दक्षिण पूर्व रेलवे
South Eastern Railway

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

संख्या/ No. SFY/Safety Circular / 2024 दिनांक/ Dated: 23.10.2024

Safety Circular No: 7/2024

Sub: Train operation during Foggy and Inclement weather - Precautions.
Ref: Railway Board's Letter No. 98/Safety (A&R)/19/16 of 18.10.2024.

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

A. Infrastructure/ Additional / Alternations:

(i) Provision of Fog Safe Devices: - Provision of reliable Fog Safe Devices should be provided to the Loco Pilots in all Trains running in affected areas during fog. Placement of detonators under conditions as prescribed in Para E (ii) of this circular shall be dispensed with, where reliable Fog Safe Device is available and is in working order.

(ii) Modification of Automatic Signalling System: - Introduction of modified Automatic Signalling system (wherever applicable) as per GR 9.01 (3) & (4) & GR 9.03 (3) & (4) and GR 5.18 to be followed strictly.

B. Works to be completed before onset of foggy weather, to strengthen Rail Infrastructure:

(i) Adequate supply of Detonators to be ensured.
(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, Fog Signal Posts and busy vulnerable Level Crossing Gates 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) Lifting barriers and busy level crossings, where necessary, to be provided with Yellow/Black luminous indication strips.
(v) The new, Existing SLRs are already being fitted with LEDs based flasher tail light, therefore, the existing SLRs with fixed Red Light should also be modified & fixed with LED lights. This will be very important step to ensure safety in foggy weather. This work should be undertaken on war footing basis. When a Train is held-up in Automatic territory (on double and multiple section) in abnormal situations including fog, the Guard will put the LED light to 'ON' Positon. This will be in addition to flashing Red tail light.
(vi) It should be ensured that retro reflective strip in Sigma shapes for identification of Stop Signal be provided as per existing instructions.

C. The following points are to be kept in mind during operations of train in foggy weather:

(i) Reduced movements during fog: - Rationalization of movements in coaching yards, approach to terminals and at / near terminals etc. has to be done to reduce pressure on congested areas. This may be achieved by reduction in loco changes, reduced shunting etc. and cancellation of trains. 20% reduction in movements during the fog has to be ensured i.e. by reduced movement of locos from and to shed, shunting in major yards etc. and mainly by cancellation of trains – Mail/Express and passenger trains running in and via Delhi area as also up to an equal number, also in other fog affected sections (other than the trains passing via Delhi area) to be proposed to be cancelled. A review be done by all Zonal Railways with mutual consultation to identify which Mail/Express and passenger trains are to be cancelled and proposal be sent to the coaching directorate, Railway Board. This will also help in tackling extra requirements of Loco Pilots/Assistant Loco pilots and TMs for changing in route on section where there is abnormal increase in duty hours of Crew. This will also increase availability of spare rakes to cater to late running of trains.

(ii) PME/Refresher training and other safety/ promotional courses of Loco pilot / Assistant Loco pilot and Guards in ZRTIs/STCs, etc. who become due between 15th December and 31st January should be completed by 15th December.

(iii) In view of increased hours on road, infrastructure at new/additional crew changing locations may be created. Simultaneously, the Loco/Crews/Rake links be reviewed during the period of fog. All crews (Loco Pilots, Assistant Loco Pilots and TMs) on stationary duties should be utilised for Train working specially during fog.

(iv) The instructions on all matters including cancellation of trains be made applicable from 20th December to 31st January, subject to the provisions if the fog sets in early before 20th December and continues beyond 31st January respectably as the case may be.

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

(i) The check of adequacy of visibility through the VTO is to guide the SM/ASM, so as, he can decide when detonators are to be placed to warn the Loco pilot of the location of an approach stop signal.

(ii) The VTO may be the light (Or arm by day) of a Starter Signal (where exist) or the back light of the Home Signal etc. as define in GR 3.61/(2)(b). In such cases, the VTO is normally located 300-350 meters at a place from where it is to be seen by the SM. During Foggy or tempestuous weather, when such a VTO is not seen by the SM, it shall determine that fog has set in.

Note: - The visibility test object to be defined in the SWR of Stations, which qualify for placement of detonators, should be on each end of a Station (for Junction stations there may be more than two VTOs).

(iii) Prescribed VTO for Multiple Aspect Colour Light Signalling: -

(a) Stations with MACLs shall have a Prescribed VTO located at a distance of 180 meters from a nominated location, where the SM shall stand.

(b) When a prescribed VTO is not visible from 180 mts or more during dense fog, the SM shall not use his discretion as per GR 3.61 (2)(a), but will arrange to place the detonators to warn the Loco pilot, unless specified otherwise in these instructions.

Note: - There should be one visible test post in MACLS territory (at stations which qualify for placement of detonators) located at a distance of 180 meters from the place where the SM shall normally stand to see the prescribed VTO.

(iv) When the VTO (or the prescribed VTO) provided under conditions laid down is not visible to the Station Master, he shall take action as under.

(a) Ensure that Signals are lit during night as well as during day, in Semaphore Signalling sections when visibility is impaired due to Fog and VTO is also lit.

(b) Observe the VTO before granting line clear to a train.

(c) In case prescribed VTO is not visible, take action as under

- Depute fog signal man with detonators to place detonators in situations prescribed under para (E)(ii) at 270-280 meters from the first stop signal to inform in advance the location of this Signals to the Loco Pilot of the approaching train.
- Engineering department will make all efforts to provide fog signal man.
- No shunting should be carried out on non-isolated lines after granting line clear to an approaching train.

(d) Provisions given as per GR 5.18 to be followed strictly and no train to be advanced beyond the Starter, or beyond intermediate starter signal where these exists, up to the Advance starter at stations, which do not have track circuiting in this zone.

Necessity of Placement of Detonators:

(i) **Where not necessary to Place Detonators:**

It is not necessary to place detonators to indicate "location of a Stop Signal" to the Loco Pilot in the 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 Signals;

(g) On Departure Signals;

(h) At the site(s) of Temporary Speed Restriction imposed due to maintenance of Track/OHE/Signal.

(ii) **Where it is necessary to Place Detonators:**

The detonators should be placed at 270 meters short of the First Stop Signal at Stations detailed as under: -

at 'A' Class stations where warner exists – detonators to be placed short of Home Signal and not the Warner.

At 'B' class stations equipped with lower quadrant signals – detonators to be placed short of outer signal.
In Multiple Aspects Signalling, where Single Distant Signal is provided – detonators to be placed short of Home Signal.
Note: - The Fog Signal post will be provided only at Stations where there may be requirement for placing detonators. Such post may, therefore, be shifted suitably based on the above mentioned position(s).

F. Precautions by Loco Pilot:

The Loco Pilot shall take action in regard to speed of the train during fog as under: -

(i) During fog, when the Loco Pilot in his judgement feels that visibility is restricted due to fog, he shall run at a speed at which he can control the train so as to be prepared to stop short of any obstructions; this speed shall in any case not be more than 75 Kmph.

(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 shouldn't exceed 75 Kmph as detailed at item (i) above.

(iv) In automatic block territory, speed will be subject to be judgement 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 not to exceed 75 Kmph.

(b) After passing an Automatic Stop Signal at 'Double Yellow', the speed not to exceed 30 Kmph.

(c) After passing an Automatic Stop Signal at 'Yellow', the Loco Pilot to run at a further restricted speed so as to be prepared to stop at the next Stop Signal.

Note (i) in case fog safe device is not available in Locomotives or the device fails en-route, 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) red tail lamp of approved design displaying a flashing red light, during 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 Kilometre 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 counselled regarding provisions in G&SRs and Railway Board Letter before onset of 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 1st December every year positively.

Note: (i) *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.*

(ii) In case of any further instructions received from Railway Board, the same shall be intimated subsequently.

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.

23/10

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मुख्य संरक्षा अधिकारी/ Chief Safety Officer

प्रतिलिपि सूचनार्थ एवं आवश्यक कार्यवाही के लिए:

(v) Secy. to GM – for kind information of GM/SER.

(vi) Secretary to AGM- for kind information of AGM/SER.

(vii) PCEE, PCME, PCOM, PCE & PCSTE/GRC.

(viii) DRM/ADA, CKP, KGP & RNC.

(ix) Sr. DSO/ADA, CKP, KGP & RNC.