कोल्ड वेदर पेट्रोलमेन के कर्तव्य और दायित्व

Duties and Responsibilities of Cold Weather Patrolman

A. Responsibilities of Cold Weather patrolman

1. General

The cold weather patrolling of track carried out during the period (in winter) when rail temperature is significantly lower than stress-free/ de-stressing temperature. Every Patrolman shall be responsible for maintenance and safety of track in every situation. They shall follow the instructions of their concerned higher authorities.

2. The patrolmen are provided with GPS tracker equipment. The patrolman must turn it on while patrolling the track. Switch it off after patrolling and put it on charging.

3. Knowledge of Rules and Signals

Every patrolman shall have the correct knowledge of hand and detonating signals and shall be conversant with the following rules:-

a) Hand Signals Rules

I. Knowledge and possession of hand signals

(1) Every railway servant connected with the movement of trains, shunting operations, maintenance of installations and works of any nature affecting safety of trains shall have:–

i. Correct knowledge of hand signals; and

ii. The requisite hand signals with him while on duty and keep them in good working order and ready for immediate use.

(2) Every railway servant shall see that the staff under him concerned with use of hand signals are adequately supplied with all necessary equipment for hand signaling and have a correct knowledge of their use.

(3) A red flag and a green flag by day or lamp, which is capable of showing red, green and white lights by night, shall constitute the requisite equipment for hand signaling.

II. Exhibition of hand signals

(1) All hand signals shall be exhibited by day by showing a flag or hand and by night by showing a light as prescribed in these rules.

(2) During day a flag or flags shall normally be used as hand signals. Hands shall be used in emergencies only when flags are not available.

(3) During night a hand signal shall normally be given by showing a red or green light. A white light waved violently shall be used as a Stop signal only when the red light is not available.

(4) Red or green light shall be either a static or flashing type.

(5) The signals to be used to warn the incoming train of an obstruction shall be a red flashing hand signal lamp at night or a red flag during day.

III. Stop hand Signal

(1) Indication: Stop dead

(2) How given by day:

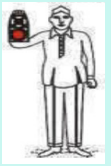
By showing a red flag or by raising both arms with hands above the head as illustrated below:-





(3) How given by night:

By showing a red light or by violently waving a white light or horizontally across the body of the person showing the signal as illustrated below:-





IV. Proceed hand signal

(1) Indication: Proceed

(2) How given by day:

By holding a green flag or by holding one arm steadily as illustrated.





(3) How given by night:

By holding a green light steadily as illustrated:-



V. Proceed with caution hand signal

(1) Indication: Proceed slowly reducing speed further if the signal is given at a progressively slower rate.

(2) How given by day:

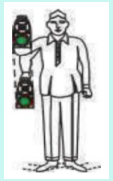
By waving a green flag vertically up and down or by waving one arm in a similar manner as illustrated below:-





(3) How given by night:

By waving a green light vertically up and down as illustrated:-



b) Detonating Signals Rules

I. Description of detonating signals

Detonating signals, otherwise known as detonators or fog signals, are appliances which are fixed on the rails and when an engine, a vehicle passes over them, they explode with a loud report so as to attract the attention of the Loco Pilot.

II. Use of Detonators

(1) The staff in possession of detonators shall not make any improper use of them.

(2) Life of Detonators:-

The normal life of detonators is five years.

(3) Method of using detonators

i. A detonator when required to be used shall be placed on the rail with the label or brand facing upwards and shall be fixed to the rail by bending the clasps around the head of the rail.



ii. Detonators should not be placed on rail joint and sleeper spacing, but should be kept on the rail where there is sleeper below.

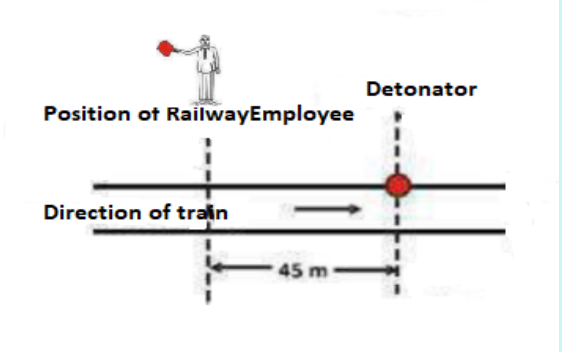
(4) Placing of detonators in case of obstruction

i. 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 600 metres from the obstruction and place on the line one detonator and then proceed to a point 1200 metres from the obstruction and place on the line three detonators, about 10 metres apart from each other.

ii. 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.

(5) Safety range from detonators

When a railway servant has placed one or more detonators on the line, he must withdraw beyond the safety radius of **45 meter** from the detonator or detonators before they are exploded by an approaching engine or train.



4. Duty for securing safety

a) Every railway servant shall see that–

I. Every exertion is made for ensuring the safety of the public.

II. Promptly report to his superior any occurrence affecting the safe or proper working of the railway which may come to his notice, and render on demand all

possible assistance in the case of an accident or obstruction.

b) Every railway servant who observes that–

I. Any obstruction, failure or threatened failure of any part of the way or works,

II. Anything wrong with a train, or any unusual circumstances likely to interfere with the safe running of trains, or the safety of the public.

III. Shall take immediate steps, such as the circumstances of the case may demand, to prevent accident; and where necessary, advise the nearest Station Master by the quickest possible means.

IV. In the case of a train having parted, he shall not show a Stop hand signal but shall endeavor to attract the attention of the Loco Pilot or Guard shouting, gesticulating or other means.

V. Any railway servant observing a hot axle on a running train is bound to do everything in his power to stop the train and warn the train staff by showing a danger signal.

c) Action to be taken where sabotage is suspected.

As soon as he observe any sabotage or likely sabotage, bomb blast explosion etc. to the track, bridges or other fixed installation, immediately he will protect the track and inform to nearest Station Master.

B. Equipments of Cold weather Patrolman

1. 10 fog signals in a tin case
2. Two tri-colour hand signal lamps/ Rechargeable LED torch
3. One match box
4. Two red flags and one green flag
5. One three-cell electric torch
6. One staff
7. Number plate
8. Spanner
9. Protective clothing according to local dress regulations including industrial safety shoe / Gum boots, Safety jacket, Rain coat, Helmet with Head light.
10. Patrol Charts.

C. Duties of Cold weather Patrolman

The duties of a Patrolman undertaking cold weather patrolling are as follows–

1. Patrol the track strictly as per patrolling chart.
2. Each Patrolman will have a Patrol Book, which will be exchanged with the neighboring/nearby Patrolman and whenever the Patrolman reaches the station as per the chart, a portion of the book will be signed by the ASM on duty.
3. Protect the track at the site of weld/rail fractures, or excessive gaps at SEJ, or shearing/snapping of bolts and report to nearest Station Master, JE/SSE/P.Way.
4. On single line walk over the beat slowly along one rail in one direction and on the other rail in the return direction. On double line, repeat this procedure alternately on UP and DN tracks.
5. Be vigilant and look out for rail/ weld failure, or excessive gaps at SEJ, or shearing/snapping of bolts etc.
6. In case it is noticed that a rail/weld failure has occurred or gap at SEJ becomes more than the designed maximum gap, the patrolman will take immediate action to suspend the traffic and protect the line. After protecting the track, the patrolman will arrange to report to Keyman/ Gangmate, JE/SSE/P.Way, and Station Master of adjacent station.

7. Action to be taken in case of Rail fractures/ Weld failures

It is of Paramount importance that whenever a fracture of a rail/welded joint is noticed, immediate action is taken to restore the track, if necessary with restricted speed, with the least possible delay.

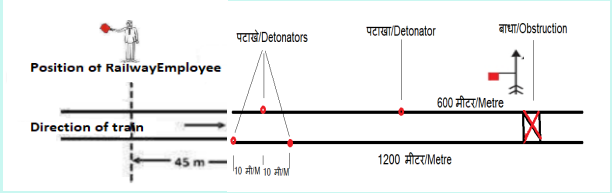
a) Protection of Line

I. The Patrolman, as soon as he notices the rail fracture/weld failure should first protect the track. He should also send information to the JE/SSE (P.Way) and the Station Master of the nearest station.

II. Temporary Signals in Emergency

(1) Whenever in consequence of an obstruction of a line or for any other

reason it is necessary for a railway servant to stop approaching train he shall plant a danger signal at the spot and proceed with all haste in the direction of an approaching train with a danger signal (red flag by day and red light by night) to a point 600 metres from the obstruction and place one detonator on the line after which he shall proceed further for not less than 1200 metres from the obstruction and place three detonators on the line 10 metres apart. He should then take a stand at a place not less than 45metres from there, from where he can obtain a good view of an approaching train and continue to exhibit the danger signal, until recalled. If recalled, he shall leave on the line three detonators and on his way back pick up the intermediate detonator continuing to show the danger signal.



(2) On single line the line must be protected on both side of obstruction.

b) Emergency repairs

The fractured rails shall be joined by using the Special 1 m long fishplates with screw clamps and joggled fishplates with bolted clamps for fractures at welded joints with or without insertion of closure rail piece as per site conditions and feasibility.

I. If the fracture is with a gap of less than 30 mm, the fractured rail ends should be joined with fish plates and clamps.

II. When the fracture gap is more than 30 mm, a closure of appropriate length should be used, and fish plated with clamps.

III. In cases where a small portion or piece of rail has come off or in the case of multiple fractures, the rail has to be changed before allowing traffic.

IV. In the case of weld failure, joggle fishplates and clamps should be used.

c) Restoration of traffic

After emergency repairs are completed the traffic may then be resumed by a Mate/ Keyman at prescribed speed, until the Permanent Way Official replaces the rail.

Trackman deputed as patrolman (Railway Employee) may also pass only the first train which is stopped by him in the course of protection of track after detecting rail/ weld failure and after carrying out the emergency repairs, if he feels confident of passing the train;

Speed for **First train STOP DEAD & Proceed with 10 kmph.**

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हमारा उद्देश्य /OUR OBJECTIVE

To upgrade maintenance technologies and methodologies and achieve improvements in productivity and performance of all railway assets and manpower which inter alia would cover reliability, availability for use, utilisation and efficiency.

सत्यमेव जयते

भारत सरकार - GOVERNMENT OF INDIA
रेल मंत्रालय - MINISTRY OF RAILWAYS

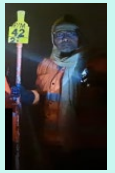
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(End user – Cold weather patrolman)



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