Responsibilities and Duties of Hot Weather Patrolman

A. Responsibilities of Hot Weather Patrolman

1. General

The Hot weather patrolling of LWR/CWR track shall be carried out during hot days in summer when rail temperature rises above:-

(a) T_d + 25° C on PSC sleeper track with sleeper density 1540 nos. Per km and above.

(b) T_d + 20° C on PSC sleeper track with sleeper density less than 1540 nos. Per km

Every Patrolman shall be responsible for 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.

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 concerned are adequately supplied with all necessary equipment for hand signaling and have a correct knowledge of their use.

II. Exhibition of hand signals

(1) All hand signals shall be exhibited by day by showing a flag or hand.

(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) Signals to warn incoming train of danger ahead

The signals to be used to warn the incoming train of an obstruction shall be 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:-





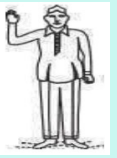
IV. Proceed hand signal

(1) Indication: Proceed

(2) How given by day:

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





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:-





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. Storage of Detonators

(1) Detonators must be carefully handled as they are liable to explode if roughly handled.

(2) Detonators shall be kept in Tin cases specially supplied and they shall be stored in dry places and not left in contact with the brick walls, damp wood, chloride of lime or other disinfectants, nor exposed to dampness or steam or other vapours.

(3) The month and year of manufacture is shown on the label outside each case and is also stamped on each detonator/detonators must be used in the order of the dates stamped on them, those of the oldest date being always used first.

To facilitate ready withdrawal in this sequence, they should also be stored accordingly.

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.



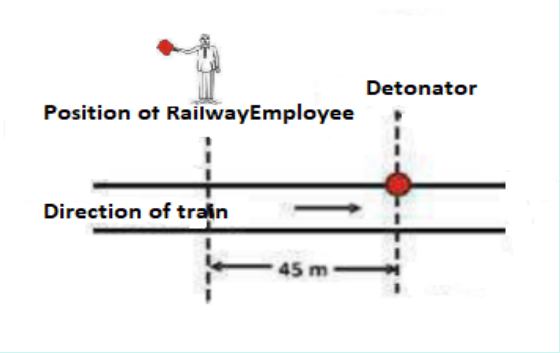
(4) Placing of detonators in case of obstruction

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 three detonators on the line 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.

I. 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.

II. As instructed he will patrol over the length affected in case of any emergency.

B. Equipments of Hot Weather Patrolman

1. HS Flags (Red) -2
2. Staff for Flags -1
3. Detonators -10
4. Canne-a-boule fitted with rubber ball -1

C. Duties of Hot weather Patrolman

It is of supreme importance that patrolmen thoroughly understand what they have to do in the event of emergency.

In the event of an emergency the patrolmen should devote their whole time and energy to the protection of the line and summoning of assistance. Having protected the line and after arriving the assistance, they should resume their patrolling.

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

1. Patrol the track during the hottest part of the day, to look for prominent kinks, incipient buckles or tendency towards buckling.
2. 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.
3. On single line walk over his beat slowly over one rail on sleeper non gauge side of rail in one direction and on the other rail in the return direction. On double lines, repeat this procedure alternately on UP and DN tracks.
4. Be vigilant and look out for kinks in the rail especially during the hottest part of the days. When a kink is observed, immediately examine at least 100 sleepers ahead and in the rear of the

kink for any floating/misaligned condition of track.

5. 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.

6. Protection of Line

a) 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.

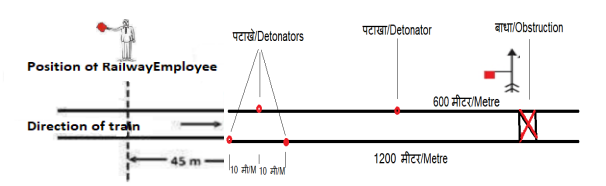
The Patrolman will take immediate steps to protect the affected portion by display of hand signals. After protecting the track, the patrolman will arrange to advise the Gangmate, JE/SSE/P.Way of his apprehension of a buckle/actual buckle.

b) Temporary Signals in Emergency

I. 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) 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 45 metres 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.

II. On single line the line must be protected on both side of obstruction.

III. Where there are adjacent lines and it is necessary to protect such lines, action should be taken on each such line in a similar manner.



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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

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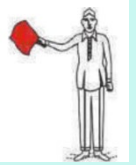
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ग्रीष्मऋतु पेट्रोलमेन के दायित्व और कर्तव्य

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(End user – Hot weather patrolman)



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