilting of spring. ❖ Emission of white smoke.

Measures during detection of hot axle & seizure of roller bearing

- ❖ Any employee who notices a hot axle/seizure of roller bearing must immediately report to responsible person such as the Station Master, Guard or Loco Pilot.
- ❖ “Station Masters” take immediate steps to stop the train by showing danger signals, in the event of hot axle box or other unsafe conditions being detected.
- ❖ If the train cannot be stopped, he shall at once advise with Private number the Station in advance to stop such train and examine it.
- ❖ At Road-side Stations where there are no Train examining staff, TXR staff should be informed through Control.
- ❖ Water must not be poured on the Hot Axle but wait until it gets cooled by itself.
- ❖ If there is fire on the hot box then fire extinguisher, sand, soil can be used to extinguish the fire.

(Ref: SR 4.29).



Test your knowledge

	MCQ
1.	दुर्घटना अभ्यास हर महीने में एक बार आयोजित किया जाना चाहिए, यदि उस अवधि के दौरान कोई वास्तविक दुर्घटना नहीं होती है? Accident drills should be conducted once in months, if no actual accident occurs within that period? A. 4 months B. 3 months C. 6 months D. 12 months
2.	निम्नलिखित में से कौन सा माल प्रकार का लोको नहीं है Out of the following which is not a goods type of loco A. WAP5 B. WAG7 C. WDG4 D. WDM3
3.	निम्नलिखित में से कौन सा मार्शलिंग यार्ड का प्रकार नहीं है? Which of the following is not a type of marshalling yard? A. Flat yard B. Coaching yard C. Gravity yard D. Hump yard
4.	जब भी कोई नया सिग्नल लगाया जाता है या सिग्नल के स्थान और/या प्रकार में परिवर्तन होता है, तो सिग्नल लगाने या स्थान परिवर्तन की तारीख से _____ महीने की अवधि के लिए सतर्कता आदेश जारी किए जाएंगे। Whenever any new signal is erected or there is a change in the location and / or type of signal, Caution orders shall be issued for a period of _____ months from the date of erection of signal or change of location. A. 01 B. 02 C. 03 D. 06

5. शरीर पर क्षैतिज रूप से श्वेत प्रकाश लहराना हिंसक रूप से संकेत देता है
Waving a White Light horizontally across the body violently indicates
A. Proceed B. Proceed with caution
C. Stop Dead D. None of the above
6. निम्नलिखित में से कौन 'कार्यवाही करने का प्राधिकरण' नहीं है?
Which of the following is not an 'Authority to Proceed'?"
A. T/A - 602 B. T/C - 602
C. T/F - 602 D. T/G - 602
7. निम्नलिखित में से कौन सा संकेत कभी भी अकेले किसी पोस्ट पर नहीं रखा जाता है?
Which of the following signal is never placed alone on a post.
A. Calling-On signal C. Shunt Signal
B. Repeating Signal D. Warner Signal
8. दोषपूर्ण सिग्नल को पास करने के लिए अग्रिम प्राधिकरण
Advance Authority To Pass Defective Signals
A. T/369(3b) B. T/369(1)
C. T/409 D. None of these.
9. आई.बी.पी. _____ अनुभाग में प्रदान किया जा सकता है।
IBP may be provided in _____ section.
A. Single B. Double
C. Multiple D. Any of these.
10. लाइन क्लियर प्राइवेट नंबर प्राप्त करने के बाद दोषपूर्ण आईबीपी को पास करते समय लोको पायलट द्वारा उपयोग किया जाने वाला सीटी कोड _____ है।
Whistle code used by Loco Pilot at the time of passing defective IBP after getting Line clear private number is _____ |
A. One long B. short long short
C. long short long D. Two long

Answer

Answer:

1. B 2. A 3. B 4. C 5. C
6. C 7. A 8. B 9. D 10. B

Emergency Operation

Operations	Use
❖ EGGN (in Panel/VDU) ❖ SCB (in RRI)	• Use for put back a signal in case of emergency only.
❖ EUYN (in Panel/VDU) ❖ RCB (in RRI)	• Use for releasing locked route, when concerned track circuit/s not failed.
❖ EOVN (in Panel/VDU) ❖ OCB (in RRI)	• Use to release Signal Overlap in case the overlap of a Starter Signal will not release automatically after 120 seconds after complete arrival of a train clearing back locked track circuit.
❖ RRBUN (in Panel/VDU)	• Super emergency route release is used for releasing a signal route when a signal/part route does not get released after the passage of a train due to concerned track circuit/s failure or when route is not released by the normal cancellation or any other reason.
❖ ECB (in RRI)	• This button allows the operator to immediately clear of individual route section of a signaled route and release signals, even if the route is already occupied or locked.
❖ EWN (in Panel/VDU) ❖ EPB (in RRI)	• Use to alter the point setting position after ensuring its physical clearance, in case of failure of point Zone track.
..... Continue to next page.	

Operations	Use
❖ COGGN (in Panel/VDU/RRI)	• Calling- "On" Signal is generally provided below the reception Signal or under special instructions below the departure signal except LSS and is used for ❖ drawing an incoming train within the Platform, or ❖ during the failure of concerned stop signal below which it is provided, or ❖ failure of track circuit/s except berthing track of concerned Stop Signal, or ❖ to received a train on an obstructed line, or ❖ to advancing a train upto next stop signal, or ❖ When direct taking off condition of the concerned stop signal is not complied or otherwise.
❖ CH (in Panel/VDU/RRI)	• When point is not operated by the Panel/VDU/RRI then Crank Handle Operation is required to operate point,.
❖ ECHR (EI/Panel/RRI)	• Emergency release of Crank Handle is to be done when point zone portion route is in 'locked' condition and the same point is required to be operated on emergency basis by the use of Crank Handle. When any point's 'Locked' indication in a signal route can not get released after completion of the signal movement or after route cancellation with the help of EUYN/RRBUN/ECB and the same point is required further for another signal movement, the following procedure shall be followed.

DUTIES OF RAILWAY OFFICIAL IN CASE OF ACCIDENT

A. Duties of Station Masters:- (Ref AM para 3.08)

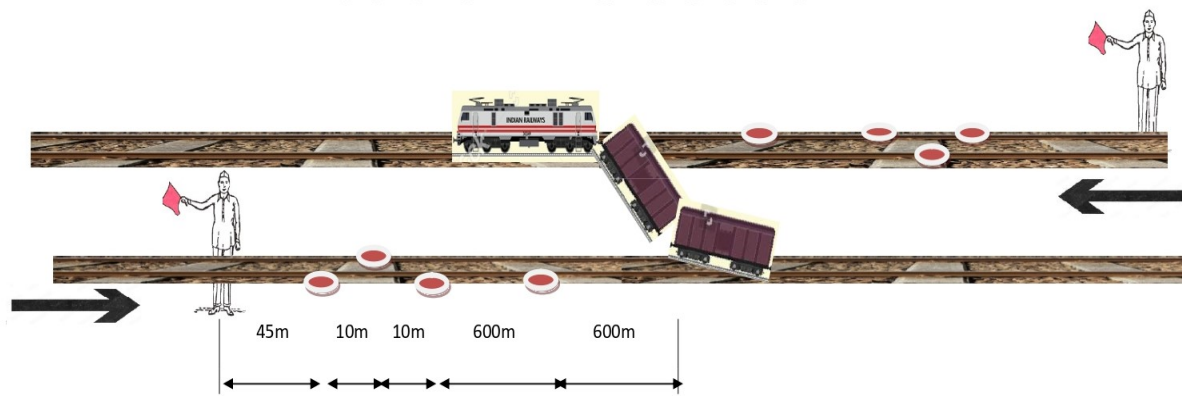
- (i) Ensure that no other train enters into the affected section.
- (ii) Advise the control immediately of the accident indicating the nature of medical aid and other assistance required.
- (iii) The Station Master should maintain a detailed log of all actions taken, timings, and communication made during the incident.
- (iv) Collect as many staff as possible & distribute the Arm-bands for identification of Railwaymen at site.
- (v) Assisting in rescue operation.
- (vi) Remain on duty at site until the Accident Manager permits them to return to Station.

B. Duties of Train Manager :- (Ref: AM para 3.02)

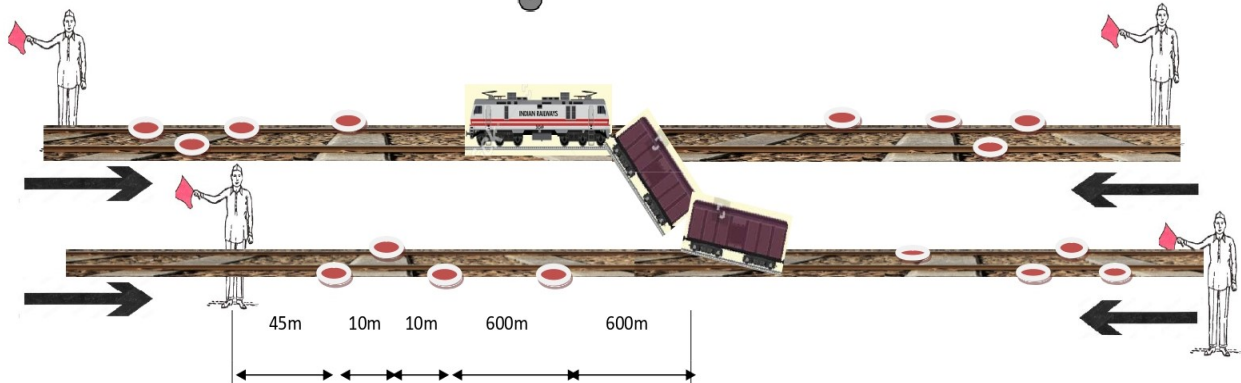
- (i) Send information through quickest means to Control/SMs on either side & note the time of accident.
- (ii) Arrange to protect adjacent line/lines, if necessary, and then the line on which the accident has taken place.
- (iii) On D/L or M/L section, if assistance is asked for, LP shall protect the train in front also.
- (iv) Take action to save lives, render first aid and other relief operations.
- (v) Preserve and safe-guard all clues indicating cause of accident.
- (vi) assist the Accident Manager in every possible way. He shall not leave the site of accident without the permission of the Accident Manager.

Placing of Detonators in Absolute Block System in Case of Obstruction

Double Line Section



Twin Single Line Section



Essential Disaster Equipments at Station



Jerrican



Stretcher



WheelChair



Fire extinguisher



First AID Box



Disaster management Board



Arm Band





Prepared by Aniruddha Nag (TI/Rules/ER)