

2004 SAFE Notice 017

Permanent

From Thursday 1 July 2004, until Friday 31 December 2004. This SAFE Notice contains the instructions issued in SAFE Notice 002 - 2004.

General Instructions

Location of embankment slip detectors and notice signs

[a]

The following table shows the location of all embankment slip detectors, their distance from Sydney, and between which locations the embankment slip detectors are located:

km's from Sydney	detector location
104.309 – 104.438	Dombarton – Summit Tank
123.231 – 123.550	Mount Murray – Robertson

Signs are provided on either side of each of the embankment slip sites, facing to Down and Up trains respectively.

Digitised-voice slip detectors

[b]

Digitised-voice slip detectors are provided to cover the portions of line from 123.231 kms to 123.550 kms in the Mount Murray – Robertson section.

These slip detectors apply to the movement of rail traffic in both the Down and the Up directions.

Drivers and Track Vehicle Operators approaching the slip site must have their 'Mountain' train radios switched on.

If the 'Mountain' train radio system is not working, the instructions as shown in clause [q] of this unit must be carried out.

A sign (with silver lettering on a blue background), inscribed "Slip area – Listen for radio message", is provided at the approaches to the slip sites in both the Down and the Up directions.

Radio messages

When a train is approaching the slip site, a message will be transmitted by the digitised-voice slip detector over the train radio. The transmission will advise the slip site name, the kilometrage, and the condition of the slip site. The message will be transmitted at least twice.

The message transmitted will be one of the following:

message	action for Drivers
"Slip site clear"	Drivers/Track Vehicle Operators may proceed normally
"Stop, stop,slip detected"	Drivers/Track Vehicle Operators must bring their train/vehicle to a stand before the slip site and request the Signaller to advise the Train Controller of the circumstances.

If a slip is detected when rail traffic is approaching the slip area, the Signaller must inform the track supervisor to inspect the line and establish if it is safe for traffic.

If a slip is detected and no rail traffic is in the vicinity of the slip area, a message will be transmitted to Wollongong signalbox. The message, “Slip detected, contact track inspector”, will be repeated at half-hourly intervals.

Radio message not received

A sign, inscribed “Slip area – If no radio message has been received by this point, stop train and contact Signaller”, is provided at the end of these slip sites.

If no message is received, the Driver/Track Vehicle Operator must stop the train/vehicle clear of the slip site, and then inspect the three green indicator lights enclosed in an SL-locked weatherproof box, located on the equipment hut.

Provided that all three green indicator lights are displayed, the Driver/Track Vehicle Operator must promptly advise Wollongong signalbox of the slip condition and may then proceed normally.

If any of the indicator lights is out, the Driver/Track Vehicle Operator must advise Wollongong signalbox that a slip has been detected.

The signaller & driver then must carry out the procedures as though they had received a slip detector message.

When a Driver/Track Vehicle Operator reports that no message has been received from the slip detector, the Signaller at Wollongong signalbox must instruct the Signals maintenance representative at Moss Vale to attend the slip site.

If the equipment is to be temporarily booked out of use, the Civil Engineering Manager must ensure that the two approaching signs are each covered with a sign, advising Drivers/Track Vehicle Operators that the equipment is out of use.

Location of embankment rock fall detectors and notice signs

[c]

The following table shows the location of all embankment rock fall detectors, their distance from Sydney, between which stations the embankment rock fall detectors are located, and the protecting signals for that rock fall detector:

km from Sydney	detector location	protecting signals	
		Down	Up
99.490	Summit Tank – Dombarton	WG1061 D	WG1058
99.129	Summit Tank – Dombarton	WG1061 D	WG1058

Signs are provided on either side of each of the embankment rock fall sites, facing to Down and Up trains respectively.

Signs are provided on the following signals:

- No. WG1058 Up home signal
- No. WG1061D Down home/starting signal.

Embankment rock fall detectors [d]

When an embankment rock fall occurs, Signal Nos. WG1058 and WG1061 D will be placed at stop.

Indicator lights are provided on the indicator diagram at Wollongong signalbox and the local control panel at Dombarton to show the condition of the rock fall detectors.

Responding to a warning from embankment rock fall detectors [e]

Each of the following conditions must be treated as an indication of track instability, and the instructions for protecting the affected site must be carried out by the Signaller:

- when a red embankment rock fall detector light is displayed
- when both detector lights are out and the Signals maintenance representative has not advised that an embankment rock fall detector(s) has been switched to the “override” position
- when the alarm sounds
- when there are conflicting indications between any two of the following:
 - the protecting signals on site
 - the signal repeater in the signalbox at Wollongong (or Dombarton, when switched in)
 - the warning equipment in the signalbox at Wollongong (or Dombarton, when switched in)
- when there is a failure of the signalling system at the local control panel at Dombarton.

When a Signaller at a remote signalbox detects any indication of track instability applicable to the location controlled by a local control panel that is switched in, the Signaller at the remote signalbox must immediately inform the Signaller at the local control panel of the circumstances.

Protecting the affected site and restoring the line for normal use [f]

When protecting the affected site

When the affected site has to be protected, the Signaller must:

- immediately ensure that all controlled signals on all lines in the affected area are at stop
- place and keep blocking facilities on these signals
- try to stop all rail traffic heading towards the obstruction by any means available
- inform the Train Controller of the circumstances
- inform the Civil maintenance representative(s) and request them to attend
- NOT allow rail traffic to proceed over the affected section until the line is certified safe for traffic by the Civil Engineering Manager (or an employee authorised by that officer).

When the Civil maintenance representatives are requested to attend, they must:

- inspect the site and determine the condition of the line and the rock fall detector(s)
- if the line is unsafe for traffic, inform the Signaller and take whatever steps are necessary to restore the line for normal use
- if the line is safe for traffic, inform the Signaller of the circumstances.

When the line has been certified safe for traffic

After the line has been certified safe for traffic, the Signals maintenance representative must reset embankment rock fall detector equipment to allow the protecting signals to clear.

When the Signaller has been assured by the local Civil Engineering Manager (or an employee authorised by that officer) that the line has been certified safe for traffic and the rock fall detecting equipment has been restored to normal, the Signaller may then clear all controlled signals to allow rail traffic to proceed.

If the immediate protecting signal(s) will not clear after the line has been certified safe for traffic, the Signaller must authorise the Driver/Track Vehicle Operator to pass the signal(s) at stop in accordance with the instructions on the plate attached to the signal.

When the line has been certified safe for traffic but the detector is found to be defective, the Civil maintenance representative must inform the Signaller that the detector is defective and then follow the instructions as shown at [h] in this unit.



EXCEPTION

As an exception to the Network Rules and Procedures, it will be permissible to issue a Track Occupancy Authority (TOA) with a train occupying the section in accordance with the instructions shown in clause [g] of this Local Appendix unit.

Responding to a warning from embankment slip or rock fall monitor (Dombarton – Summit Tank section) when a train is occupying the section [g]

Due to the lack of road access in the Dombarton – Summit Tank section, the following exception to the Network Rules and Procedures for Track Occupancy Authority is permitted. When an embankment slip or rockfall monitor is activated in the Dombarton – Summit Tank section and a train has already entered the section and cannot be safely removed, the Civil maintenance representative may be issued a Track Occupancy Authority for the section, provided the following conditions are met.

- The Driver of the train must be issued a CAN restraining the train until further notice.
- The Driver must secure the train and give an assurance to the Signaller not to move the train until the restraining CAN has been lifted and advice has been received that the line has been inspected and is safe for traffic.
- The Driver must be advised that a TOA will be issued for the section to enable an inspection to take place.
- The TOA issued to the Civil maintenance representative must also include a notation relating to the location of the restrained train along with the work to be performed.

When the section has been inspected and is fit for traffic, the TOA must be fulfilled before the restraining CAN is lifted.

Failure of embankment rock fall detectors [h]

If an embankment rock fall detector warning light or audible warning is activated and an inspection reveals that the rock fall detectors are defective and cannot be promptly repaired, the embankment rock fall detector(s) concerned must be booked out of use.

When the equipment is being booked out of use, the key-locked emergency switch must be placed in the “override” position. This will allow normal operation of the immediate protecting signals.

Booking the equipment temporarily out of use

[i]

When the equipment has to be temporarily booked out of use, the Civil and Signals maintenance representatives must:

- inform the Signaller of the circumstances
- if the embankment rock fall detector(s) cannot be promptly restored to normal operation, book the embankment rock fall detector(s) out of use on an Infrastructure Booking Authority
- if the equipment is to be booked out of use for an extended period of time, report the matter to the local Civil Engineering Manager and the local Signals Engineering Manager
- while the embankment rock fall detector(s) is booked out of use and the remaining rock fall detector is insufficient to monitor the site, arrange for a Civil maintenance representative to remain at the site and to continually monitor the site until the embankment rock fall detector(s) and associated equipment have been brought back into use or a supplementary monitoring system has been installed
- turn the key-locked emergency switch to the “override” position
- advise the Signaller of the action taken
- ensure that both embankment rock fall detector lights have gone out on the track indicator diagram.

Restoring the equipment to normal use

[j]

When the embankment rock fall detector(s) equipment has been repaired, the Civil maintenance representatives must:

- advise the Signaller that the equipment will be restored
- turn the key-locked emergency switch to the “normal” position
- book the embankment rock fall detector(s) back into use on the Infrastructure Booking Authority
- advise the Signaller of the action taken.

Routine maintenance, testing and adjustment of embankment rock fall detectors

[k]

All routine maintenance, testing and adjustment of embankment rock fall detectors must be conducted by nominated Civil maintenance representatives, who must inform the Signaller at the controlling signalbox before the work is carried out and when it is completed.

Ensuring that the Signaller is aware of the status of the equipment

[l]

Before the work commences, the Civil maintenance representatives must:

- inform the Signaller at the controlling signalbox that they are going to temporarily turn off the equipment
- turn the key-locked emergency switch to the “override” position.

When the work is completed and before leaving the rock fall site, the Civil maintenance representatives must:

- turn the key-locked emergency switch to the “normal” position
- inform the Signaller at the controlling signalbox that the equipment has been restored.

Temporarily disconnecting a rock fall detector(s) [m]

If an embankment rock fall detector is to be temporarily disconnected:

either the remaining embankment rock fall detector must be sufficient to monitor the condition of the track at that site

or, if the remaining embankment rock fall detector is insufficient to monitor that rock fall site, the local Civil Engineering Manager must arrange for a Civil maintenance representative to continually monitor the site until:

- either a supplementary monitoring system has been installed
- or the embankment rock fall detector that had been disconnected has been brought back into use.

The Civil maintenance representative will:

- disconnect the nominated embankment rock fall detector by turning the key on the override switch
- inform the Signaller at the controlling signalbox that the nominated embankment rock fall detector has been disconnected.

The Civil maintenance representative *must* compile an Infrastructure Booking Authority.

Disconnecting an embankment rock fall detector(s) [n]

The local Signals Engineering Manager will arrange for the Signals maintenance representative to carry out the necessary work to disconnect and remove the embankment rock fall detector in conjunction with the Civil engineering representative.

When authorised by the local Signals Engineering Manager, the Signals maintenance representative and the Civil engineering representative will:

- disconnect and remove the nominated embankment rock fall detector(s) by turning the key on the override switch
- compile and jointly sign the Infrastructure Booking Authority
- inform the Signaller at the controlling signalbox that the nominated embankment rock fall detector(s) has been permanently removed.

Axle counters [o]

Axle counting equipment is in use between Moss Vale and Dombarton.

Special two-way radios for trains travelling over the Moss Vale – Unanderra line [p]

Special frequency two-way radios are in use for all rail traffic travelling over the Moss Vale – Unanderra line. These are the only radios that can operate the base stations and the digitised slip site and rock fall detectors between Moss Vale and Unanderra, and be used to speak to Wollongong signalbox. These radios are known locally as “mountain” radios.

The “mountain” two-way radio system provides 98 % coverage over the line between Moss Vale and Unanderra, and will also operate through Illawarra Range No. 2 tunnel.

The radios can be used on the normal train radio system but, under no circumstances, are they to be used by rail traffic operating outside the Moss Vale – Port Kembla area.

These radios are marked with a white stripe on the front and are inscribed “Moss Vale – Port Kembla”.

Train crews and Track Vehicle Operators travelling over the Moss Vale – Unanderra line must obtain one radio per train/track vehicle consist at either Moss Vale or a nominated location in the Wollongong area.

A panel is provided in Wollongong signalbox to allow the Signaller on the south panel to select the base station that is closest to a train/track vehicle(s) travelling over a specific section of the line.



NOTE

Details of the instructions to be followed by Signallers when using the radio control panel are contained in the Centracom Operator’s Handbook that is provided in Wollongong signalbox.

The train crew/Track Vehicle Operator must contact the Signaller on the south panel at Wollongong signalbox before departing Moss Vale or the other nominated location to ensure that communication between the Signaller and the train crew is working.

Instructions to be followed when the mountain radio system fails [q]

When a train/track vehicle(s) is to travel between Moss Vale and Unanderra and the mountain radio system has failed, before the train/track vehicle(s) departs Inner Harbour, Port Kembla, Wollongong or Moss Vale, an alternate, effective form of communication must be identified and used and a CAN must be issued advising the Driver/Track Vehicle Operator that:

- the mountain radio system has failed
- the train/track vehicle(s) must be stopped at each slip site notice sign
- the Driver or the Qualified Worker must proceed to the slip site indicator box and check that all indicators are displaying the correct indication, before allowing the train to proceed over the slip site area
- the train/track vehicle(s) must travel at restricted speed between Dombarton and Summit Tank.

WARNING

If the Driver or the Qualified Worker cannot establish that the slip site indicators are displaying the correct indication, the Driver or the Qualified Worker must not proceed until it can be established that the line is safe for traffic.

Returned to Controlling Manager: Date : Signed:

(Cut along this line and forward the detached receipt to your Controlling Manager)

To Controlling Manager :

Received SAFE Notice No. 017 - 2004 Date : Signed:

Name: (print) Location:

(Controlling Manager to retain this Acknowledgment of Receipt of the SAFE Notice for record purposes for 3 months.)