



# RAIL SAFETY MANAGEMENT SYSTEM - 2012

Authorised by : .....  
(print name)

.....  
(signature)

**Chairman  
Port Dock Station Railway Museum (SA) Inc**

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**Rail Safety Manager  
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Port Dock Station Railway Museum (SA) Inc., trading as National Railway Museum.*

# National Railway Museum

## Rail Safety Management System - 2012

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# 1. Safety Policy and Culture

## NRM - RAIL SAFETY MANAGEMENT POLICY

- ❖ To provide a safe working environment for all National Railway Museum (NRM) personnel associated with railway operations.
- ❖ To provide a safe venue for visitors to the NRM when riding on, or watching any of NRM's trains.
- ❖ To maintain and review annually, an appropriate Rail Safety Management System (RSMS), to ensure rail safety compliance.
- ❖ To provide appropriate training, procedures, rules and regulations to enable NRM personnel to become competent and remain competent to undertake specific operational activities.
- ❖ To demonstrate safe train operations for the benefit of visitors to the NRM, by using suitably maintained rolling stock, track and competent personnel.
- ❖ To ensure that the necessary property and public liability insurance coverage is in place to protect all property, NRM personnel and visitors to the NRM.
- ❖ To ensure that all NRM personnel engaged in rail operational activity have current, accurate and all necessary records in place.
- ❖ To create an environment to encourage NRM personnel to enjoy their experiences and to qualify further in additional operational duties.

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Chairman  
Port Dock Station Railway  
Museum (SA) Inc.

Rail Safety Manager  
Port Dock Station Railway  
Museum (SA) Inc.

Date.....

Date.....

## 2. Governance, Management, Accountabilities, Responsibilities and Authorities

### 2.1 General Overview

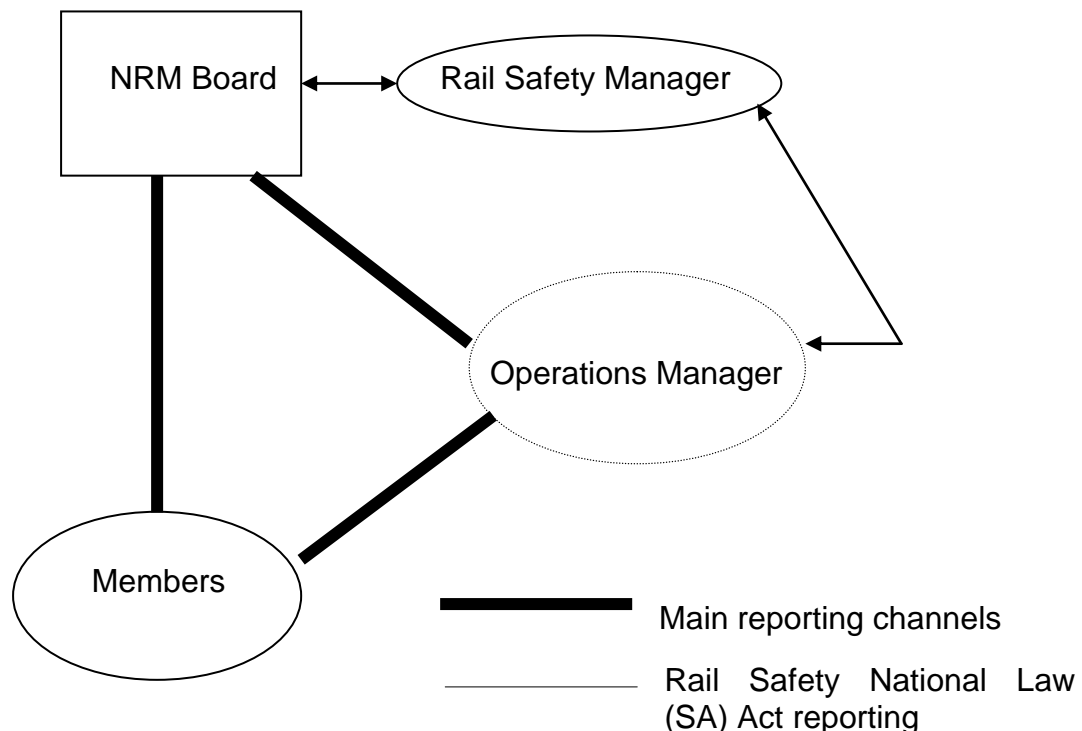
Port Dock Station Railway Museum (SA) Inc., trades as the National Railway Museum (NRM) and is an Incorporated body. Under the Rules of the Association, responsibilities of NRM are undertaken by a Board, whereby members of NRM elect six (6) persons who are members of NRM to fill positions on that Board. In addition the Board has two (2) SA Government appointed representatives.

Of the six elected members of the association, one is nominated as Chairman and one is nominated as Vice Chairman.

One of the six elected members of the association is nominated as Public Officer and one is nominated as Responsible Officer – pursuant to the specific legislation.

NRM employs a full time resource - Operations Manager, primarily to ensure compliance with the Rail Safety National Law (SA) Act and its legislative regulations, in conjunction with the appointed NRM Rail Safety Manager.

### 2.2 NRM Rail Safety Organisational Structure



Pursuant to the Rail Safety National Law (SA) Act and as required in the regulations, NRM appoints a Rail Safety Manager and Rail Safety Internal Auditor as part of its Accreditation, under the Rail Safety National Law (SA) Act.

The Operations Manager is responsible for various duties and specific tasks as defined by the Board, which includes all necessary obligations and compliance matters under the Rail Safety National Law (SA) Act.

Obligations and responsibilities pursuant to the Rail Safety National Law (SA) Act, and the compliance to the NRM Rail Safety Management System (RSMS) are managed on a day to day basis by the Operations Manager, under direction from the Rail Safety Manager and Board.

### **2.3 Appointment of Rail Safety Manager**

Prior to the end of each calendar year (31 December) the NRM Board will appoint a Rail Safety Manager for a period of 12 months and such appointment will be recorded in the Minutes of the association.

### **2.4 Responsibility for Producing Rail Safety Documentation**

The Rail Safety Manager has the authority, and is responsible for creating, managing and maintaining all rail safety related documentation. Any amendments to the RSMS and any relevant rail safety documentation can only be authorised by the appointed Rail Safety Manager.

### **2.5 Responsibilities and Authorities**

The Rail Safety Manager is responsible for:

- Reporting all Rail Safety National Law (SA) Act issues to the NRM Board
- General rail safety Policy development and accreditation matters
- Operational competency and compliance to the relevant criteria.
- Reporting of Notifiable Occurrences to the Rail Regulator.
- Operational competency assessment for NRM certification.
- Compiling the annual Safety Performance Report for the NRM Board and Rail Regulator
- Authorising all rail movements

The Operations Manager (in conjunction with the Rail Safety Manager) is responsible for:

- Overseeing of operational competencies.
- Dissemination of all appropriate documents, notices and instructions.
- Compiling all relevant information related to Notifiable Occurrences.
- Reporting details of any breaches of the RSMS and any other incidents to the Rail Safety Manager.
- Undertaking the necessary competency assessment and retraining requirements for all operational positions.
- Volunteers' personal files.
- Maintaining the Document Control Register and all Rail Safety National Law (SA) Act and RSMS documentation requirements.

## **2.6 Transferring of Rail Safety Manager Responsibility**

If for any reason contact with the Rail Safety Manager is not possible, the Operations Manager assumes all authority and responsibilities of the Rail Safety Manager. If in the absence of both the Rail Safety Manager and Operations Manager the NRM Responsible Officer will be responsible to delegate and/or initiate the necessary rail safety actions, until contact with or replacement of the Rail Safety Manager is implemented.

## **2.7 Access to and Use of Land and Tracks**

### **Museum (Minister's Lease) Land**

NRM occupies land leased to it by the Minister for Arts. Operation of 1600mm, 1435mm and 1067mm gauge rail activities occur on this land. NRM is responsible for the use and maintenance of all land and tracks within the boundaries defined in the Lease.

### **DPTI/Public Transport Services - Interface Track**

By way of a *DPTI Safety Interface Agreement (AG-SR-IC-020)*, NRM rail operations have a right to use land and track which forms the link between the PTS/DPTI urban network and the NRM.

The *PTS Interface Procedure (PO-SR-IC-053)* deals with train movements not under the jurisdiction of NRM (eg PTS railcars or special movements), which are permitted to enter and use NRM Leased land and tracks.

## **2.8 Insurance**

### **Public Liability Insurance**

Pursuant to the accreditation requirements of the Rail Safety National Law (SA) Act, NRM holds the necessary Public and Products Liability Insurance cover to undertake railway operations on the Leased land, and on the Interface land and tracks.

This insurance coverage is assessed and obtained on an annual basis. A Certificate of Currency is issued to NRM following the purchase of the necessary cover, and a copy retained on file.

### **Volunteers Insurance**

Appropriate volunteer workers insurance is maintained by NRM, with Certificate of Currency, and a copy retained on file.

### **3. Regulatory Compliance**

#### **3.1 Assurance**

The NRM Board treats rail safety compliance very seriously, and demonstrates that position by various means;

- Engagement of a full time resource - Operations Manager, with specific responsibilities associated with eg Rail Safety and WHS
- Allocation of resource time for RSMS assessment, hazard/risk reviews and recommendations for improvement
- Allocation of resource time for risk assessments and maintenance of the museum's Risk Register
- Preparation and review of annual Safety Performance Report
- Agenda item for rail safety at each NRM Board meeting
- Promulgation of meeting minutes and instructions
- Display of relevant key rail safety information and notices
- Ensure the appointment of Rail Safety Manager, and Rail Safety Internal Auditor
- Financial commitment to the necessary insurance coverage

#### **3.2 NRM Rail Safety Management System**

The management and annual review of the RSMS is the key driver to ensuring compliance to the Rail Safety National Law (SA) Act and regulations.

Ensuring all operational volunteers comply with the RSMS.

#### **3.3 Document Control Register**

A Document Control Register (DCR) is managed and maintained by the Operations Manager (ref RSA 2010.46).

The DCR shows all relevant details associated with the RSMS including details of the specific copy of the RSMS issued to volunteers and signed by them upon receipt of the document.

The RSMS is issued to all rail operational personnel, and any amendments to the RSMS are controlled and issued to those affected and signed by the recipient. The DCR spread sheet is regularly updated.

## **4. Document Control, Information Management and Safety Records**

### **4.1 General Document Control**

All relevant documentation is located in the NRM administration office. This includes confidential personal files, notifiable occurrence reports and files associated with incidents, rolling stock and track maintenance records. A nominated notice board is on view in the main workshop.

All relevant internal forms/documents are categorised and numbered with distinct identification, and form part of the NRM records management document index. Documents and forms available to the NRM personnel are the relevant blank incident report forms (eg injury and/or accident), basic rolling stock inspection and track inspection and maintenance report forms. All completed forms are collated and if needed advice/information is actioned as necessary.

### **4.2 Document Control Register**

A Document Control Register (DCR) is managed and maintained by the Operations Manager. The DCR shows all relevant details associated with the RSMS including details of the specific copy of the RSMS issued to volunteers and signed by them upon receipt of the document.

The RSMS is issued to all rail operational personnel, and any amendments to the RSMS are controlled and issued to those affected and signed by the recipient. The DCR spread sheet is regularly updated.

### **4.3 NRM Rail Safety Management System**

All Rail Safety National Law (SA) Act accreditation documentation and details are kept in the administration office.

The RSMS is issued to all rail operational personnel. The Document Control Register (DCR) is maintained showing relevant details associated with the specific copy of the RSMS issued to volunteers and signed by them upon receipt of the document. Any amendments to the RSMS are controlled and issued to those affected and signed by the recipient.

Copies of the RSMS are produced from the Master File/Disk, and a copy kept in the RSMS folder in the administration office. In addition a controlled office copy of the RSMS for 'read only' purposes is also kept in the administration office.

Controlled copies of the RSMS are distributed to respectively qualified NRM personnel from the Master File/Disk only and details recorded in the DCR.

The Rail Safety Manager also retains off site, an electronic and printed copy version of the Master RSMS.



#### **4.4 Other Key Documents**

Other key documents, records and files (but not limited to) that are kept securely in the administration office include:

- Rolling stock maintenance records for all operational rolling stock.
- Locomotive Boiler Inspection and Registration records.
- Master Track Plan (MTP).
- Annual Track Inspection Report form (ATIR).
- Track Inspection Report form (TIR)
- Minor Track Maintenance work report (MTM).
- Major Track Work report (MTW).
- Copy of the relevant Certificate of Currency for insurance purposes.
- Copy of the Museum Lease with Dept Arts.
- Track access arrangements with PTS/DPTI.
- Notice of Accreditation under the Rail Safety National Law (SA) Act
- Notifiable Occurrences
- Annual Rail Safety Internal Audit reports.
- Annual Rail Safety External Audit reports.
- Medical Process Flow Chart.
- Alcohol Breath Test Result (ABTR) form.
- Drug Swipe Test Result (DSTR) form.
- Drug and Alcohol Test Results Register
- Re-Training Schedule (RTS)
- Hazard/Risk and Annual Risk Assessment Process.
- Annual Rail Safety Performance Reports, including annual RSMS review reports.
- Extracts of NRM Board Minutes;
  - appointment of Rail Safety Manager and Rail Safety Internal Auditor
  - tabling and endorsement of annual Rail Safety Internal Audit and subsequent actions.
  - tabling and endorsement of annual Rail Safety External Audits and subsequent actions.
  - tabling and endorsement of Rail Safety Annual Performance Report.

#### **4.5 NRM Personnel Records**

Operationally competent NRM personal records are kept in a locked rail safety file, which is located in the administration office. This includes all operational qualification certificates, medical certificates and any other details which may apply to the person under the NRM RSMS. Personnel data bases are maintained and continually updated and these records are kept in the administration office.

- Authorised Operators – including qualifications.
- Rail Safety Document Control Register (DCR).

- Rail Safety Medical Register (SMR) – all relevant volunteer information and results related to the National Standards Health Assessment.

#### **4.6 Rail Safety Medical Register (SMR)**

The SMR contains all relevant information and dates associated with volunteer medical examinations, results, follow-up, dates of next required medical examination. Copies of the medical assessments (Safety Critical Worker Health Assessment and Report [blue] Form) are also kept on the volunteer's personal file.

#### **4.7 Drug and Alcohol Test Results Register (DATR)**

The DATR contains all relevant results of both drug and alcohol random test results – ie who conducted the tests, the date and who was tested. The DATR is maintained and updated after each occasion a test has been undertaken.

#### **4.8 Authorised Operators List (AOL)**

The AOL shows all current operationally qualified volunteers and also includes the various qualifications held by each volunteer. The AOL is displayed on all designated Notice Boards.

#### **4.9 Re-Training Schedule (RTS)**

The RTS is a document which indicate the various operationally qualified volunteers and show the necessary re-training due dates.

#### **4.10 Trainers and Assessors Register (TAR)**

Definitions for those roles are:

**Trainer** An operationally competent person authorised by the Rail Safety Manager to carry out those duties.

**Assessors** An operationally competent person authorised by the Rail Safety Manager to carry out training duties and the assessment of a trainees' competency to undertake specific responsibilities attached to the position being assessed.

## **5. Rail Safety Management System Review and Revision**

### **5.1 NRM Rail Safety Management Group**

The formation of the NRM Rail Safety Management Group (RSMG) was to achieve various goals and ensure various outcomes. Formed with the Operations Manager; Rail Safety Manager; Rail Safety Internal Auditor; and selected NRM operational volunteers the RSMG has been able to;

- spread some of the administrative tasks associated with RSMS
- encourage input to document development
- attend annual hazard/risk assessment sessions
- participate in the annual Rail Safety Performance Report
- generate wider 'ownership' for rail safety needs
- contribute tangible input to NRM Board rail safety related papers

### **5.2 Annual Review of the Rail Safety Management System**

The RSMS undergoes an annual review as part of the overall NRM annual review of all rail safety compliance documentation. It is reviewed primarily by the Rail Safety Manager and Operations Manager, with review assessment input from the RSMG, and any others as deemed appropriate by the Rail Safety Manager. The findings and proposed recommendations of the annual review are tabled with the NRM Board and included in the NRM Rail Safety Performance Report.

### **5.3 Rail Safety Performance Report**

The Rail Safety Manager is to prepare a Rail Safety Performance Report for the 12 month period ending 31 December each year. The report is tabled with the NRM Board for endorsement by no later than 31 January each year.

#### **Rail Safety Performance Report**

The Rail Safety Performance Report is publically accessible upon request, and must contain (as a minimum):

- Details of any Notifiable Occurrences
- Details of any breaches of the RSMS
- Findings of the annual review of the RSMS
- Findings and actions to the annual internal audit of the RSMS
- Findings and actions to the annual external audit of the RSMS
- Annual Hazard/Risk Assessment
- Variations to the Risk Register
- Locomotives and rolling stock operated
- Train kilometres operated and passengers carried
- Train kilometres operated
- Alterations to the track infrastructure

## **6. Safety Performance Measures**

NRM is able to monitor and measure its performance under the Rail Safety Act and regulations, and under its RSMS by various steps. Some of those steps and actions include the following:

- The annual review of the Risk Register
- The annual hazard/risk assessment
- Review of the frequency and type of notifiable incidents and/or breaches
- Annual internal audit findings and actions
- Training and re-training processes for operational volunteers
- Annual rail safety external audit findings and actions

Evidence of when and who attended these activities are recorded, and those papers retained on file.

Where relevant, the annual review findings are compiled and included in the Rail Safety Performance Report for review and discussion by the NRM Board – prior to being endorsed and sent to the Rail Regulator.

## **7. Rail Safety Internal Audit Arrangements**

### **7.1 Appointment of Rail Safety Internal Auditor**

Prior to the commencement of each calendar year the NRM Board will appoint a suitably competent Rail Safety Internal Auditor (RSIA) for the following 12 months. The RSIA will require an understanding of the NRM RSMS covering the railway operations, and it is desirable for the RSIA to have some previous auditing experience. This appointment process will be recorded in the NRM Board meeting minutes.

The RSIA can also be an NRM 'operational volunteer', but not mandatory.

### **7.2 Audit Process**

The RSIA will liaise with the Rail Safety Manager and the Operations Manager to determine a suitable audit schedule for the coming year, incorporating key elements of the RSMS. The audit schedule will be based on the immediate previous audit findings and mitigation recommendations, recent rail safety operational performance and will include an assessment of the association's rail safety Risk Register.

The RSIA will contact the Rail Safety Manager and the Operations Manager to arrange a suitable date and time to prepare the audit schedule, prior to the commencement of the rail safety internal audit.

### **7.3 Audit Reports and Actions**

The RSIA will provide a written report to the Rail Safety Manager within 30 days of conducting the audit, detailing the audit findings including details of any non conformances and any observations made during the audit. Should the internal audit identify an element requiring urgent attention, the RSIA must advise the Rail Safety Manager within 48 hours of conducting the audit.

The Rail Safety Manager will table the rail safety internal audit findings for the NRM Board endorsement. These findings will be included in the NRM Rail Safety Performance Report, prepared by the Rail Safety Manager and endorsed by the NRM Board, before being forwarded to the Rail Regulator.

The Rail Safety Manager is responsible, in conjunction with the Operations Manager, to assess the audit findings and take appropriate action and implement mitigation measures to ensure any non conformances or observations identified are 'closed out' and formal advice of these mitigation measures are to be sent to the RSIA within 30 days upon receipt of the audit findings.

The Operations Manager maintains an Internal Rail Safety Internal Audit Compliance file with all relevant internal audit documentation.

## **8. Corrective Actions**

### **8.1 Corrective Action Register (CAR)**

NRM maintains a Corrective Action Register (ref RSA 2011.66), which primarily tracks and allocates responsibilities associated with non-compliance or non-conformance reports and actions that emanate from eg (not limited to):

- Rail safety internal audit findings and proposed actions
- Rail safety external audit findings and proposed actions
- Annual/hazard risk assessment findings and proposed actions
- Annual Risk Register review

The CAR will also contain the anticipated completion timeframe, and by who, of the corrective action and will be updated on conclusion of the proposed/agreed action.

The CAR will be included in the annual rail safety documentation review – associated with the RSMS annual review.

### **8.2 Risk Register Update**

As a consequence of the activity associated with the corrective actions and maintaining a robust and meaningful CAR, the Risk Register will be used to formalise the approval of any newly identified ongoing risks.

## **9. Change Management**

The NRM Board acknowledges that change management is an important part of risk management. The Board therefore accepts responsibility for ensuring that when changes are made to certain aspects of museum rail operations, the change management process is to be used to ensure that the change is effectively managed.

Please refer to the NRM “Change Management Policy and Procedure” document (ref Corp 2010.4).

## **10. Consultation and Internal Communication**

The NRM operates rail movements on an ad-hoc basis, due to a low frequency of events throughout the year, and for the purposes of shunting and repositioning of rolling stock.

Additionally there are only a small number of operationally active volunteers involved with NRM rail operations.

### **10.1 Direct/Indirect Communication**

Regular information updates and notices are provided to volunteers by;

- Emails
- Notices posted at specific locations around the site
- All Authorised Operations are personally reminded of their duties and responsibilities prior to each day's shift of duty
- Invitations to annual hazard/risk workshops
- Invitations to annual review of the Risk Register
- Invitations to the annual review of the RSMS

All volunteers are reminded of the incident reporting requirements and access to or whereabouts to the necessary forms.



## **11. Risk Management**

The NRM Board fully supports a proactive approach to risk management, particularly associated with the operation of trains under its Accreditation to the Rail Safety National Law (SA) Act and regulations.

Additionally the importance of the Risk Register (ref RSA 2010.40) and its annual review and assessment is paramount to understanding and ranking its risks on “as far as reasonable” basis.

Please refer to the “Integrated Risk Management Policy and Procedure” document (ref OHS 2010.48)

## **12. Procurement and Contract Management**

Due to the nature and type of railway operations undertaken by NRM, pursuant to its Accreditation under the Rail Safety National Law (SA) Act and regulations, virtually all activities on site associated with the maintenance/repairs to locomotives, rolling stock and rail infrastructure are undertaken by internal resources.

### **12.1 Materials**

When acquiring any materials associated with their use in railway operations, liaison occurs with reputable similar rail heritage sector operators to avoid any potential risk of incompatible usage.

NRM maintains a list of preferred suppliers of materials, and the procurement of all materials associated with compliance to the Rail Safety National Law (SA) Act operations are undertaken only by the Operations Manager and Rail Safety Manager.

### **12.2 Contractors/Workers on Site**

If on very rare circumstances, external parties are engaged to undertake any specific activities that fall under NRM's rail safety compliance, then those NRM persons involved with the induction process will ensure all relevant risks are identified, acknowledged and mitigation measures put in place.

However as NRM operates a controlled site; it is highly unlikely for any external party to be at risk when undertaking site works, as there are robust train operations processes in place to avoid conflict.

## 13. Engineering and Operational Safety Systems

### 13.1 Engineering and Operational System Safety

NRM has developed and uses an Engineering and Operational System Safety Standard, for all listed rolling stock.

### 13.2 Rolling Stock Register

NRM maintain a Rolling Stock Register (RSR) to track the life of all listed operational locomotives, railcars and rolling stock. The RSR includes those items that are listed as 'Operational Rolling Stock' for the purposes of identifying specific rolling stock utilised by NRM for providing experiences for the public and/or NRM operational volunteers. (ref RSA 2009.57)

Separate files, associated with the RSR, exist for each item of rolling stock and contain details of all relevant repairs, maintenance, annual inspections, incidents and distance travelled.

### 13.3 Operational Rolling Stock

#### 1600 mm gauge

801	-	ex Australian National 800 class diesel electric loco
321	-	ex TransAdelaide 300 class railcar
400	-	ex TransAdelaide 400 class railcar
875	-	ex TransAdelaide 860 class non-power car
257	-	ex Australian National 250 class railcar
8394	-	ex Australian National 8300 class Guard's brake van
276	-	ex SAR 12 wheeled brake van
BE42	-	ex V&SAR joint-stock sit-up passenger car
Onkapinga	-	ex V&SAR joint stock Overland sleeping car
376	-	ex Australian National Centenary baggage/pass car
4367	-	ex SAR Caboose brake van
4074	-	ex SAR Composite brake van
446	-	ex SAR centre-end loading suburban passenger car
606	-	ex SAR country steel car
Allambi	-	ex SAR Overland sleeping car

#### 1435 mm gauge

515	-	ex Australian National 500 class diesel electric loco
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#### 1067 mm gauge

Peronne	-	ex Broken Hill Associated Smelters steam engine
3	-	ex SAR four wheel passenger car
144	-	ex SAR bogie passenger car
7553	-	ex Australian National Composite brake van
V1990	-	ex Australian National four wheel steel van

## 13.4 Track Infrastructure Definitions

Part of the induction and training process, all trainees are provided with a demonstration of the variety of operational safe working assets. The following represents a list of key assets/devices which are fundamental on site.

A **facing point** is a set of points which can alter the direction of travel of an approaching rail movement.

A **trailing point** is a set of points which cannot alter the direction of travel of an approaching rail movement.

**Spring lever points** must not be trailed through. These points must be pre-set for the movement. Always pre-check the operation of spring lever points prior to any rail movement, as dirt and/or grease can alter their effectiveness.

**Cheese knob points** must not be trailed through as damage to the points, blades and rods will occur. A pin is used to secure the cheese knob and hold the blades in the correct position. Always leave the pin in place during any movement through these points. Always leave cheese knob points locked when not in use.

**Point stands** are fitted with indications which display the setting and direction of the blades. The operating lever must always be in the 'down' position and unless being operated they must also remain locked. In general the 'main line' will be displayed as a green arrow otherwise a yellow or red dumbbell will indicate that the points are set in the reverse position. Note: a green arrow does not necessarily indicate that the points are set for the straight leg.

A **derail** protects rolling stock from accidentally leaving sidings and onto the 'main line' or a line that is used as a primary running line. This device, is set on top of the rail head, and will derail any movement passing over it.

A **derail point stand** displays a purple diamond to indicate that the derail is in position on top of the rail or a white square when the derail is off the rail head.

A **buffer stop** is a fixed structure positioned at the end of a running line, which helps to prevent a rail movement from continuing beyond the extent of the rail track.

A **Track Obstruction Board** (painted red) will be placed in the centre of a track, displaying a red square towards the direction of any rail movement to be stopped that is using that track. This sign is primarily used where track work is being undertaken or to indicate the end of a specific track gauge.

A **Stop Board** (painted red) is used to define the operational and track maintenance boundary between NRM and PTD/DPTI. (ref *PTS Interface Procedure (PO-SR-IC-053)*)

### **13.5 Rail Infrastructure Maintained Fit for Purpose**

A maximum speed of 15 km/h applies to all tracks maintained to a “fit for purpose” standard. Due to the infrequent use of the tracks, combined with relatively low axle loads and speed, only minor maintenance is necessary.

Maintenance standards are adopted on a “fit for purpose” basis.

To assist with understanding these standards, components from the *1988 Australian National Railways – Track Maintenance Guide* can be used, but purely as a source of information.

A specific NRM Track Inspection Engineering System Safety Standard has been developed which is the primary document for track condition and inspection. (ref RSA 2005.50)

A Master Track Plan (MTP) (ref RSA 2006.140) is managed by the Rail Safety Manager and Operations Manager, on which is recorded all Major Track Work (MTW) refer to Clause 14.2. The MTP is retained in the Operations Manager administration office and only accessed by the Rail Safety Manager or Operations Manager.

### **13.6 Annual Track Inspection**

All tracks are inspected on an annual basis, using the basic method of:

- walking the tracks, inspecting for broken rails, horizontal rail movement, fish plate movement, loose rail and sleeper fastenings, etc.
- a random check for track gauge, using the combination of:
  - a fixed track rail gauge
  - steel tape measure
  - general line of sight

The Track Inspection Engineering and Operational System Safety Standard is used for the annual track inspection and the results are detailed in the Annual Track Inspection Report (ATIR) (ref RSA 2006.19).

Any faults or areas of concern which may prevent train movements are to be verbally advised to the Rail Safety Manager and Operations Manager immediately. Those findings are also to be shown on the ATIR and conveyed to the Rail Safety Manager and Operations Manager.

Any other faults or matters which will not prevent train movements are to be shown on the form and forwarded to the Operations Manager within 7 days of the inspection.

## 13.7 Safe Working Operations

### Principle Authorisation

Under no circumstances shall any rail operations be conducted by NRM unless authorised in advance by the Rail Safety Manager or the Operations Manager.

The Rail Safety Manager and Operations Manager will attempt to confer before any rail operations take place.

This will ensure that operationally competent personnel are engaged and that the rolling stock and rail infrastructure to be utilised are available and maintained “fit for purpose”.

- When multiple train movements on the same or differing gauges are required at the same time, these operations can be undertaken, but *only* after obtaining approval from the Rail Safety Manager or Operations Manager.
- If any of those planned train movements required at the same time, cause and could cause physical interface, these operations can be undertaken, but *only* after obtaining approval from the Rail Safety Manager or Operations Manager and an Operational Procedure has been authorised and distributed to the respective train crews.

### Maximum Speed for All Movements - 15 km/h

- all train movements will be under the control of a operationally competent person
- only operationally competent personnel can take charge of any locomotive or railcar – eg steam, diesel loco or railcar
- the driver of any external party train movement accessing the NRM site, must be advised by the NRM operationally competent person, prior to it departing the ACCESS AUTHORITY STOP BOARD to enter the NRM tracks, or departing to return to the Interface boundary, that there is a maximum speed of 15 km/h on NRM tracks

### **13.8 NRM Hand Signals**

Primary communication controlling all rail operations is by hand signal. These hand signals are described in full, in “Appendix A” NRM Hand Signals (ref RSA 2011.58).

If any rail movements must occur during the hours of darkness, approval must be obtained in advance with the Rail Safety Manager or Operations Manager, to clarify the specific instructions and safe working control methods. If approved, any such movements will strictly be in accordance with the ‘night time’ hand signals as contained in “Appendix A” Hand Signals.

If any external party operated train movement requires access to NRM track during the hours of darkness (eg a PTS/DPTI movement into NRM), an operationally competent person, authorised by the Rail Safety Manager or Operations Manager, will take charge of those movements – pursuant to the terms and conditions outlined in the *PTS Interface Procedure (PO-SR-IC-053)*.

### **13.9 Fixed Signals**

No regard is to be given to any fixed signals which display indications, as these signals are for preservation purposes and carry no authority - apart from the following exception:

#### *Exception*

Any signal displayed by fixed signals operated from the Woodville signal cabin, when the signal cabin is *Attended*, must be complied with.

#### **Woodville Signal Cabin**

In the context of attending to operate Woodville signal cabin (*Attended*), the definition of an operationally competent person is a person who holds a rail safety competence level equal to either:

Driver (D1/D2/D3), Fireman (F1), Guard (G1/G2) or Shunter (S1).

When Woodville signal cabin is *Attended* by an operationally competent person, any rail movement traversing any rail tracks which may or can be manipulated from the Woodville signal cabin, the Authorised Operators must comply any such fixed or hand signals manipulated/displayed from the cabin by the operationally competent person in attendance.

### **13.10 Tractor (non-loco) Repositioning of Rolling Stock**

If any rail movement is necessary, where a tractor is to be utilised, prior approval must be obtained from the Rail Safety Manager or Operations Manager.

The tractor can only be operated by a person holding a Loading Permit for the use of that machine, but in addition that person must hold a rail safety competency level equal to that of either; Driver (D1/D2/D3), Fireman (F1), Guard (G1/G2) or Shunter (S1).

The tractor shunt movement must also be accompanied by a competent rail safety worker at ground level, and that person must hold a rail safety competency level equal to that of either; Driver (D1/D2/D3), Fireman (F1), Guard (G1/G2) or Shunter (S1).

The tractor is to be firmly secured to the rolling stock with minimal length steel chain, and adequate to prevent separation during the movement. Due care must be undertaken to ensure that all persons and obstructions are clear of the proposed movement.

The rail safety competent worker at ground level must ensure direct visibility is maintained with the tractor driver. Maximum speed for these tractor movements is to be lower than normal walking pace.



### 13.11 Code of Practice for Rail Operations

Railway operations at NRM are managed no differently to the methodology used for the operation and responsibility under any other commercial railway system.

All operationally competent volunteers have a direct responsibility for their own safety and for the safety of other volunteers and the public.

- ❑ All volunteers are responsible to dress using appropriate safety wear and be conversant with the planned railway operations for each day/occasion.
- ❑ Volunteers are permitted to carry out duties matching their operational competency levels, or any duties considered less of a risk, under the discretion of the Operations Manager or Rail Safety Manager.
- ❑ Volunteers are not permitted to report for duty whilst affected by intoxicating liquor or a deleterious drug.
- ❑ If involved in the planned movements (ie Guard / Shunter / Driver / Observer / Fireman), complete the necessary Track Inspection Report form and/or Basic Rolling Stock Inspection form.
- ❑ Appropriate safety clothing must be worn eg, safety vest and footwear when working on or adjacent to (within 3 metres) any track on any day declared a 'rail operations' day by the Rail Safety Manager or Operations Manager. A safety vest need not be worn for track work undertaken on or near any track on a 'non rail operations' day.
- ❑ Any external parties requiring to work on or within 3 metres of any track, eg pest and plant control contractors etc, need to liaise with the Operations Manager or Rail Safety Manager to confirm no train operations on that day.
- ❑ Locomotive and railcar cab crew members (ie drivers and firemen) are permitted to remove their safety vest when inside the cab, but if they are required to leave the train for any purpose, they must wear a safety vest.
- ❑ Volunteers must take care when carrying out any duty, so as not to be exposed to any risk of personal injury.
- ❑ Volunteers must not board or alight from a moving train and they must take every opportunity to prevent the public from doing so.
- ❑ Volunteers must always be alert and recognise where and when dangerous situations may arise and exercise appropriate action to reduce the risk of personal or property damage.
- ❑ Volunteers are also representing NRM and will need to obey instructions as issued by any key attending person having that relevant authority.

- ❑ Operational volunteers must always be courteous and obliging to the public and to other volunteers.
- ❑ If a volunteer is questioned by the public, or other volunteers, they must always give precise accurate information. If unsure, they must give directions to the best person available to handle the enquiry.
- ❑ If unsure of any duty or responsibility, volunteers must immediately clarify the situation with the relevant authority.
- ❑ Under no circumstances should a volunteer take control of or signal any movement beyond the extent of the NRM operational jurisdiction, that is beyond the PTS/DPTI operational signal boundary at Signal No.1154.
- ❑ Volunteers must be fully acquainted with the NRM railway layout. This must include the location of all tracks, their associated gauges, gradients, location of points, derails, or any other infrastructure that forms an important aspect while undertaking any duty.
- ❑ Volunteers must be fully acquainted with the location of nearby structures or infrastructure that may come within close proximity of the railway movement, eg platforms, gates, point stands, pavilion doors, location of buffer stops, dead-ends etc.
- ❑ The public must always be kept clear of any rail movements, including when shunting is being undertaken by tractor - by the use of either bunting, or clear directions and supervision by other volunteers, to the satisfaction of the operationally competent person in charge of those movements.
- ❑ All rail movements on any gauge are restricted to a maximum of 15km/h. This speed must be reduced when either track restrictions exist, or if the track is not sufficiently clear ahead to stop.
- ❑ Volunteers must always display the correct hand signal and always ensure the signal is given promptly, accurately and from a position where it can be seen clearly, understood and acknowledged by other operationally competent persons involved in the movement.
- ❑ If a volunteer is unsure of any hand signal or instruction, or if the line ahead cannot be seen clearly, the train movement must be brought to a stand, until visual contact is re-established and the correct hand signal or message is received.
- ❑ If a volunteer is riding on any rolling stock in motion they must always ensure they have a secure footing and good grip – particularly if they are required to display a hand signal.
- ❑ Whenever and wherever possible volunteers must always converse with the driver/fireman/observer/guard/shunter (whichever is appropriate) to clarify any operational aspect. If any doubt exists, stop the movement.

## 13.12 Operational Categories

### Rail Gauge movements

	1600/1435mm	All gauges	1067mm
<b>Driver</b>	D1 and D3		D2
<b>Observer</b>	O1		
<b>Fireman</b>			F1
<b>Guard</b>	G1		G2
<b>Shunter</b>		S1	

<b>Duty No.</b>	<b>Description</b>
D1	driver duties and responsibilities on 1600/1435mm diesel locomotives
D2	driver duties and responsibilities on 1067mm steam locomotives
D3	driver duties and responsibilities on 1600mm diesel railcars
O1	observer duties and responsibilities on 1600/1435mm diesel locomotives
F1	fireman duties and responsibilities on 1067mm steam locomotives
G1	guard duties and responsibilities on 1600mm locomotive hauled trains or diesel railcars
G2	guard duties and responsibilities on 1067mm trains
S1	shunter duties and responsibilities on 1600/1435/1067mm

### 13.13 Operational Qualification Criteria

<b>Driver</b>	<b>515</b>	<b>diesel locomotive</b>	-	<b>1600/1435mm</b>
	<b>801</b>	<b>diesel locomotive</b>	-	<b>1600mm</b>

- D1** - previously authorised diesel driver with a recognised railway authority (letter and/or proof of past experience), and
- hold a minimum Category 2 Medical certification, and
  - competency level approved by the Rail Safety Manager

**OR**

- min age of 18 years, and
- hold a minimum Category 2 Medical certification, and
- competency level approved by the Rail Safety Manager

<b>Driver</b>	<b>Peronne</b>	<b>steam locomotive</b>	-	<b>1067mm</b>
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- D2** - previously authorised steam driver with a recognised railway authority (letter and/or proof of past experience), and
- OHS Certification of Australia (Boiler, BB, BI, BA) or Licence to Perform High Risk Work (Boiler BB, BI, BA) or its interstate equivalent providing it is recognised by SafeworkSA and
  - hold a OHS Certification of Australia (Reciprocating ES) or Licence to Perform High Risk Work (Reciprocating ES), and
  - hold a minimum Category 2 Medical certification, and
  - competency level approved by the Rail Safety Manager

**OR**

- min age of 18 years, and
- OHS Certification of Australia (Boiler, BB, BI, BA) or Licence to Perform High Risk Work (Boiler BB, BI, BA) or its interstate equivalent providing it is recognised by SafeworkSA and
- hold a OHS Certification of Australia (Reciprocating ES) or Licence to Perform High Risk Work (Reciprocating ES), and
- hold a minimum Category 2 Medical certification, and
- competency level approved by the Rail Safety Manager

<b>Observer</b>	<b>515</b>	<b>diesel locomotive</b>	-	<b>1600/1435mm</b>
	<b>801</b>	<b>diesel locomotive</b>	-	<b>1600mm</b>

- O1** - previously authorised diesel driver/observer with a recognised railway authority (letter and/or proof of past experience), and
- hold a minimum Category 2 Medical certification, and
  - competency level approved by the Rail Safety Manager

**OR**

- min age of 18 years, and
- hold a minimum Category 2 Medical certification, and
- competency level approved by the Rail Safety Manager

**Driver Railcars : Redhen/Bluebird - 1600mm**

- D3** - previously authorised driver/railcar driver with a recognised railway authority. (letter and/or proof of past experience), and
- hold a minimum Category 2 Medical certification, and
  - competency level approved by the Rail Safety Manager

**OR**

- min age of 18 years, and
- hold a minimum Category 2 Medical certification, and
- competency level approved by the Rail Safety Manager

**Fireman Peronne steam locomotive - 1067mm**

- F1** - previously authorised steam driver/fireman with a recognised railway authority. (letter and/or proof of past experience), and
- OHS Certification of Australia (Boiler, BB, BI, BA) or Licence to Perform High Risk Work (Boiler BB, BI, BA) or its interstate equivalent providing it is recognised by SafeworkSA and
  - hold a minimum Category 2 Medical certification, and
  - competency level approved by the Rail Safety Manager

**OR**

- min age of 18 years, and
- OHS Certification of Australia (Boiler, BB, BI, BA) or Licence to Perform High Risk Work (Boiler BB, BI, BA) or its interstate equivalent providing it is recognised by SafeworkSA and
- hold a minimum Category 2 Medical certification, and
- competency level approved by the Rail Safety Manager

**Guard Locomotive hauled/ railcars - 1600mm**

- G1** - previously authorised guard/shunter or similar with a recognised railway authority (letter and/or proof of experience), and
- hold a minimum Category 2 Medical certification, and
  - competency level approved by the Rail Safety Manager

**OR**

- min age of 18 years, and
- hold a minimum Category 2 Medical certification, and
- competency level approved by the Rail Safety Manager

- |              |                      |   |               |
|--------------|----------------------|---|---------------|
| <b>Guard</b> | <b>Peronne train</b> | - | <b>1067mm</b> |
|--------------|----------------------|---|---------------|
- G2**
- previously authorised guard/shunter or similar with a recognised railway authority (letter and/or proof of experience), and
  - hold a minimum Category 2 Medical certification, and
  - competency level approved by the Rail Safety Manager
- OR**
- min age of 18 years, and
  - hold a minimum Category 2 Medical certification, and
  - competency level approved by the Rail Safety Manager
- 
- |                |  |   |   |
|----------------|--|---|---|
| <b>Shunter</b> |  | - | <b>1600mm</b><br><b>1435mm</b><br><b>1067mm</b> |
|----------------|--|---|---|
- S1**
- previously authorised shunter/guard or similar with a recognised railway authority (letter and/or proof of experience), and
  - hold a minimum Category 2 Medical certification, and
  - competency level approved by the Rail Safety Manager
- OR**
- min age of 18 years, and
  - hold a minimum Category 2 Medical certification, and
  - competency level approved by the Rail Safety Manager

### **13.13.1 Railcars (Redhen and Bluebird) - Second Person**

To clarify the competency level required to act in the capacity of “Second Person” on the railcars (Redhen and Bluebird) in addition to the appointed Railcar Driver (D3), the Second Person needs to have as a minimum, the following competency level.

When in motion, the Railcar Driver must also be accompanied by a competent rail safety worker in the cabin at all times, and that person must hold a rail safety competency level equal to that of either; Driver (D1/D2/D3), Fireman (F1), Observer (O1), Guard (G1/G2) or Shunter (S1).

## **14. Process Control**

### **14.1 Rolling Stock Register (RSR)**

The Rolling Stock Register (RSA 2009.57) data base is managed and maintained by the Operations Manager. It is updated whenever necessary and at least annually, associated with the rolling stock Annual Inspection, in addition to any issue or incident that involved that particular item.

Whenever any specific modification and/or maintenance/repairs occur on a particular item of rolling stock, those details are logged onto the RSR, by the Operations Manager.

Basic Inspection Forms are used by qualified volunteers on each occasion any of the rolling stock is operated. These forms list all safety critical areas to be examined. The completed forms are forwarded to the Operations Manager immediately after the use of the specific rolling stock.

Annual Inspection Forms are used by the Operations Manager (or nominated suitably qualified person) for the required annual inspection of rolling stock operated or not, during each 12 month period.

No work can be undertaken on these items without the prior approval of the Operations Manager. On completion of that specific work, the appropriate rolling stock log sheet must be completed. These are located in the Steam Shed where all other forms are accessible.

### **14.2 Track Work**

Minor Track Maintenance (MTM) (ref RSA 2006.24) eg ballast packing of sleepers or replacing up to a maximum of three adjacent sleepers, tightening fishplate bolts or rail fastenings, can be undertaken by suitably experienced volunteers, with details of such work advised to the Operations Manager within 7 days of that work being completed.

Major Track Work (MTW) (ref RSA 2006.23) eg closing the track for rail movements, or any other track work declared as MTW by the Rail Safety Manager, cannot be undertaken without prior approval by the Rail Safety Manager. This work must be completed to the satisfaction of the Rail Safety Manager, prior to the resumption of any operations over the affected track.

Details of any MTW must be forwarded to the Operations Manager and Rail Safety Manager, to ensure the Master Track Plan (MTP) is updated within 7 days of the that work being completed (ref RSA 2006.140)

Any tracks proposed to be used on any operational day are inspected immediately prior to any movements, with the appropriate Track Inspection Report (TIR) form (ref RSA 2006.25) being completed by the operationally competent person in charge ie Driver, or Guard, or Shunter. This document is forwarded to the Operations Manager.

## 15. Asset Management

Due to the nature of railway operations undertaken by NRM, primarily associated with;

Low speed	15km/h maximum
Low axle loads	no commercial traffic
Infrequent usage	locomotives and rolling stock are only operated on average for about 25 days per year
	all track infrastructure has been upgraded and well maintained

.....all locomotives, railcars and other rolling stock, and all rail infrastructure is routinely inspected and maintained in a "fit for purpose" condition.

The lifespan and overhaul maintenance schedules are based on direct usage and as the extent of track and operable rolling stock are both quite small and manageable, the NRM asset management policy is aligned to a risk based management approach.

In addition, NRM has developed and uses an Engineering and Operational System Safety Standard, for all listed rolling stock (refer Clause 13) albeit simple, it is used on an annual, or when necessary more frequent basis.



## 16. Interface Co-ordination

### 16.1 Train operations: procedures associated with the arrival or departure of external party train movements

The *DPTI Safety Interface Agreement (AG-SR-IC-020)* and *PTS Interface Procedure (PO-SR-IC-053)* are in place between DPTI and NRM which outlines all necessary instructions for the arrival or departure of any train movement between DPTI at Port Adelaide Junction and NRM land and tracks.

To further clarify responsibilities and actions associated with NRM operationally competent volunteers, the following additional instructions are to be understood and complied with:

- All movements are to be authorised in advance by the Rail Safety Manager or Operations Manager.
- An operationally competent person will be authorised by the Rail Safety Manager or Operations Manager to manage the movement.
- The operationally competent person is to be advised in advance, with details of the type and length of train, scheduled arrival and departure times, and the location at which the train is to arrive and depart within the NRM site.
- The agreed access tracks and points to be used are set correctly and inspected prior to the arrival and/or departure of the train. Complete the necessary Track Inspection Report form.
- If 457mm gauge cross-over track is to be removed, ensure those sections of track are clear of the proposed running track and the necessary 457mm gauge track stop boards are in place.
- The relevant gates are to be unlocked, fully opened and secured, to reduce the risk of fouling the train movement.
- The operationally competent person managing the movement will confer with DPTI Train Control at least 30 minutes prior to the arrival of the movement to confirm the access arrangements and contact details.
- The operationally competent person will meet the train and ensure the driver is briefed about the movement and max. speed is 15 km/h, prior to permitting the train to proceed beyond the ACCESS AUTHORITY BOARD.
- Prior to the movement departing and to leave the NRM track network, the operationally competent person will confer with the train driver to ensure clarity is reached surrounding those departing arrangements.
- Once the movement has left the museum site, the operationally competent person must ensure the museum boundary gates are closed and locked.

## **16.2 Level Crossing Interface Agreements**

### **SA Aviation Museum**

A roadway level crossing exists over which NRM tracks and railway operations occur. Pursuant to the Rail Safety National Law (SA) Act and Regulations, all necessary requirements are included in the Road Rail Interface Agreement between the SA Aviation Museum and NRM (ref RSA 2010.45)

### **City of Port Adelaide Enfield (CPAE)**

A pedestrian at grade crossing exists over which NRM tracks and railway operations occur. Pursuant to the Rail Safety National Law (SA) Act and Regulations, NRM and CPAE have reached mutual agreement that there is a need for an executed Interface Agreement.

## 17. Management and Investigation of Notifiable Occurrences

### 17.1 Management and Reporting of Notifiable Occurrences

If an incident occurs and it is of a nature that meets the criteria of a Notifiable Occurrence **Category A or B** the following steps need to be undertaken.

The Authorised Operator must also immediately carry out the following:

- *If no serious injury or property damage has resulted, or if there are no life threatening consequences, or if no other volunteers or public are in danger, (most likely a **category B** - subject to clarifying) immediately contact the Rail Safety Manager or Operations Manager.*

Whether a category A or category B, collect all relevant information applicable to the incident (included but not limited to):

- all train crew details
- time of the incident
- train direction, estimated speed, train consist information
- full details of any other parties involved and/or effected
- if possible take photographic evidence of the resultant incident
- likely cause

Do not permit any other rail movements to occur, – until the Rail Safety Manager or Operations Manager are on site, or if necessary, verbally approved to do so by either of them. Complete the Rail Incident Report form (RSA 2006.29) and forward it immediately to the Rail Safety Manager.

- *If passengers or other parties have sustained injuries, or serious property damage has occurred, (**category A**) follow the NRM Emergency Procedures first. Also contact the Australian Transport Safety Bureau (ATSB) by telephone 1800 011 034, then the Rail Safety Manager and Operations Manager.*

Do not permit any other rail movements to occur and collect all key relevant information (as listed above). Complete the Rail Incident Report form and forward it immediately to the Rail Safety Manager. Do not leave the site and await the attendance of the Rail Safety Manager or Operations Manager – or otherwise the receipt of specific instructions.

Details of the criteria for category A or category B are posted on the designated Notice board.

**Category A** notifiable occurrences are to be immediately reported to the ATSB by telephone 1800 011 034. Also provide a written report to the National Rail Safety Regulator (NRSR) within 72 hours.

**Category B** notifiable occurrences will require a written report to be forwarded to the NRSR within 72 hours.

## Voluntary and Confidential reporting of incidents

A nationwide voluntary and confidential reporting scheme for rail incidents (RECON) will allow any person to confidentially report a rail safety concern about any rail operation to the ATSB. Contact can be made by either; telephone 1800 020 505 or email [recon@atsb.gov.au](mailto:recon@atsb.gov.au)

### 17.2 Investigation of Notifiable Occurrences

The Rail Safety Manager, or a operationally competent person nominated by the Rail Safety Manager, are to undertake appropriate internal investigations, as far as practicable, to satisfy the requirements of the ATSB and the Rail Safety National Law (SA) Act and Regulations.

An Investigation Report (ref RSA 2012.146), incorporating all relevant information collected and reported on the Rail Incident Report (RSA 2006.29), is to be conducted by the Rail Safety Manager or Operations Manager. The investigation will include (not limited to):

- ❖ general site inspection
- ❖ inspection of rail infrastructure
- ❖ inspection of rolling stock involved
- ❖ discussions with train crew members involved (as necessary)
- ❖ likely cause
- ❖ proposed corrective actions

Key elements in managing Investigation of Notifiable Occurrences are:

- ❖ The compilation and content of the Investigation Report (RSA 2011.TBA), including the Rail Incident Report form (RSA 2006.29)
- ❖ Reporting to the National Rail Safety Regulator (NRSR)
- ❖ Reporting to the NRM Board
- ❖ Proposed Corrective Actions
- ❖ Timeframe for corrective actions and control measures
- ❖ Inclusion of the Notifiable Occurrence Investigation Report in the NRM Rail Safety Performance Annual Report

The severity level, or potential severity of the consequences, of the Notifiable Occurrence (Category A or B) will determine whether an Investigation is required or not, and if so the level and extent of that investigation.

To provide further assistance in the determination of the Investigation, in conjunction with the NRM Rail Safety Management System, guidance can be obtained by referencing the Australian Standard AS 4292 – 2006 *Rail Safety Management : Part 7 Rail Safety Investigation*.

Based upon the type of operations conducted at NRM, the adequate standard of rail infrastructure and rolling stock maintenance, low speed and low risk factors, the following Table of Notifiable Occurrence Investigation Levels is proposed to be implemented.

## Table of NRM Notifiable Occurrence Investigation Levels

Severity Level	Description of Occurrence	Level of Investigation	Reporting Requirements
1	An occurrence causing significant damage to track and/or rolling stock and serious injuries.	On reporting to and liaison with ATSB and NRSR, the NRM Rail Safety Manager will initiate an Investigation Report. Advice from ATSB or NRSR may indicate an agency Investigator or potential engagement of an independent Investigator.	An investigation, undertaken by ATSB or NRSR or independent Investigator. In addition an NRM Investigation Report to be completed pursuant to the requirements in the NRM RSMS 17.2. Notifiable Occurrence form and Rail Incident Report form to be completed pursuant to the requirements in the NRM RSMS 17.2, and forwarded to NRSR and NRM Board. Include the incident in the NRM Rail Safety Performance Annual Report.
2	An occurrence causing damage to track and/or rolling stock or minor injury.	Investigation Report into the Notifiable Occurrence to be initiated by NRM Rail Safety Manager, or Operations Manager.	Investigation Report to be completed pursuant to the requirements in the NRM RSMS 17.2. Notifiable Occurrence form and Rail Incident Report form to be completed pursuant to the requirements in the NRM RSMS 17.2, and forwarded to NRSR and NRM Board. Include the incident in the NRM Rail Safety Performance Annual Report.
3	An occurrence of minor consequence ie little to minor damage done to track and/or rolling stock – or where the risk is low and a potential for more serious results is not evident.	No Investigation Report is required – unless determined by the NRM Rail Safety Manager.	Notifiable Occurrence form and Rail Incident Report form to be completed pursuant to the requirements in the NRM RSMS 17.2, and forwarded to ORSR and NRM Board. Include the incident in the NRM Rail Safety Performance Annual Report.

## 18. Volunteer Information, Training and Competence

### 18.1 Volunteer Rail Safety Worker Assessment of Competence

- Where specific external qualifications and/or competency levels are necessary to comply with an Operational Category for a duty, these are outlined in RSMS Clause 13.13 *Operational Qualification Criteria*. Each position lists the eligibility and competency levels needed.
- All Operational Category positions need to obtain the relevant Medical Certification for *Rail Safety Critical Worker Health Assessment* – included in RSMS Clause 13.3.
- Another important key that a rail safety worker is competent in a particular Operational Category, is also the total understanding of RSMS Clause 13.11 *Code of Practice for Rail Operations*.
- In all Operational Categories there is an element of training and experience necessary to permit the person to attain specific competency levels. Training and Assessment documents are used by the appointed Trainer or Assessor (RSMS Clause 4.10) when undertaking that training or the re-assessment of already competent rail safety workers.
- The Training and Assessment documents (RSA 2008.61) are used on each case that a rail safety worker is being trained in a particular Operational Category or re-trained or assessed to measure their level of competency.
- All rail safety workers are assessed and retrained in each of their specific Operational Categories, within 3 years of attaining that competency level (RSMS Clause 18.2).
- If any rail safety worker is involved with ongoing incidents or behaviour not acceptable, the person will be interviewed by the Rail Safety Manager and/or Operations Manager. It will be made quite clear about the responsibilities and risks associated with their relevant operational duties.
- Additionally, on every opportunity available, the Rail Safety Manager or Operations Manager observe and question rail safety workers in regards to their awareness and knowledge of key elements in undertaking rail safety work competently, including but not limited to the following:
  - Knowledge and demonstration of Hand Signals (ref RSA 2011.58).
  - Pre-planning and communication with all other rail safety workers involved in the proposed movements.
  - Clear understanding of the rolling stock gauge/s and track gauge/s involved in the proposed movements.
  - Knowledge of the yard layout and proposed movements (Appendix 'C').
  - Being aware of any other train movements and/or potential conflict.

- Clearance – from structures and other rolling stock.
- Ensuring to keep out of danger and visible to other rail safety workers.
- Awareness of members of the public and/or external party activities in and/or near the movements.

## **18.2 Volunteer Competency Records**

Internal and external qualification certificates and documents are kept on the volunteer's personal file. Volunteer operational categories for specific positions are monitored and altered to reflect any down grade (voluntary or otherwise) or gaining additional qualifications.

Volunteers who attain competency levels in a specific area of rail operation, are issued with an Authority Card which must be signed by the holder of that card. Details associated with the issuing of the card are entered in the appropriate data base and on the volunteer's personal file. A Notice showing all current authorised operators (Authorised Operators List – AOL) and their current competency level is displayed on the designated Notice boards.

Random ad-hoc checks are undertaken by the Rail Safety Manager or Operations Manager to assess the operational activity being undertaken by the volunteer, against those details contained on the Authority Card. Any discrepancies or not having the Authority Card in their possession at that time, is recorded on the volunteers' personal file. Whilst this task may be undertaken by the Rail Safety Internal Auditor, the Rail Safety Manager or Operations Manager will reserve their right to do so.

Volunteers must be aware that the costs associated with any external agency and/or legislative requirements or regulations affecting their operational certification at NRM, will not be met by NRM and any arrangements to facilitate those requirements must be undertaken separately by the individual.

## **18.3 Three-Year Assessment Period - incorporating Re-Training**

All operationally competent volunteers are subject to an assessment within every three-year period. Those persons will be re-trained based on their specific areas of competency of rail operations at NRM. The Rail Safety Manager or Operations Manager facilitate the necessary re-training, which will be undertaken by a suitably experienced persons approved by the Rail Safety Manager – and as indicated on the Trainers and Assessors Register (TAR).

A series of specific documents are provided to enable the necessary re-training to be undertaken. The training or re-training is matched to the criteria and competency levels applicable to the operational volunteer.

All relevant details associated with re-assessment, training or re-training is recorded on the volunteer's personal file.

## **18.4 Changes to Operational Qualification**

Volunteers may apply to increase (or decrease) their level of operational competency. The volunteer must apply in writing to the Rail Safety Manager and provide appropriate reasons and supporting documentation.

In conjunction with the Operations Manager, the Rail Safety Manager will make an assessment, incorporating the reasons and reviewing the supporting documentation.

If agreed by both the Rail Safety Manager and Operations Manager, a letter will be presented to the volunteer outlining the new level of competency and the date from which that increase (or decrease) of competency applies.

If the application from the volunteer is not accepted, the volunteer will be advised the reasons why and provided with suggested ways on how to re-apply in the future.

All relevant details associated with any changes to the competency level will be reflected on the volunteer's Authority Card and also recorded on the volunteer's personal file.

## **18.5 Physical, Mental and Literacy Capacity**

Any volunteer involved in rail operations, is assessed within each of the designated three year re-training period, by the Rail Safety Manager and the Operations Manager. Based on past performance and general activities on site, an assessment is made during that process.

Consequently an assessment is undertaken whether the volunteer has the appropriate physical, mental and literacy capacity for the task to be performed.

## **18.5 Responsibility, Trust and Discipline**

A sense of responsibility and trust, based on previous performance, is established between the association and volunteers during the three yearly rail safety assessment process. The general performance and attitude of the volunteer is monitored by the Rail Safety Manager and Operations Manager.

Volunteers not displaying common sense and responsibility may be requested to attend an interview, with representatives of the NRM Board, to discuss relevant issues and concerns.

Volunteers who need to be interviewed a second time may temporarily lose their competency level authority, until progress is made to improve the situation. A third incident involving the same volunteer will result in a loss of their right to participate in any rail operation activity. The NRM Board has powers, listed in Clause 7 of the Port Dock Station Railway Museum (SA) Inc. Rules which could result in expulsion.



## **18.6 Safety Critical Worker Health Assessment**

NRM has appointed a registered and certified Chief Medical Officer (CMO). The CMO has the responsibility, in conjunction with the Rail Safety Manager to conduct the necessary medicals, monitor the health and fitness of the volunteers and provide the required medical certificates to NRM within the prescribed time frames and matched to the prescribed medical risk assessment categories, pursuant to the National Safety Critical Worker Health Assessment, for “rail safety critical workers”.

NRM has risk assessed and nominated that all operational positions falling within the NRM RSMS 2012, will require a minimum Category 2. The records and copies of the results of these medicals and dates of prescribed future medical examinations are entered in the Rail Safety Medical Register (SMR) and copies of the medical assessments are also kept on the volunteer’s personal file.

The NRM Medical Process flow chart indicates the procedural steps and responsibilities.

## **18.7 Rail Safety Worker Risk Assessment**

NRM has undertaken and will annually review the relevancy of the necessary Risk Assessment for each operational position, as part of the annual review of the NRM Rail Safety Management System.

If a volunteer possesses a Category 1 medical certificate under the Rail Safety Critical Worker Assessment, that person will be automatically accepted on presentation of that documentation, as it is in excess of the NRM required Category 2 requirement.

## **19. Security Management**

### **19.1 Security of the Public, Volunteers and Operations**

There is a general awareness of security importance amongst the volunteers involved with operating the NRM, due mainly because of the context of the venue being predominantly a voluntarily operated museum.

A culture has been developed whereby all volunteers are encouraged to raise issues with the respective Operations Manager or Duty Manager.

As part of the daily routine, employed staff and volunteers are encouraged to assess the site with matters such as hazards and risks being paramount, and where and when necessary complete the necessary Hazard Report form – which in turn are reviewed and assessed and if required logged as a new risk and mitigated where necessary.

A Security Management Plan (ref RSA 2011.13) has been developed and implemented to give a robust and tangible set of procedures – available to all volunteers.

### **19.2 Security Responsibilities**

A combination of;

- ❖ NRM Operations Manager duty responsibilities
- ❖ NRM Responsible Officer (under WHS)
- ❖ NRM Compliance Committee
- ❖ NRM Board awareness
- ❖ Security alarm systems – office areas and site grounds
- ❖ Monitored security system contract
- ❖ General track and rolling stock inspection requirements
- ❖ Incident Report procedures
- ❖ Security Management Plan

...collectively provides a robust security approach to reduce risk.

### **19.3 Review of Security Arrangements**

An annual review is undertaken, as part of the responsibilities of the Operations Manager and Responsible Officer (NRM Compliance Committee), of the general site security arrangements. This review also includes the annual assessment of the WHS Risk Register.

## **20. Emergency Management**

### **20.1 Emergency Procedures**

In conjunction with the Security Management Plan, in the event of an emergency where serious personal injury, explosion or major property damage has occurred, the following procedures must be carried out as swiftly as possible:

- ❑ Assess which emergency services are required

#### **FIRE - AMBULANCE - POLICE**

then use the nearest telephone eg personal mobile telephone, telephone in the Bookshop, Steam Shed or Administration office.

- ❑ Assess the situation and organise other volunteers to assist where necessary. If appropriate, have qualified volunteers render first aid.
- ❑ Protect the public from any further danger and evacuate if necessary.
- ❑ If a train is involved in the incident, the Operations Manager and the Rail Safety Manager must be contacted to inform them of the current situation, and what action has already taken place. (refer No.17 Notifiable Occurrences)
- ❑ Ensure that all relevant information has been collected as soon as possible after the incident. This includes all personal details eg names, addresses, telephone numbers of all involved, and also the roles any volunteers were performing at the time.

### **20.2 Emergency Evacuation Procedures**

Emergency evacuation procedures have been developed and are posted at various locations around the site. These procedures are included in the training and awareness of those involved with the Compliance Committee and Duty Manager roles. An easily activated audible emergency warning alarm is installed for use under these circumstances.

### **20.3 First Aid Kits**

First Aid Kits are accessible in three designated locations; the Bookshop, the Steam Shed and in the Administration office. Where personal injury has occurred, an Injury Report Form must be filled in and provided to the Operations Manager.

### **20.4 Key Contact Telephone Numbers**

- ❖ Police – Ambulance – Fire           **000**
- ❖ Police Communications           **131 444**

## **21. Personnel Management**

### **21.1 Blood Alcohol Level and Drug Testing and Procedures**

NRM has initiated a Drug and Alcohol Policy and Procedure (ref Corp 2010.2) and a Drug and Alcohol Test Results Register (ref RSA 2011.60)

NRM is required to undertake a program of random testing of blood alcohol levels and drugs in operationally active volunteers, to ensure that they are below the prescribed limits.

Due to the infrequency of rail operations and the small number of volunteers engaged in these activities, NRM conducts these tests on as many personnel as practical, during the course of their work on site, at least twice during each 12 month period.

To comply, NRM has engaged the services of a certified Authorised Person, pursuant to the regulations, for the purpose of random alcohol breath and drug testing.

An Alcohol Breath Test Result (ref RSA 2011.43) form and Drug Test Result (ref RSA 2011.44) form have been created to enable the recording by the Authorised Person of those random alcohol breath and drug testing results – in accordance with the policy and procedures. Additionally the dates of all drug and alcohol tests undertaken with the volunteers are recorded on the Drug and Alcohol Test Results Register (DATR)

In addition, under the Regulations of the Office of the National Rail Safety Regulator, ONRSR can request additional and independent random alcohol and drug testing on operationally active volunteers. These tests can be undertaken at any time and on any day, without the attendance of the Rail Safety Manager or Operations Manager.

### **21.2 Fatigue Management**

NRM has implemented a Fatigue Management Policy and Procedure (ref Corp 2010.3).

## Appendix 'A'



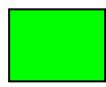
# National Railway Museum

## Rail Safety Management System - 2012

### Hand Signals (RSA 2011.58)



red flag



green flag



white light



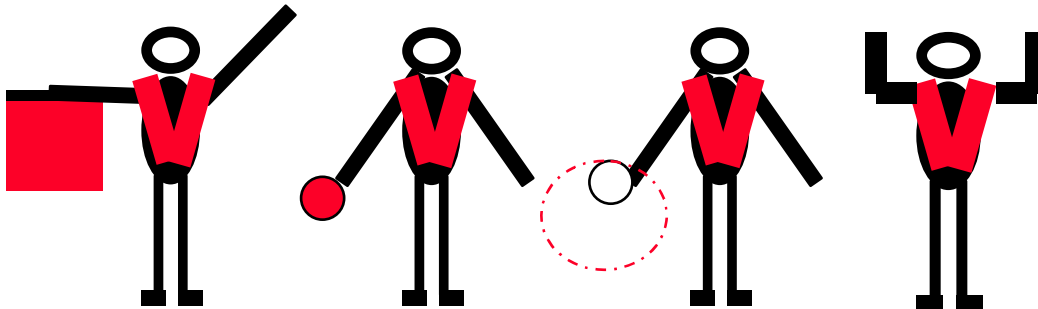
green light



red light

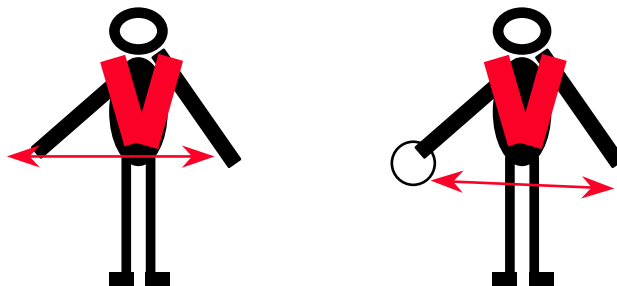
#### Stop Signals

This signal is given to **stop** a movement,



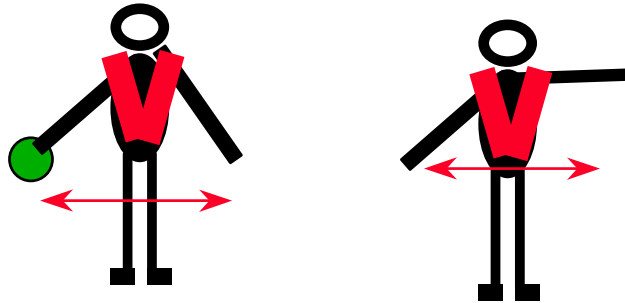
#### Move toward Signals

This Signal is given when the rail safety worker exhibiting the signal wants the driver **to move towards** the rail safety worker,



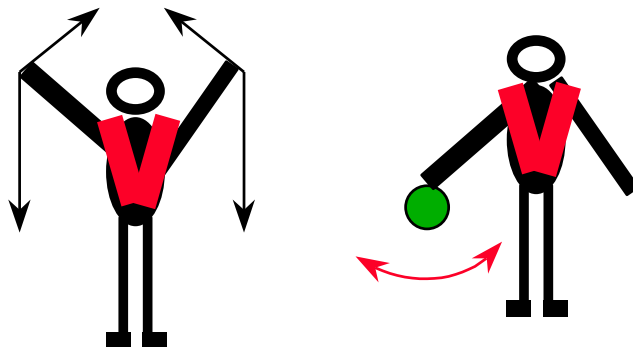
### **Move Slowly toward Signals**

This signal is given when the driver is required to **slowly move towards** the rail safety worker,



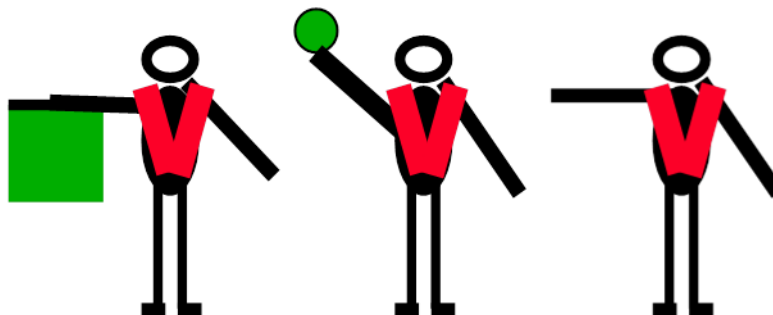
### **Ease Up/Couple up Signals**

This signal is given when the driver is required to **bring the vehicles together** and exert pressure on couplers to assist coupling or uncoupling,



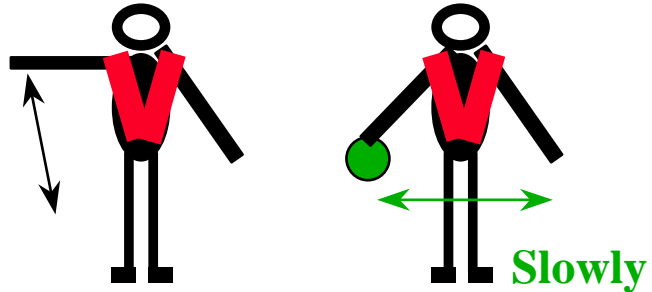
### **All Right - Clear to proceed Signals**

This signal is given to the Driver when the track ahead is **safe** for the passage of the movement,



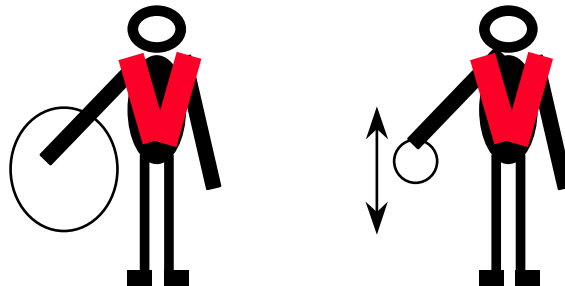
**Caution - Reduce speed signal.**

This signal is given when the Driver is required to **reduce the speed** of the movement,



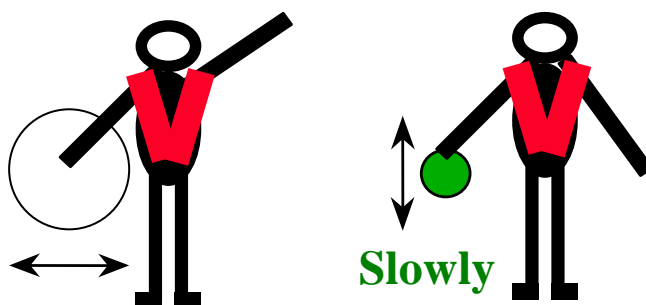
**Move Away Signals**

This signal is given when the rail safety worker exhibiting the signal requires the Driver to **move away** from the rail safety worker,

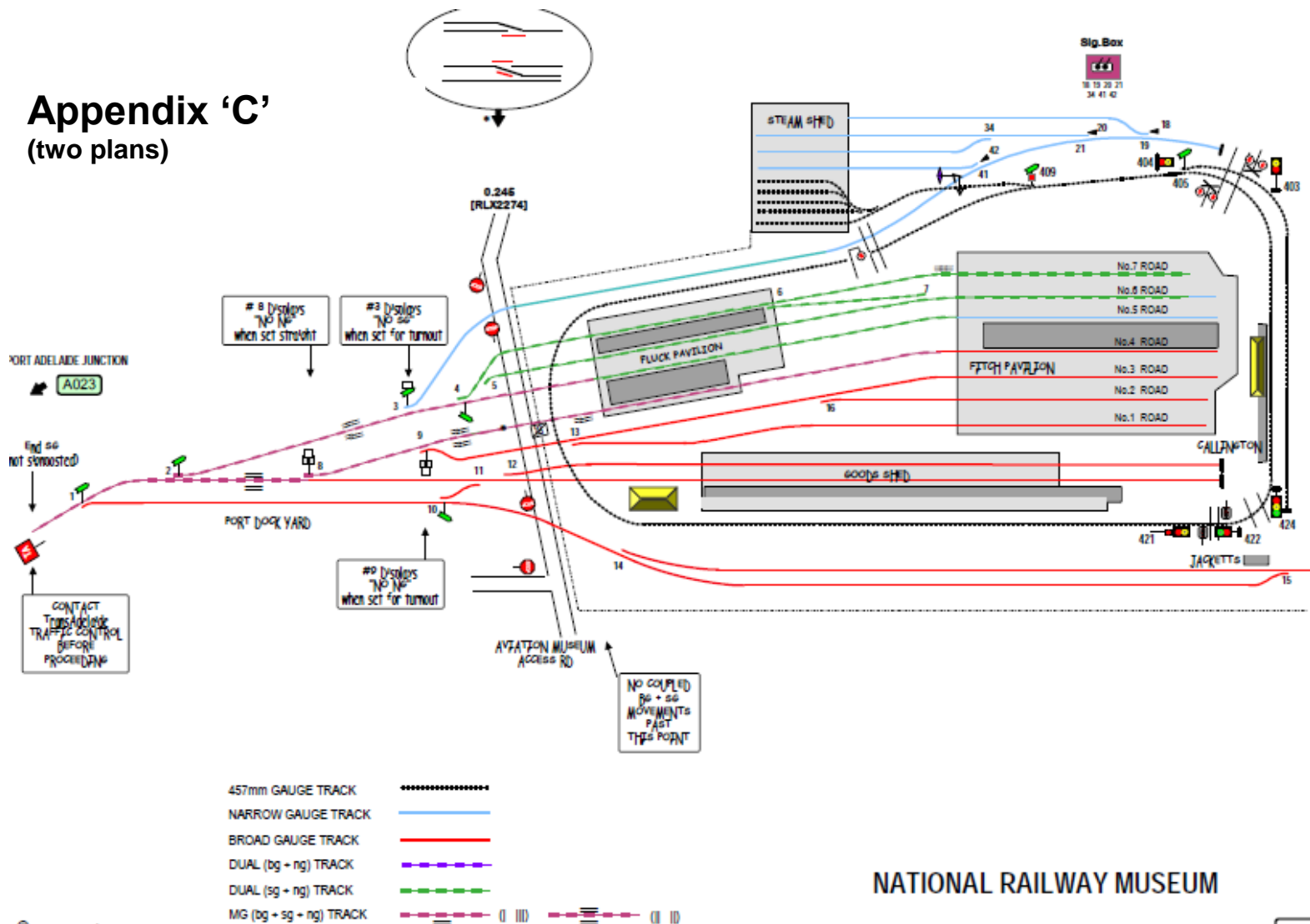


**Move Away slowly Signal**

This signal is given when the rail safety worker exhibiting the signal requires the Driver to move **slowly away** from the rail safety worker,



# Appendix 'C' (two plans)



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