Network Safeworking Rules and Procedures

Shunting and Marshalling

Rule Number: 4013



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Glossary for this Rule

Active Control Level Crossing	A road or pedestrian level crossing where warning equipment warns road users and pedestrians about approaching rail traffic by devices such as flashing lights or barriers.
Adjacent	Near to, close to, parallel to.
Advertise	To give written or electronic notice, usually in advance, of planned activities.
Airbrake	A braking system activated by change in air pressure.
Brookfield Rail	Brookfield Rail Pty. Ltd.
Catch Points	Single or double bladed points used to derail rail traffic that might enter or foul an adjacent running line.
Clear	A proceed indication displayed by a signal.
	In reference to a track circuit, block, section or signal route, the absence of rail traffic.
	In reference to track workers being clear of track.
Competent Worker	A worker certified as competent to carry out a relevant task.
Consist	A listed order of the vehicles arranged to make up a complete train.
Delegate	A Competent Worker authorised and designated to act in place of another.
Derail Device	A device intended to guide the wheels of rail traffic off the rails to protect a running line.
Effective Communication	The ability to successfully send, receive and understand information. The communication does not need to be continuous.
Fixed Signal	A signal that is located permanently near the line.
Handbrake	A device to secure a rail vehicle against movement.
Haul	To move rail traffic using a motive power source at the leading end.
Level Crossing	A location where the railway line and a road or pedestrian walkway cross paths on the same level (at grade).
Locomotive	Self-propelled, non-passenger-carrying railway vehicles used for hauling other (typically freight or passenger) rolling stock.
Main Line	The running line (not including Loops) normally used for running rail traffic through and between locations
Marshal	To arrange the order of vehicles in a train's consist.
Marshalling Irregularity	An irregularity in marshalling of a train, for example, not in accordance with the Dangerous Goods code.



Motive Power Unit	A rail vehicle used to provide the power to move itself or other vehicles.
Network	A combination of track and other associated infrastructure controlled by Brookfield Rail.
Network Controller	A Competent Worker who authorises and issues Occupancy Authorities, and works points, signals and other signalling equipment to manage routes for safe and efficient transit of rail traffic in the Network.
Obstruct	To make a line unsafe for the passage of rail traffic by the placing of tools, equipment or plant on the track.
Platform	A designated raised or level area, next to the line, that allows passengers to enter and leave trains.
Points	A track component consisting of paired pieces of tapered rail (blades) that can be moved and set to allow tracks to diverge or converge.
Propel	To push rail traffic away from the controlling locomotive or motive power unit.
Rail Traffic	Trains and track vehicle or vehicles travelling on the Network.
Rail Traffic Crew	Competent Workers responsible for the operation of the Motive Power Unit.
Restricted Speed	Restricted speed is a speed that allows rail traffic to stop short of an obstruction within half the distance of clear track that is visible ahead.
	Restricted speed must not exceed 25 km/h.
Route	The rail traffic path from one limit of authority to the next in the direction of travel.
Running Line	A line (other than a siding) that is used for through movement of rail traffic, not normally used for stabling rail vehicles.
Section	The line between the departure end station limit of one location and the arrival end station limit of another location. A section consists of one or more blocks.
Secure	To safeguard against accidental or unauthorised access or movement.
Shunt	To move rail traffic, rakes of vehicles, or vehicles on lines for purposes other than through movement.
Stable	To leave rail traffic unattended and secured, usually in a siding.
Station Limits	A defined operational limit of controlled locations or a running line.
Track	The combination of rails, rail connectors, sleepers, ballast, points and crossings.
Unauthorised	Not given approval, or exceeding the limit of authority.



1. Purpose

The purpose of this Rule is to prescribe the rules for safe *Shunting* and *Marshalling* in the *Network*.

2. General

Vehicles must not be *Shunted* in the *Network* without a *Motive Power Unit* attached (i.e. loose-*Shunted*).

2.1 Shunting

Shunting is moving Rail Traffic:

- to arrange or rearrange vehicle order in a Consist;
- to attach or detach vehicles from a Consist;
- to move vehicles in a yard or terminal; or
- to or from Running Lines, except for through Rail Traffic movements.

Shunting must be performed at a speed not exceeding restricted speed.

When performing *Shunting*, *Rail Traffic* may only be moved with the authority of the *Competent Worker* directing the *Shunting* operations.

Workers not involved in Shunting must stay Clear of moving vehicles.

2.2 Marshalling

Vehicles carrying Dangerous Goods must be *Marshalled* in accordance with the <u>Australian</u> Code for the Transport of Dangerous Goods by Road and Rail (ADG Code)©.



3. Planning Shunting



WARNING: If there are narrow *Track* clearances, *Competent Workers* performing *Shunting* must keep at least 2 metres between themselves and moving vehicles.

When planning Shunting the Competent Worker directing Shunting operations must:

- confer with the Network Controller and agree about planned movements;
- confer with the *Rail Traffic Crew* and other *Competent Workers* and agree about planned movements; and
- warn other *Competent Workers* of hazards presented by narrow *Track* clearances, such as:
 - gates and fences;
 - buildings;
 - Platforms; and
 - rail vehicles on Adjacent lines.

Competent Workers during Shunting operations must:

- if necessary, arrange for clearance of Fixed Signals;
- make sure that Routes are correctly set and safe for movements; and
- make sure that it is safe to Shunt.

Competent Workers must tell *Network Controller* when *Shunting* within their area of control has been completed.

3.1 Shunting Over Points

If the *Competent Worker* directing *Shunting* is not assured that the *Points* will hold their set positions, the *Points* must be *Secured* for the intended *Route*.



4. Directing Shunting

A Competent Worker directing Shunting must:

- make use of radio, hand or light signals to *Communicate Effectively* with the worker at the controls of the *Motive Power Unit*;
- be in a position where the safe progress of the movement and the line ahead can be seen; and
- closely accompany or ride in or on the leading vehicle in a position designated as safe by the operator and approved by *Brookfield Rail*.

Rail Traffic Crews and *Competent Workers* directing *Shunting* must communicate at agreed intervals.

If communication between a *Competent Worker* directing *Shunting* and the *Rail Traffic Crew* is interrupted, the *Rail Traffic Crew* must stop the movement immediately.

5. Running Lines

Shunting on Running Lines must be authorised by the Network Controller.

On *Running Lines*, vehicles being *Shunted* must be equipped with an operating continuous *Airbrake*.

Vehicles with defective brakes must be *Shunted* in accordance with *Brookfield Rail's* specific instructions (refer Rule <u>4003 Rail Traffic Integrity</u>).

6. Level Crossings

A Shunting movement over a Level Crossing must:

- be directed by a Competent Worker,
- not be commenced unless the *Level Crossing* is *Clear*, or road and pedestrian traffic has stopped; and
- not be commenced before it is safe to do so.

Where provided, Active Control Level Crossing equipment must be operated.

Shunted vehicles Hauled or Propelled across a Level Crossing must have the continuous Airbrake throughout the Consist.



NOTE: The *Consist* of vehicles being shunted must comply with Brookfield Rail's <u>Automatic Air and Vacuum Brake Instructions</u>.



7. Attaching Locomotive

After attaching a *Locomotive* to stationary vehicles, the *Rail Traffic Crew* must fully pressurise the brake pipe before releasing *Handbrakes*.

8. Detached Rail Vehicles

Vehicles must not be detached from a *Motive Power Unit*, or a continuous brake system, until they are *Secured* against unintended movement by the use of sufficient effective *Handbrakes* or other devices, in accordance with Rule <u>4001 Rail Traffic Integrity</u>.

Detached vehicles must be Secured:

- where necessary, Clear of Adjacent lines;
- Clear of Level Crossings; and
- inside *Catch Points* or *Derail Devices* provided to prevent vehicles entering *Running Lines*.

The Rail Traffic Crew must advise the Network Controller of vehicles detached en-route.

9. Vehicles Under Repair

Vehicles with warning signs, flags or lights must not be moved or *Shunted* against or have other vehicles attached to them unless:

- the warning signs, flag or lights are removed by the workers who put them there;
- no work is being done on or near the vehicles; and
- it is safe to move the vehicles.



10. Stabling Rail Traffic

10.1 On Running Lines

Rail Traffic may be Stabled on Running Lines only if:

- Derailing Devices are available;
- where *Derailing Devices* are not available, it has been authorised by the *Brookfield Rail* Manager Network Operations or *Delegate*;
- Advertised, when required;
- Unauthorised access to Motive Power Unit controls are prevented, and
- it is Secured against unintended movement.

10.2 In Station Limits

Where possible, when *Rail Traffic* is *Stabled* on a *Running Line* within *Station Limits*, the *Points* must be set to divert other *Rail Traffic* around the *Stabled Rail Traffic*.

10.3 In Sections

If the *Rail Traffic* is *Stabled* on the *Main Line* within a *Section*, the *Rail Traffic* must be treated as an *Obstruction* and *Protected* in accordance with Rule <u>4001 Protecting Disabled</u> <u>Rail Traffic</u>.

11. Marshalling Irregularity

If a *Marshalling Irregularity* is identified, the *Network Controller* and the *Rail Traffic Crew* must jointly arrange for the irregularity to be corrected.

12. Restoring Equipment

After completion of *Shunting* a *Competent Worker* must restore *Points*, signals and other equipment to their normal position.

The *Competent Worker* must report to the *Network Controller* that equipment has been restored.



13. References

4001 Protecting Disabled Rail Traffic.

4003 Rail Traffic Integrity

Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG Code)©

Automatic Air and Vacuum Brake Instructions

14. Effective Date

4 May 2016