

दक्षिण पूर्व रेलवे  
South Eastern Railway



प्रधान मुख्य संरक्षा अधिकारी कार्यालय  
Office of the Principal Chief Safety Officer  
गार्डनरीच, कोलकाता / Garden Reach, Kolkata -43

संख्या/ No. SFY/ Safety Circular

दिनांक/ Dated: 29.10.2020

**Safety Circular No: 2/2020**

**Sub: Train operation during Foggy and Inclement weather--Precautions.**

**Ref: Railway Board Letter No. 98/Safety(A&R)/19/16 Dt: 22.11.2017, 15.03.2018, 23.10.2018, 25.10.2019 & 14.10.2020.**

In lines with Railway Board's instructions with under reference, following precautions/ preparation to be done for train operation during foggy/ inclement weather are re-iterated for implementation and strict compliance:

**A. Infrastructure/ Additional/ Alternations:**

Provision of Fog Safe Device: -

Reliable Fog Safe Devices, if available, may be provided to the Loco Pilots in all Locomotives running in affected areas during fog. Placement of detonators under conditions as prescribed in Para E(i) shall be dispensed with, where reliable Fog Safe Device is available and is in working order.

**B. Works to be completed before foggy weather to strengthen Rail Infrastructure:**

- (i) Adequate supply of Detonators to all concerned.
- (ii) Lime marking across the track at the Sighting Board (or at Distant Signal in case of Double Distant Signal) must be done.
- (iii) All Signal Sighting Boards, Whistle Boards, Lifting Barriers, Fog Signal Posts and busy vulnerable Level Crossing Gates which are accident prone should either be painted or provided with yellow/black luminous strips. The work of repainting for their proper visibility should be completed before onset of winter / foggy season.
- (iv) The Existing SLRs with Red Light should also be modified & fixed with LED based flasher tail lights. This will be very important step to ensure safety in foggy weather.
- (v) When the train is held up in Automatic territory (on double and multiple section) in abnormal situation including fog, the Guard will put the LED light to on position. This will be in addition to Flashing Red Tail Lamp.
- (vi) It should be ensured that retro reflective strip in Sigma shapes for identification of Stop Signal be provided as per existing instructions.

**C. PME & RC:**

PME/Refresher Training and other Safety/Promotional Courses of LP/ALP/MM & Guards etc. who become due between 15<sup>th</sup> December and 31<sup>st</sup> January should be completed by 15<sup>th</sup> December.

#### **D. (a) Visibility Test Object (VTO):**

As per SR 3.61.01 (a), the Visibility Test Object shall be provided at stations where there is requirement of placement of detonators during foggy weather condition, at a distance of **180 meters** from a nominated location where the SM shall normally stand to see. No VTO & Fog Signal Post are to be provided at stations with Double Distant Signal, Automatic Signal territory & stations which don't qualify for placement of detonator.

#### **(b) Placement of Detonators:**

One detonator shall be placed at a distance of **270 meters** outside from the first stop signal of the station and another detonator shall be placed at **10 meters** from the first one, in the direction of an approaching train to inform in advance the location of the signal to the Loco Pilot of an approaching train. SR 3.61.01(a).

**Note:** *Fog Signal Posts (FSP) shall be erected at 270 meters from the First Stop Signal at each end of the station, where detonators are required to be placed during foggy weather conditions to indicate the place where the first detonator shall be placed.*

#### **E. Necessity for Placement of Detonators:**

##### **(i) Where it is necessary to Place Detonators:**

At all 'B', 'C' & Special class stations in Multi Aspect Signaling (with **Single Distant**) SR 3.61.01.

##### **(ii) Where it is not necessary to Place Detonators: SR 3.61.01**

It is not necessary to place detonators to indicate "location of a Stop Signal" to the Loco Pilot in following circumstances.

- (a) In sections where a reliable Fog Safe Device has been provided on Locomotives.
- (b) Where adequate pre-warning is provided; i.e. at stations where double distant signals are provided;
- (c) Where maximum speed allowed in the station section is up to 15 kmph even at stations where pre-warning signal is not available, but a Warning Board exists;
- (d) Where speed of the section is less than 50 KMPH (but more than 15 kmph) and the first signal of a Station is not a stop signal;
- (e) In Automatic Signalling territory;
- (f) On Gate Signal;
- (g) On Departure Signals;
- (h) At the site(s) of Temporary Speed Restriction imposed due to maintenance of Track/OHE/Signal.

#### **F. Precautions to be taken by SM:**

When the adequacy of signal visibility is doubtful due to foggy weather conditions, the ASM/SM shall: -

- (i) Ensure that VTO is lit and observe it before granting Line Clear to a train.
- (ii) In case prescribed VTO is not visible take action as under:
  - Depute fog signalman with detonators to place detonators.

- (8)
- Engineering Department will make all efforts to provide fog signalmen.
  - No shunting should be carried out on non-isolated lines after granting Line Clear to an approaching train.
  - Provisions given as per GR 5.18 to be followed strictly and no train shall be advanced beyond the Starter or Intermediate Starter Signal where these exists or up to the Advance Starter at stations which do not have track circuiting in this zone.

**G. Precautions to be taken by Loco Pilot: Ref: SR 3.78.04**

- (i) When the Loco Pilot in his judgment feels that visibility is restricted due to fog, he shall run at a speed at which he controls the train so as to be prepared to stop short any obstruction; this speed shall in any case not be more than **60 kmph**. The speed of trains may be enhanced to 75 kmph provided there is fog safe device in the loco & is subject to the judgement of the Loco Pilot.
- (ii) Loco Pilot to whistle frequently to warn the gateman (where provided) and road users of an approaching train at level crossings.
- (iii) **In Absolute Block System**- the speed should not exceed **60 kmph** as detailed in (i) above.
- (iv) **In Automatic Block Territory** - the speed will be subject to the judgment of the Loco Pilot as mentioned in item (i) above and shall not exceed as under.
  - a. After passing Automatic stop signal at '**Green**', the speed shall not exceed **60Kmph**.
  - b. After passing an Automatic stop signal at '**Double Yellow**', the speed shall not exceed **30Kmph**.
  - c. After passing an Automatic stop signal at '**Yellow**', the Loco Pilot shall run at a further **restricted speed** so as to be able to stop at the next stop signal.
  - d. After passing an Automatic Stop Signal at '**On**' (Red), the speed shall not exceed **10 kmph** & maintains a reasonable distance at which he shall be able to observe the flashing tail lamp of the train ahead or the obstruction and able to stop adequately short of the train or obstruction. Ref:GR 9.02,01
  - e. If on account of curvature of the line, fog etc. the line ahead cannot be seen clearly, the speed shall not exceed to **10 kmph**.

**NB:** Speed may be enhanced to **75 kmph** provided that there is fog safe device in the loco and is subject to judgement of the Loco Pilot. (Refer GR A/C No-113 Vide No OPS/50/G&SR/A&C/Pt.IV Dt: 14.05.2018.).

**Note:**

- (i) In case fog safe device is not available in locomotives or the device fails enroute the maximum speed of 75 kmph as indicated above shall be reduced to 60 kmph or less subject to judgement of Loco Pilot.
- (ii) As provided under GR 4.16(1) (b) a red tail lamp of approved design displaying a flashing red light, during both day or night, to indicate last vehicle check device in foggy weather should be provided and lit on the last vehicle.
- (iii) First Stop Signal location chart of every station be provided to each Loco Pilot either as an easy to carry Card or in the Working Time Table.
- (iv) Prevailing FOG situation should be advised to Crew and Guard in lobby during "Sign ON".

It should be ensured that the staff be advised and counseled regarding provisions in G&SRs & Railway Board Letter before onset Fog. Each and every crew is to be imparted necessary training for up to two days about the systems of working of trains during fog. This process be completed by 1<sup>st</sup> December every year positively.

**Note:** These instructions are reiterated in conformity with the rules of G&SR and Railway Board instructions and can't in any way supersede them. In case of any conflict the provision of G&SR and Railway Board instructions will prevail.

Ref: GR 3.60 to 3.64, SR 3.61.01, SR 3.78.04, GR 4.16(1) (b), GR 5.18, GR 9.02.01, GR A/C No-113, Dt: 14.05.2018, RB L. No 98/Safety(A&R)/19/16 Dt: 25.10.2019

(मुदीप मुखोपाध्याय /Sudip Mukhopadhyay)

प्रधान मुख्य संरक्षा अधिकारी/ Principal Chief Safety Officer

प्रतिलिपि सूचनार्थ एवं आवश्यक कार्यवाही के लिए:

1. Secy to GM – for kind information of GM.
2. Secretary to AGM- for kind information of AGM.
3. PCEE, PCME, PCOM, PCE, PCSTE/ GRC
4. DRM/ ADA, CKP, KGP & RNC
5. Sr. DSO/ ADA, CKP, KGP & RNC