

# **Castlemaine & Maldon Railway**

## **Safety Management System**

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## Castlemaine & Maldon Railway profile

Castlemaine & Maldon Railway (CMR) is a medium-sized tourist railway operator that provides its services to the public on weekends and school and public holidays between the township of Castlemaine and Maldon in regional Victoria.

The Castlemaine and Maldon Railway Preservation Society (CMR) operates over the broad gauge 1600mm [5' 3"] ex-Victorian Railways Branch line between the provincial city of Castlemaine and the township of Maldon, some 16 kilometres distance, known as the Victorian Goldfields Railway. The line has one intermediate station located at Muckleford halfway between Maldon and Castlemaine.

CMR operations at Castlemaine operate into the area known as the West yard which includes No.3 Platform as part of an island platform also containing platform 2. Platform 2 is used by trains on the Melbourne-Bendigo Line. The CMR shares use of the island platform with the main line operators but the Castlemaine "A" Signal box and west Yard are included in the Order in Council and a separate lease is held by the CMR on the island platform building. Access to Castlemaine West Yard is via the Vic track operated and maintained Castlemaine - Maryborough line for a distance of approximately 1.5 kilometres to Maldon Junction. The branch line then extends a further 14.5km to Maldon. Details of the line can be found in the Schedules attached to the Order in Council.

Passenger services operate between Maldon and Castlemaine and are operated primarily by steam locomotive hauled wooden bodied rolling stock dating back to the early 20th Centenary. Safeworking operations utilise Train Staff and Ticket operation and are in accordance with Tourist Railways Rules and General Instructions issued by the Association of Tourist Railways and the arrangements with VicTrack.

The Society also undertakes contract track maintenance work on private sidings.

Approximately 20,000 people a year ride on Castlemaine & Maldon Railway's fleet of heritage-listed locomotives, passenger cars and railmotor to view the Castlemaine and Maldon country side, travelling 16 kilometres along the former branch line to Maldon township. CMR has operated the branch line in a similar manner since 1986, initially operating on the 8 km section from Maldon to Muckleford prior to extending to Castlemaine.

Castlemaine & Maldon Railway's fleet consists of heritage-listed locomotives, passenger cars, wagons, and railmotors, most of which are owned by CMR. The branch line is made available to CMR through an Order in Council, with CMR managing the track and infrastructure. The workshop and storage facilities at Castlemaine and Maldon are on Castlemaine & Maldon Railway's order in council property.

Volunteers actively contribute to CMR's operations. CMR currently has an EFT staff of 2 and a volunteer base of around 80 rail safety workers.

## Index of CMR's SMS resources

Safety Management System	Resources
1 Rail Safety Policy	<a href="#">Rail Safety Policy (CMR P 001)</a>
2 Governance and Internal Control Arrangements	
3 Management, Accountabilities, Responsibilities and Authorities	<a href="#">Worker Qualification Register (CMR F 001)</a>
4 Regulatory Compliance	<a href="#">Document Register and Safety Records (CMR F 004)</a>
5 Document control arrangements and information management	<a href="#">Document Control Form (CMR F 003)</a> <a href="#">Document Register (CMR F 004)</a> <a href="#">Safety Records Retention Schedule (CMR F 036)</a>
6 Safety Records	<a href="#">Safety Records Retention Schedule (CMR F 036)</a>
7 Safety performance targets and performance measures	
8 Internal SMS audit arrangements	<a href="#">Audit Procedure (CMR P 002)</a> <a href="#">Audit Scope Planner (CMR F 002)</a> <a href="#">Audit Checklist and Report (CMR F 005)</a> <a href="#">Audit Log Form (CMR F 006)</a> <a href="#">Audit Report Form (CMR F 007)</a> <a href="#">Non Conformance/Non Compliance Report Form (CMR F 008)</a>
9 Corrective Action	<a href="#">Non Conformance/Non Compliance Report Form (CMR F 008)</a>
10 Review and Revision	
11 Management of Change	<a href="#">Change Management Procedure (CMR P 003)</a> <a href="#">Change Register (CMR F 030)</a>
12 Security	<a href="#">Incident / Defect Report Form (CMR F 009)</a> <a href="#">CMR Emergency Plan (CMR P 004)</a>
13 Safety Culture	<a href="#">Tool Box meeting (CMR F 039)</a>
14 Consultation	
15 Internal Communication	<a href="#">Incident/Defect Report Form (CMR F 009)</a>
16 Risk Management	<a href="#">Railway Operations Risk Register (CMR F 033)</a> <a href="#">Risk Action Plans (CMR F 035)</a>

<b>Safety Management System</b>	<b>Resources</b>
17 Personnel Management	<p>CMR Alcohol and Drug Control Policy (CMR P 005)</p> <p>Rail Safety Worker Health Risk Assessment Template (CMR F 010)</p> <p>Record of Medicals (CMR F 021)</p> <p>Safety Critical Worker Health Assessment Request and Report Form (CMR F 012)</p> <p>Safety Critical Worker Notification and Health Questionnaire (CMR F 013)</p> <p>Safety Critical Worker Health Assessment Record (CMR F 014)</p> <p>Screen-Based Equipment Examination Request and Report Form (CMR F 015)</p> <p>Screen-Based Equipment Eye Examination Record for Health Professional (CMR F 016)</p> <p>Track Safety Health Assessment Request and Report Form (CMR F 017)</p> <p>Track Safety Health Assessment Record (CMR F 018)</p>
18 Rail Safety Worker Competence	<p>General Safety Induction (CMR P 006)</p> <p>Training Matrix (CMR F 019)</p> <p>Hi Rail Training sign off (CMR F 020)</p> <p>Record of Authorised Staff &amp; Qualifications and Medical Records (CMR F 021)</p>
19 Information, Instruction and Training	<p>Training matrix (CMR F 019)</p>
20 Procurement and Contract Management	<p>Preferred Suppliers' List (CMR F 022)</p>
21 Engineering and Operational Safety Systems	<p>Track Standard (CMR S 001)</p> <p>Rolling stock mechanical standards (CMR S 002)</p> <p>Procedure for Safety in Cabs of Steam Locomotives (CMR P 012)</p> <p>Procedure for Casual Footplate Rides (CMR P 013)</p> <p>The Procedure for 'Driver for a Day' (CMR P 014)</p> <p>Safety in Cab of Steam Locomotive Form (CMR F 032)</p> <p>Steam loco pre service checklist (CMR F 042)</p> <p>Timetable and Supplementary Instructions (CMR M 002)</p> <p>Check form for Hi Rail Vehicle Inspection (CMR F022)</p>

<b>Safety Management System</b>	<b>Resources</b>
22 Process Control	<p>Track Standard (CMR S 001)</p> <p>Rolling Stock Mechanical Standards (CMR S 002)</p> <p>Procedure for Certification of Rolling Stock Standards (CMR P 007)</p> <p>Rolling Stock Inspection Procedure (CMR P 009)</p> <p>Permanent Way Manual</p> <p>Train Examination Procedure (CMR P 011)</p> <p>Rolling Stock Certification Forms (CMR F 042 &amp; F 043)</p> <p>Rolling Stock Register (CMR F 024)</p> <p>Record of Calibration of Equipment (CMR F 028)</p> <p>Track Inspection Report (CMR F 029)</p> <p>Track Defect Report ( CMR F 009)</p> <p>Rollingstock Defect Advise ( CMR F 041)</p> <p>The procedure for Introduction of Rollingstock (CMR P 015)</p> <p>Road Rail Training Instructions (CMR W 001)</p> <p>Rollingstock exam forms (CMR F 042)</p> <p>Rollingstock and Track Inspection and Report forms (CMR F 043 )</p>
23 Asset Management	Infrastructure on the CMR (CMR M 003)
24 Safety Interface Coordination	
25 Occurrence and Emergency Management	<p>CMR Emergency Plan (CMR P 004)</p> <p>Incident Report Form (CMR F 009)</p> <p>Incident and Defect Report ( IDR) and Accident Report Form (CMR F 009)</p> <p>PTSV Form SPF 015</p>
26 Investigations	<p>Incident and Defect Report Form (CMR F 009)</p> <p>Proforma Investigation Report (CMR F 031)</p>

## 1 Safety policy

CMR's rail safety policy (**CMR P 001**) defines the safety aims and objectives of the organisation. The policy articulates CMR's commitment to risk management and the development of a positive safety culture. The safety policy was developed in consultation with CMR members and non-member volunteers. It has been approved by the CMR Board of Management and Safety Committee.

The rail safety policy is reviewed every year or more frequently if necessary. The review involves consultation with CMR members and non-member volunteers. Any changes to the policy are submitted to the CMR Board of Management for approval.

As part of the review, the Board of Management determines the key safety performance targets for the next year and circulates these to members and staff.

The targets and subsequent results are discussed at each committee meeting during the year to ensure that targets are being met, and if this is not the case, to identify what additional controls need to be implemented.

The rail safety policy is a controlled document, requiring the signature of the President on behalf of the Board of Management to take effect.

The rail safety policy is displayed at various prominent locations around the railway so it is available to members, volunteers, passengers and the public.

## 2 Governance and internal control arrangements

### 2.1 Governance

The Board of Management of the CMR is made up of the following positions:

- President
- Five to Eight Directors, and
- Non elected officials

The Board of Management is elected annually at the CMR Annual General Meeting.

The Board reviews its standards and procedures on a regular basis at its meetings in order to monitor the effectiveness of document control processes as well as other issues.

At Board and Safety Committee meetings another standard agenda item is the review of the risk register. The Responsible Officer provides an update on the risk register at each meeting and aspects of the risk register are discussed by the committee.

The Responsible Officer and the various Branch Managers provide the President and Board of Management with appropriate safety information to assist them in their decision making.

### 2.2 Internal control arrangements

Responsibility for implementing and maintaining the SMS at CMR has been given to the Responsible Officer and the Branch Managers.

Management of operational safety is the responsibility of the Operations and Assistant Managers, the Mechanical and Assistant Managers and the Civil and Assistant Managers, who have responsibility for applying risk management processes to maintain a safe operational and work environment.

The major safety responsibilities and accountabilities within CMR are set out in the table in Section 3. 2.

Refer to Section 15 for the internal communication policy which sets out the flow of information through the organisation, including information about:

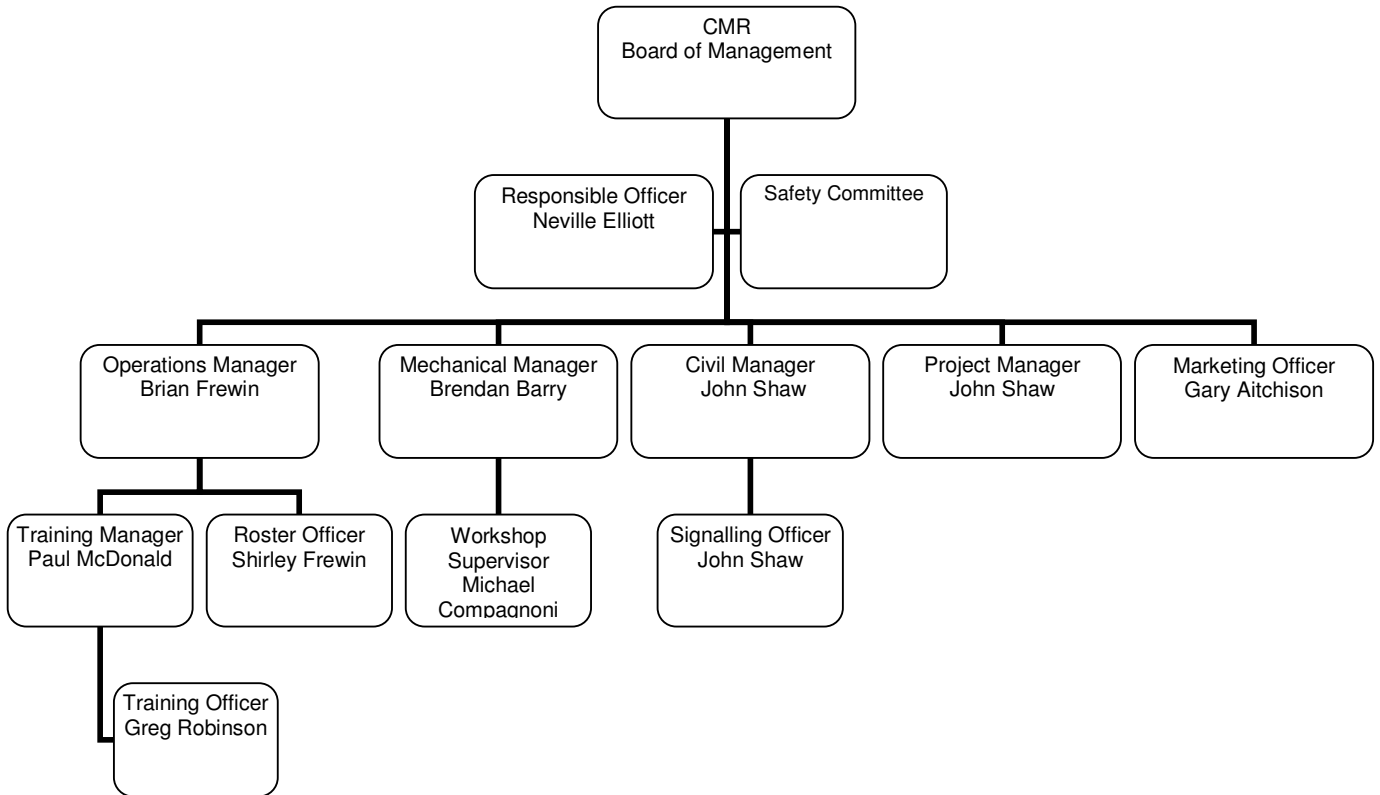
- compliance with the Act and Regulations
- the effectiveness of the SMS
- hazard and incident identification and proposed measures for the control of the likelihood, magnitude and severity of the consequences of incidents.

The Board of Management will minute and record actions to confirm all decisions and directions have been implemented.

### 3 Management, accountabilities, responsibilities and authorities

#### 3.1 Management structure

The management structure of CMR is as follows:



#### Principal Operations Officers

The organisational chart details the various areas of responsibility and reporting chain for the railway and its associated bodies. It is possible for an individual to hold more than one position due to the shortage of manpower. However it is the Board's intention that each position be an individual's responsibility

As at November 2010

## **3.2 Responsibilities and accountabilities**

Due to the nature of the organisation being primarily a volunteer operation, many tasks are performed by people who may have suitable experience or aptitude but no official qualifications for the tasks that they undertake. The following conditions are therefore to be followed.

All personnel, with the exception of skilled persons, performing tasks which impact upon safety in some form shall be deemed as "Unskilled", and all work performed shall be independently inspected by a suitably skilled person, who shall report the satisfactory completion of the task to the relevant Branch Manager via the defined reporting procedures. Such reports shall be recorded in logbooks or other applicable recording method (e.g. inspection record)

Skilled personnel shall be as deemed by the management team, as competent on a basis of knowledge, experience, and qualification, and shall be advised that such skill has been recognised and accepted by the organisation.

Records of such skilled personnel shall be maintained by the relevant Branch Manager. These records shall be reviewed by the Branch Manager, with the review period being not greater than 1 year.

### **3.2.1 Key management personal**

All members and personnel involved in the operation of the railway have a responsibility for ensuring the safety of all activities, and persons. The ultimate responsibility for safety aspects within the operation lies with the appropriate key management personnel. Appointments to these positions made by the Board of Management of the CMR are on an on-going basis until changed by the Board of Management.

Key Management personnel whose roles affect safety shall be deemed as follows:

- Responsible Officer
- Operations Manager
- Mechanical Manager
- Civil Engineering Manager;
- Signals and Communications Manager

The Key Management personnel have the authority and responsibilities of also:

- Initiating actions to prevent the occurrence of incidents/accidents.
- Identify and record incidents/ accidents.
- Initiate, recommend and provide solutions to perceived risks via designated corrective channels.
- Participate in the proving and verification of such solutions.
- Controlling any required maintenance /or operations until any deficiency has been satisfactorily corrected.
- Responding to any Emergency Response situations.

Secondary management personnel may include but not be limited to:

- Assistant Operations, Civil and Mechanical Managers
- Loco running inspector.
- Safeworking examiner.
- Training officer
- Electrical, Fire & Safety officer
- Steam Locomotive Manager
- Diesel Locomotive & Railmotor Manager

- Cars & Wagons Manager
- Running Gear Maintenance Manager
- Civil & Mechanical Consulting Engineers
- Track and Drainage Manager
- Buildings Manager

Other operational staff shall include but not be limited to those personnel as referred in section 1.1 of the Tourist Railway Rules and General Instructions 1994. Where the need to identify and address specific responsibilities and authorities for any person is required, this shall be conducted by the appropriate Branch Manager, and forwarded to the Responsible Officer for inclusion into this manual if required.

Responsibilities for responding to emergency situations are outlined in the CMR Emergency Response Plan (CMR P 004)

**3.2.2 Position responsibilities and accountabilities can be found in the table below.**

<b>Position</b>	<b>Responsibilities</b>	<b>Accountabilities</b>
<b>President</b>	Provides leadership to CMR	Gives executive approval of CMR safety policies Endorses accuracy and completeness of Annual Safety Report and other submissions to the Regulator Initiates internal training requirements
<b>Directors</b>	Ensures the financial and safe operation of CMR Ensures compliance with relevant acts and regulations Provides safety information and advice to the Chairperson Demonstrates leadership on issues of safety, including participation in compliance inspections	Selects and monitors performance of senior staff Approves safe working systems Initiates independent risk assessments or validates risk assessments, where appropriate Initiates compliance and safety audits Approves budgets, including allocation for safety expenditure Approves expenditure, including ensuring that purchase request forms contain safety specifications for the requested items Disseminates any changes to legislation and similar reference documents including ensuring that the SMS and other policies reflect these changes Implements and manages the SMS

Position	Responsibilities	Accountabilities
<b>Responsible Officer</b>	<p>Directly responsible to the Board for liaison with the Department of Infrastructure regarding all aspects of the "Order in Council" and for Rail Safety Accreditation implementation and maintenance.</p> <p>Responsible for the maintenance, review and improvement of all aspects of the Rail Safety Accreditation procedures and records.</p> <p>Conduct, schedule , review and generally manage internal audits.</p> <p>Advise Public Transport Safety Directorate Officers of operations incidents etc as required by the Order in Council and Rail Safety Accreditation</p>	<p>Full authority with regards to the management of the Rail Safety Accreditation procedures and records.</p> <p>Convene Boards of inquiry into incidents etc that may occur.</p> <p>Authorised to directly liaise with Public Transport Safety Directorate Officers as required to execute the duties of the position.</p>

Position	Responsibilities	Accountabilities
<b>Operations Manager</b>	<p>Ensures compliance with relevant SMS provisions and related standards and procedures</p> <p>Selects and monitors performance of training officer, roster manager, ATR Safe working Examiners and train crews</p> <p>Management , authorisation and responsibility for all operational, timetabling and train running matters</p> <p>Management, authorisation and responsibility of all operations staff, training, medical and appropriate records.</p> <p>Communicate with managers of Civil, Mechanical and Signals &amp; Communications Branches in all operational matters and requirements.</p> <p>Convene any Boards of Inquiry in consultation with the Responsible Officer</p> <p>Communicate with "Loco Running Inspector" in matters relating to Safety</p> <p>Communicate with Safeworking Examiners with matters referring to Safety and operational staff qualifications.</p> <p>Assist the Training Officer with conducting of classes and re-classifications of staff and ensuring sufficient staff are available to meet roster commitments.</p> <p>Maintain records of all registered Operational Safeworking Staff.</p> <p>Maintain a database of Certificate Details of all Operational Safeworking Staff and advise when examinations are required.</p> <p>Maintenance of all records and documentation as defined in the Rail Safety Accreditation Manual</p> <p>Shall ensure that all processes, methods, documents, records and actions are maintained in accordance with, and not contravening the Rail Safety Accreditation procedures.</p>	<p>Rosters train crews</p> <p>Allocates resources, including for safety actions</p> <p>Initiates corrective action where breaches of safety requirements are detected</p> <p>Carries out compliance inspections</p> <p>Identifies, assesses and rectifies workplace hazards</p> <p>Certifies safety of operations arrangements, including personnel management issues and operational procedures and protocols</p> <p>Certifies accuracy and completeness of information in annual safety reports for area of responsibility</p> <p>Specifies safety requirements when requesting purchase of goods</p> <p>Updates the risk register and discusses at the committee meetings</p> <p>Measures the effectiveness of the SMS, amending it as needed</p> <p>Authorisation of all operational, train running and similar matters and circumstances.</p> <p>Implement additional services, cancel or suspend services as may be required.</p> <p>Immediately suspend any member who attends his duty whilst under the influence of alcohol.</p> <p>Authorisation of Total Occupancy of sections of line, as required.</p> <p>Permit special trains to operate in totally occupied sections of the permanent way.</p> <p>Order fuel and other consumables required for the operation of the locomotives and rolling stock</p> <p>Responsible for all security related matters</p>

Position	Responsibilities	Accountabilities
<p><b>Civil Manager</b></p>	<p>Constructs and/or maintains and certifies safety of rail infrastructure ie track, buildings etc that are required for safe operation of trains and owned or managed by CMR. This is done in consultation with the Operations Manager</p> <p>Ensures compliance with relevant SMS provisions and related standards and procedures</p> <p>Report all pertinent information required by the Board.</p> <p>Oversee the maintenance and construction of track, bridges, drainage forming part of the permanent way, buildings and other infrastructure.</p> <p>Responsible for the implementation of all instructions and requirements as issued by consulting engineers and inspectors in the course of their inspections.</p> <p>Shall ensure that all applicable processes, methods, documents, records and actions are maintained in accordance with, and not contravening the Rail Safety Accreditation procedures.</p> <p>Shall ensure that all materials and services provided for infrastructure maintenance including private siding maintenance works meet specifications to ensure safe use.</p> <p>Is responsible for ensuring private siding maintenance works are carried out to owners specifications in a safe and efficient manner.</p>	<p>Identifies and assesses workplace hazards. Rectifies workplace hazards, or makes recommendations or refers to Board</p> <p>Safety certification of rail infrastructure and related equipment and procedures</p> <p>Selects and supervises service providers for rail infrastructure maintenance, including specification of safety requirements</p> <p>Certifies accuracy and completeness of information in annual safety reports for area of responsibility</p> <p>Specifies safety requirements when requesting purchase of goods</p> <p>Provides the Responsible Officer with input to update the SMS</p> <p>Liaison with consulting engineers, inspectors, and external sub-contractors in all civil engineering matters, unless otherwise documented.</p> <p>In consultation with the Operations Manager may apply speed restrictions to any area of the permanent way for the duration of repairs or stabilisation of works.</p> <p>Apply temporary closure of track if conditions exist which could affect the safety of passengers, staff or trains.</p>

Position	Responsibilities	Accountabilities
<p><b>Mechanical Manager</b></p>	<p>Maintains fleet of locomotives, coaches and wagons</p> <p>Ensures compliance with rolling stock standards and safety requirements and procedures</p> <p>Is ultimately responsible for the safe operating integrity of all vehicles utilised by the railway.</p> <p>Is responsible for ensuring that all required rolling stock meets annual certification requirements.</p> <p>Is responsible for ensuring that all visiting rolling stock has appropriate certifications.</p> <p>Submit written reports and information as required by the Board.</p> <p>Communicate with "Loco Running Inspector" in matters relating to training and crew efficiency</p> <p>Manage the maintenance of all operational rolling stock in accordance with established procedures.</p> <p>Regularly review rolling stock, workshops and depots for adequacy and partake in the formulation and recommendation of appropriate changes.</p> <p>Shall ensure that all applicable processes, methods, documents, records and actions are maintained in accordance with, and not contravening the Rail Safety Accreditation procedures.</p> <p>Shall ensure that all materials and services provided for vehicle workshop and depot maintenance meet specifications to ensure safe use.</p> <p>Responsible for the implementation of all instructions and requirements as issued by consulting engineers and inspectors in the course of their inspections</p> <p>Maldon Railway 1.1.</p>	<p>Sets maintenance schedules</p> <p>Sets and supervises train examinations</p> <p>Recommends rolling stock for major overhaul</p> <p>Identifies and assesses workplace hazards</p> <p>Rectifies workplace hazards, makes recommendations or refers to Operations Supervisor</p> <p>Certifies safety of rolling stock and related equipment and procedures</p> <p>Selects and supervises service providers for rolling stock maintenance and testing, including specification of safety requirements</p> <p>Certifies accuracy and completeness of information in annual safety reports for area of responsibility</p> <p>Provides the Responsible Officer with input to update the SMS</p> <p>May authorise expenditure, within budgetary constraints, thereby ensuring the ongoing availability of required rolling stock.</p> <p>Withdraw from service any locomotive or carriage which is unsafe or fails to meet safety requirements.</p> <p>Liaison with consulting engineers, inspectors, and external sub-contractors in all matters relating to the locomotives and rolling stock, unless otherwise documented.</p> <p>Responsible for the implementation of all instructions and requirements as issued by consulting engineers and inspectors in the course of their inspections</p> <p>CMR SMS – November 2010</p>

<b>Position</b>	<b>Responsibilities</b>	<b>Accountabilities</b>
<b>Safeworking examiner</b>	These persons are ATR appointed and are directly responsible to the Operations Manager for matters pertaining to Safeworking as detailed in the Tourist Railway Rules and General Instructions.	Examine candidates in Safeworking Advise Training Manager of any training prerequisites and provide guidance if required. As defined by the ATR
<b>Signals and Communications Manager</b>	Shall be responsible to the Civil Manager for all matters relating to the maintenance, operation and restoration of all signalling equipment, communications equipment.	Report all pertinent information required by the Board. Maintain all signalling equipment including level crossing warning apparatus used on the railway in working order. Book out of service any equipment which fails to meet required standards and issue specific instructions to the Operations Manager, to permit safe passage of trains. Shall ensure that all applicable processes, methods, documents, records and actions are maintained in accordance with, and not contravening the Rail Safety Accreditation procedures.
<b>Training Manager</b>	Responsible to the Operations Manager for the training of crews.  Will also be responsible for all other training requirements  Compile and conduct training courses for operations and other staff as required.	Recommend candidates for examination when they have demonstrated knowledge of the standards required for the proposed position.  Conduct preliminary examinations of safeworking personnel prior to formal qualification with Safeworking Examiner.
<b>Civil/Mechanical Consulting Engineers</b>	The person or company shall be completely autonomous from the railway and shall conduct complete inspections at a minimum of every 12 months of either the entire operational section of the track, including rails, sleepers, culverts, bridges, platforms, drainage etc which can effect the safe passage of trains; or all utilised rolling stock (as applicable).	At the completion of such inspection a Certificate shall be forwarded immediately to the relevant Manager for submission to the Responsible Officer certifying that train operations may continue, and also highlighting any trouble areas or recommendations for corrective actions and repairs. They may also recommend the maximum speed limit for the certified section/stock.  Attached to the Certificate shall be a detailed report commenting on the condition of track, sleepers, drains, culverts and bridges, vehicles etc. ; and listing any specific works which must be completed before the next inspection. Attention is also to be drawn to any specific speed restrictions, which may be applied for the duration or until specific works are completed.

Position	Responsibilities	Accountabilities
<b>Assistant Operations/ Mechanical and Civil Managers</b>	The appropriate Manager may appoint an assistant to perform such tasks as determined by the appropriate Manager in line with the Duties Responsibilities and Authorities of that position.	Shall deputise for the appropriate Manager especially during periods of his planned or unplanned prolonged absence. (Prolonged absence means - unable to be contacted or be able to attend the railway for more than 3 operational or working days.)  Shall take control of any emergency tasks from the railways perspective, if the appropriate Manager is unavailable, or uncontactable, when an emergency occurs as defined in the Emergency Response Plan.
<b>Officer in Charge (OIC)</b>	<p>The operation of the railway on any day depends on a large number of people working as a team to ensure all that is needed is satisfactory accomplished.</p> <p>To ensure that the activities of all concerned are coordinated and directed towards that aim, an Officer-In-Charge (OIC) is appointed for each running day..</p> <p>On behalf of the CMR Railway Board, control or coordinate the activities necessary for the safe and effective operation of the Railway for the day.</p> <p>On most days the Stationmaster, will be the OIC unless otherwise advised.</p> <p>Arrive on the job at least two hours before the commencement of passenger train operations for the day.</p>	<p>The OIC is the person in whom the satisfactory day-to-day operation of the Railway is vested and is the person to whom all personnel on duty are operationally responsible</p> <p>Supervises all aspects of train operations, on a shift basis. Ensures the requirements of the SMS are observed in day to day operations</p> <p>Refer to the Standing Instructions 2010 for further detailed responsibilities and duties</p>
<b>Workers/ Volunteers</b>	<p>Adheres to the rail safety policies</p> <p>Performs allotted duties in accordance with CMR documented procedures and instructions</p> <p>Participates and constructs in development and review of safety systems as required</p>	<p>Reporting of safety issues and suggestions for solutions in accordance with CMR's reporting protocols</p> <p>Adhering to the communication policy of reporting concerns, hazard identification and the effectiveness of the SMS to the Manager or Supervisor.</p>

### 3.2.3 Delegation

Any of the Branch Managers may delegate specific duties to persons suitably trained and qualified. On-going delegations are defined in individual job specifications. Any temporary delegations may be notified in writing to the nominated person. Should a person who is normally responsible for a specific task be absent or unavailable, then delegation shall be upwards in all instances, unless another person has been designated prior to the occurrence of the activity to undertake the duties required.

### **3.2.4 Delegation of Safety Matters**

Where a position on the organisation chart is not filled then the responsibilities for rail safety matters will be delegated upward to the next assigned position.

In the case of the Responsible Officers position, this will be delegated to the position of President.

Further information about internal control arrangements can be found in Section 2.2.

To ensure that volunteers/workers have the required knowledge and skills, a Worker Qualifications (**CMR F 021**) has been designed to show the current qualifications and training needs of CMR workers.

### **3.3 Governance arrangements**

Governance of the CMR is through the Board of Management. Refer to Section 2.1 for further information about the Board of Management.

### **3.4 Audit**

Audits of CMR's SMS are carried out to validate the organisation's compliance with the relevant Acts, Regulations, CMR procedures, and other requirements.

Refer to Section 8.2 for further information about audit schedules and requirements.

### **3.5 Reporting process**

Refer to Section 15 for information about CMR's internal communication policies and procedures.

## 4 Regulatory compliance

CMR complies with all Acts and Regulations relevant to its operations and ensures its workers and volunteers are aware of their legal responsibilities. Refer to Section 15 for further information about internal communication.

The Responsible Officer has responsibility for keeping current copies of relevant Acts and Regulations according to CMR document and data control procedures. The Responsible Officer reviews the copies of Acts and Regulations to make sure these are up to date. (Appropriate web sites and other appropriate sources are monitored to check for any new or changed Acts and Legislation that impact the CMR. Primary sites are [www.dms.dpc.vic.gov.au](http://www.dms.dpc.vic.gov.au) and [www.lawlex.com.au](http://www.lawlex.com.au)).

The current version of the Rail Safety Act 2006 and Regulations can be accessed via the PTSV web site – [www.ptsv.vic.gov.au/](http://www.ptsv.vic.gov.au/)

This review is carried out every twelve months or more frequently if it becomes known that changes have occurred to the relevant documents. CMR's membership of the Association of Tourist Railways also provides a forum for highlighting changes to legislation.

The Acts and Regulations relevant to CMR operations include:

- Rail Safety Act 2006
- Rail Safety Regulations 2006
- Transport Act 1983
- Road Management Act 2004
- Transport Legislation (Safety Investigations) Act 2006.
- Control of Pressure Vessels, Boilers and air receivers.
- Environmental management.
- Interactive railway operations
- Management of subcontractors and services provided.
- Contingency planning.
- Transport (Alcohol & Drug Controls) Act 2001
- Dangerous Goods Act

Details of all relevant Acts and Regulations monitored and held by CMR are provided in the Document Register (**CMR F 004**) (See Section 5.2).

When policies and procedures are developed, or existing policies and procedures are reviewed, a check is made of relevant Acts and Regulations to ensure the policies and procedures are legally compliant.

## 5 Document control arrangements and information management

Document issue and control of the Accreditation documentation including procedures, manuals and other instructions, is the responsibility of the Responsible Officer, who shall maintain a matrix or register of all issued documents.

Controlled documents shall be classed as:

- Procedures and instructions pertaining to the Rail Safety Accreditation requirements.
- Tourist Railway Rules and General Instructions
- General Appendix and Supplementary Instructions
- Standards documents

All of the above documents shall be identified as in section 5.1

### 5.1 Document identification

Controlled documents are allocated a unique identification number. Where there is more than one copy of a controlled document these are numbered in sequence.

CMR applies the following numbering system to documents developed within CMR and those obtained externally. Documents and data are controlled through insertion of a Document Control Form (**CMR F 003**) in the front of each copy.

Documents that may be reviewed and thereby changed are controlled

The document and data control numbering protocol is:

Organisation Name:	CMR
Manuals:	M
Standards:	S
Policies/Procedures:	P
Forms:	F
Item Number:	3 digits e.g. 001
Revision status:	Rev. 0
Copy Number:	when more than one copy is issued

For example, this version of CMR's SMS is CMR M 001 Rev.0.

### 5.2 Document register & storage

A Document Register (**CMR F 004**) is kept in the Maldon Workshop office.

The Document Register includes the following minimum information:

- a unique document number
- title of document, standard, procedure or form
- person responsible for maintaining document
- Issue date
- document status (e.g. draft, revision number, superseded or obsolete)
- risk register cross reference (where appropriate)
- retention period
- disposal action.

### **5.3 Document and Data Approval and Issue**

The Responsible Officer reviews and approves all new and amended rail safety documents before they are issued.

The Responsible Officer records that review and approval has taken place by signing the relevant column of the Document Control Form (**CMR F 003**) at the front of each master control document.

The identity of individual holders of manuals and procedures is recorded on the Document Control Form at the front of each controlled master copy.

The Responsible Officer distributes controlled documents by hand to each person on the document distribution list for storage in agreed locations (ie Maldon Loco workshop, Maldon Station office, Castlemaine Signal Box). The Responsible Officer removes obsolete documents and then updates the Document Register to indicate the current status of each document. Archived or superseded documents that could impact on the safe operations of CMR are stored separately in a secure environment.

CMR keeps obsolete documents in accordance with the Safety Records Retention Schedule (**CMR F 036**), after which they are reviewed and either discarded or retained as archival documents. (See Section 6.2).

### **5.4 Document Changes**

The relevant Branch Manager is responsible for issuing any amendments to the documents for which they have responsibility to the Responsible Officer for inclusion in controlled manuals and for distribution to workers as appropriate.

Communication of change to members is set out in section 15 –Internal Communication.

Documentation shall be reviewed at periodic intervals and shall be amended appropriately. Such reviews may be as a result of External Audit, Internal Audit, Management Review, or other suggestion.

All suggested revisions shall be submitted in written form to the Responsible Officer for consideration, presentation and approval by the Board of Management.

## 6 Safety records

### 6.1 Identification

The identification and administration of Safety Records will be the responsibility of the Responsible Officer and the relevant Branch Managers.

'Railway safety records' include operational records, engineering records, and rail safety worker records such as competencies, training records, and health assessment records under Section 40 of the Rail Safety Regulations 2006.

### 6.2 Storage and retention of safety records

CMR makes safety records available for inspection by authorised parties as required.

The Safety Records Retention Schedule ([CMR F 036](#)) lists the records to be retained, how long these are to be retained and the name of the Manager or Supervisor who is responsible for monitoring storage and retention.

The Filing and storage of system master documentation shall be the responsibility of the Responsible Officer. All reference documentation and manuals shall be retained as required by the appropriate manager; however access to procedures must be freely available to all employees.

Due to the valuable and collectable nature of some maintenance manuals, these may be retained in a secure environment with access limited.

All records shall be retained and archived by title, chronologically, in the archives area. This archiving is the responsibility of the appropriate manager.

### 6.3 Layout & records

The procedures that comprise this system shall be in printed format.

Records, logs etc. shall be contained in hand written card, logbook, loose leaf files and similar systems. These records will be located and maintained as follows-

Operational records (qualifications, IDR's etc, OIC reports)	Maldon Workshop
Mechanical Records(locomotive and rolling stock maintenance records etc)	Maldon Workshop
Civil Records (Track inspection and maintenance records)	Maldon Workshop
Rail Safety Audit records	Maldon Workshop

All supporting documentation will be located at point of use or in a Central library (located in the locomotive shed at Maldon)

## 7 Safety performance targets and performance measures

### 7.1 Performance goals

The Board of Management sets goals each year for the improvement of CMR's safety performance. CMR assesses its performance against these goals by monitoring and analysing the numbers and types of:

- notifiable occurrences per kilometre travelled, or per operating day
- injuries
- Incident Defect Reports (IDRs)
- Faults (Zero derailments)
- customer complaints
- All internal audits and inspections completed as scheduled

### 7.2 KPIs

Key performance indicators which measure safety performance and determine whether the SMS is effective include:

- corrective actions resulting from the internal review implemented within agreed timeframes; and
- directions from the safety regulator implemented within the required timeframe.

CMR aims to meet or exceed key safety performance targets through the effective use and review of procedures and standards, including the collection and measurement of data on completion of and compliance with safety management activities.

### 7.3 Data collection

CMR collects data to show how it is meeting its safety performance objectives, including the following:

- risk register
- injury register
- agenda items and or minutes from safety committee or relevant safety meetings
- Notifiable Occurrence Forms
- IDRs
- analysis of causes of accidents and incidents — this helps to develop strategies to prevent future occurrences

Reports of key safety performance data are provided to the Board of Management and safety performance for the year is presented in each annual report.

## 8 Internal SMS audit arrangements

### 8.1 Safety audit program

CMR's Board of Management is responsible for establishing and managing the CMR annual audit program. Two levels of auditing may be undertaken:

- CMR workers with relevant experience and knowledge of position responsibilities, but independent of the position being audited, carry out internal audits to ensure individuals assigned rail safety responsibilities are effectively carrying out their responsibilities
- Where appropriate, external auditors with relevant experience (e.g. Managers or Supervisors from other heritage rail operators) may carry out audits of specific SMS policies and procedures.

Audits are conducted according to the Audit Procedure ([CMR P 002](#)).

The Responsible Officer is responsible for internal audit arrangements and for reviewing the risk register to make sure high risks are given priority.

### 8.2 Audit scheduling

The Board of Management prioritises the audit program taking into account various factors, including:

- previous audit findings and recommendations
- recent rail safety performance
- status and importance of activities to be audited
- scope of previous audit
- industry trends

The program is run on a financial year basis according to a prepared Audit Scope Planner ([CMR F 002](#)). This schedule may vary as a result of changes to audit priorities or if additional audit requirements are identified. The Audit Schedule makes provision for all rail safety related activity to be audited at least once in each financial year.

The audit program is monitored at meetings of the Board of Management, which inspects the Audit Log ([CMR F 006](#)) to ensure audits are proceeding according to schedule. The annual audits only cover part of the SMS and over a 5 year period the whole SMS should be reviewed. The audit schedule sets out which aspect of the SMS should be audited each year for the 5 years. No Manager can conduct an Audit on his own area of responsibility.

### 8.3 Audit reporting

Audit findings are documented on the Audit Report Form ([CMR F 007](#)) with Non Conformance/Non Compliance Report Forms ([CMR F 008](#)) completed, as necessary. The scope for annual independent audits includes the requirement to provide a written audit report.

Audit reports are given to the Responsible Officer and are reviewed at Board of Management meetings until all corrective action items have been completed.

Where findings from audits require urgent attention the Manager can assign corrective action items to the relevant workers or arrange to convene a Board of Management meeting to review the findings and assign action.

### 8.4 Annual review

A full review of the SMS is conducted annually (see Section 10.1).

## 9 Corrective action

### 9.1 Corrective actions

Audits shall record non conformances/non compliances on the Non Conformance/Non Compliance\_Report Form (**CMR F 008**) in accordance with Section 8.3. Auditors shall provide all Non Conformance/Non Compliance Reports to the relevant Branch Manager for forwarding to the Board of Management. The Board of Management shall review Non Conformance/Non Compliance Reports and record approved recommended actions, including the name(s) of the worker(s) responsible for implementing the corrective action. The Board of Management shall release additional resources, identify the required timeframe, and any other action considered necessary in Section 2 of the Non Conformance/Non Compliance Report.

A copy of all Non Conformance/Non Compliance Reports shall be retained on the audit file. A copy shall also be issued to the worker who has been allocated responsibility for implementing the Board of Management's recommendations.

The worker allocated responsibility for the corrective actions shall progress such actions through to close out of each Non Conformance/Non Compliance. Each worker allocated responsibility for corrective actions shall provide regular updates on the status of each action in time for scheduled Board of Management meetings.

### 9.2 Review of non conformance/non compliance

Non Conformances/Non Compliances shall be reviewed at Board of Management meetings until each one has been satisfactorily closed out. The Board of Management is responsible for ensuring that the corrective action has effectively overcome the problem that gave rise to the Non Conformance/Non Compliance in the first place.

The worker with responsibility for the corrective actions will complete Section 2 of the Non Conformance/Non Compliance Report (**CMR F 008**) when actions have been satisfactorily completed, and provide the form to the auditor for completion of Section 3. Completed forms shall be retained by the Manager in the audit file.

The auditor who issued the Non Conformance/Non Compliance Report shall, where possible, review the satisfactory implementation of the corrective action before signing Section 3.

### 9.3 Risk register review

The Responsible Officer will review the risk register in relation to CMR's corrective actions and their corresponding rankings, and amend the risk register accordingly.

## 10 SMS review and revision

### 10.1 Annual SMS management review

A review of CMR's SMS is conducted annually. It is undertaken by a Review Committee, comprising members of the Board of Management and Branch Managers from each functional area, including rail safety and non-rail safety areas. In the lead up to the review the Responsible Officer circulates a notice to all volunteers and workers inviting them to raise safety issues or suggestions for improvement. The objectives of the review are to:

- consider the effectiveness of the SMS and decide whether changes are needed. Changes could be required as a result of:
  - safety performance against established goals and measures
  - safety directions or prohibition notices received from the regulator since last review
  - recommendations or issues arising from audits, occurrence investigations or commissioned reports
  - incremental or other changes to systems or organisational context
  - safety issues and suggestions for improvement provided by staff
  - opportunities for safety improvement.
- initiate action to implement system or other changes decided upon following the review, this could include:
  - risk assessment and safety validation for any significant system changes
  - development of a Safety Improvement Plan for implementation of agreed changes or actions.

### 10.2 Format for (SMS) Safety Management System Review

A formal management review meeting to consider all aspects of the system shall be conducted at least once per financial year and all elements of the system shall be examined.

The Meeting shall be attended by all management and senior board personnel of the organisation.

The meeting shall be minuted, and any corrective actions shall be addressed as defined above, by the Responsible Officer. Minutes shall be distributed to those present and any other relevant officers of the organisation.

The meeting shall follow a strict agenda that shall comprise the following:

- Review of minutes from previous meeting.
- Review of Safety Management Policy
- Review reports of Internal Audits
- Review of any IDR's or Incidents that occurred.
- Review of identified principal safety risks.
- Review of training conducted and any future training requirements.
- Review of the on-going suitability of the Safety Management System, and any strategies for improvement.
- Other business

### **10.3 Record of annual SMS review**

Full records are kept of the annual review process and its outcomes. The review is certified by the Board of Management which sets out:

- how the review was conducted, the date the review took place and those people who directly participated in the process
- a statement certifying the matters that were considered and copies of supporting documentation (which could include copies of safety directions, prohibition notices, recommendations from audits and occurrence investigations).

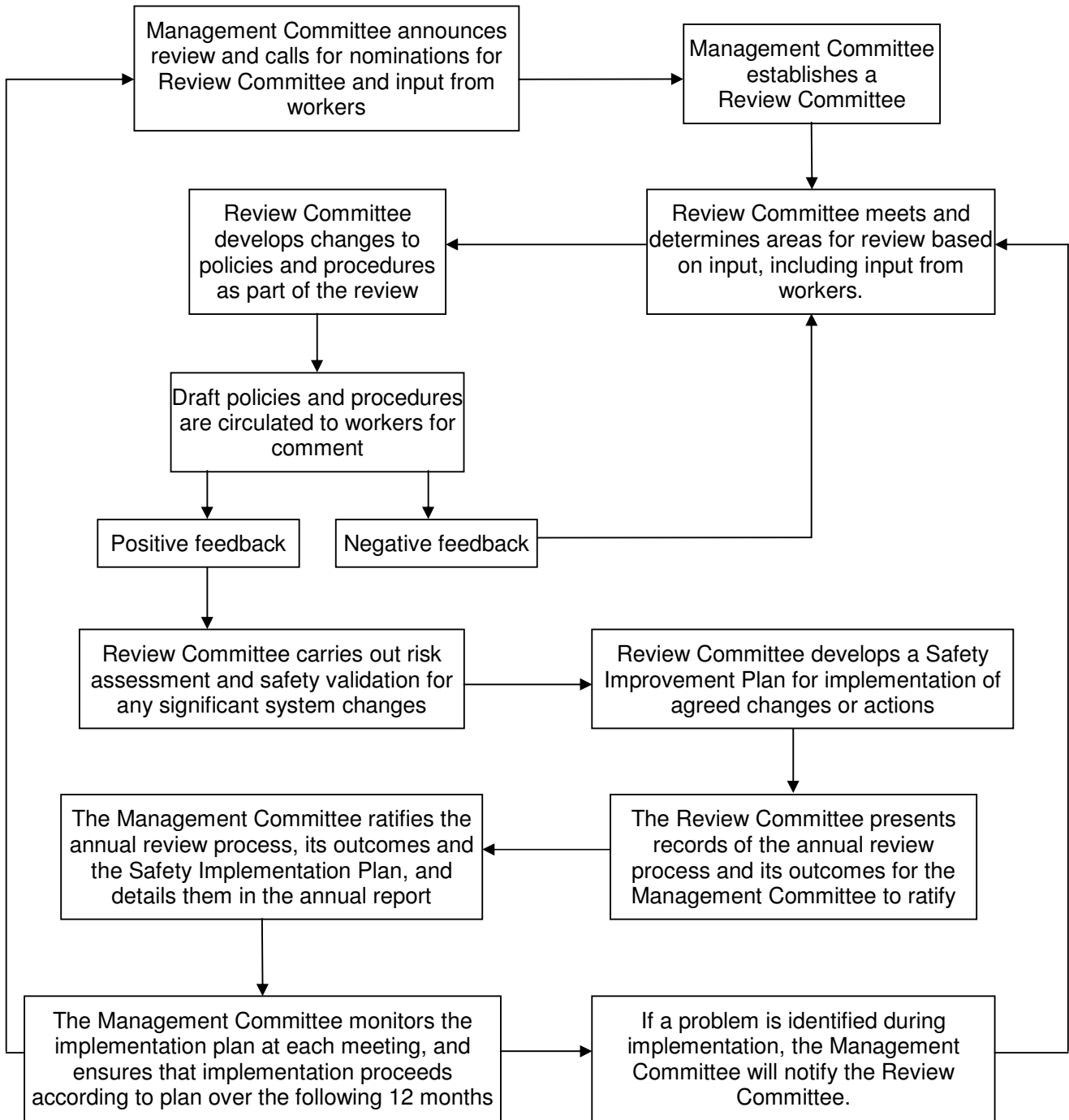
If changes are made to any parts of the SMS the following records are created:

- a copy of the proposed system
- risk assessment safety validation documentation for significant changes to the existing SMS.

The annual SMS review is a key part of CMR's continuous improvement cycle.

The following process map demonstrates the method used by CMR in carrying out the Annual Review of its SMS.

**Process map for annual review of the SMS**



## 11 Management of change

CMR has a change management procedure to ensure that proposed changes to and within the rail operation are appropriately documented and any potential rail safety risks are clearly identified, described and reduced to a level that is reasonably practicable. Refer to the Change Management Procedure (**CMR P 003**).

Changes that affect safety to CMR's operations may arise from a number of sources, including:

- modifications to infrastructure and/or rolling stock
- changes to procedures, processes and systems
- changes to organisational structure and position roles and responsibilities, including job design
- the general operating environment and interfaces

Proposed changes that may affect safety at CMR are carried out in accordance with CMR's change management procedure. Key requirements are consultation, communication, risk assessment and reduction and review.

Where required by legislation, an application for variation to accreditation is prepared and lodged with PTSV.

Change management at CMR involves people who have the appropriate qualifications, knowledge and skills in the areas affected by the proposed change.

The change management procedure is authorised by the appropriate Branch Manager, while the Board of Management regularly reviews progress in implementing changes.

The Responsible Officer will maintain a register of all Change Managements requests and will maintain a Change Management Register identifying all change requests.

## 12 Security

### 12.1 Security of rail operations

CMR is committed to the safety and security of its passengers and staff, protection of its unique rail assets, and the prevention of damage to its operational infrastructure as a result of crimes to people or property, including vandalism, sabotage or terrorism.

All risk assessments and reviews carried out on policies and procedures of the railway include identification of any security risks as part of the determination of the risks of the process or activity.

### 12.2 Identification and control of security risks

The implementation of security measures is based upon determinations resulting from risk assessments which attempt to identify all security risks affecting passengers, personnel, rolling stock and infrastructure arising from the railway's operations. The risk assessments are reviewed each year by the Board of Management. Staff and volunteers assist in helping to identify security risks.

The following security risks have been identified.

Threat to -	Threat	Risk Source	Level of Risk (eg H M L VL)
<b>Customers</b>	Assault	Other passengers or personnel	VL
	Anti-social behaviour	Other passengers or personnel	L
	Robbery	Other passengers, personnel or external persons	VL
	Bomb threat	Passengers, personnel or external persons	VL
	Sabotage/Vandalism	Passengers, personnel or external persons	VL
<b>Personnel</b>	Assault	Other passengers or personnel	VL
	Anti-Social Behaviour	Other passengers or personnel	L
	Robbery	Other passengers, personnel or external persons	L
	Sabotage/vandalism	Passengers, personnel or external persons	VL
<b>Rolling stock</b>	Arson	Passengers, personnel or external persons	L
	Graffiti	Passengers, personnel or external persons	M
	Theft	Passengers, personnel or external persons	L
	Vandalism	Passengers, personnel or external persons	H
	Sabotage	Passengers, personnel or external persons	L
	Bomb Threat	Passengers, personnel or external persons	L
<b>Infrastructure</b>	Arson	Passengers, personnel or external persons	L

Threat to -	Threat	Risk Source	Level of Risk (eg H M L VL)
	Graffiti	Passengers, personnel or external persons	M
	Theft	Passengers, personnel or external persons	M
	Trespass	Passengers, personnel or external persons	M
	Vandalism	Passengers, personnel or external persons	L
	Sabotage	Passengers, personnel or external persons	L
	Bomb Threat	Passengers, personnel or external persons	VL
<b>Revenue</b>	Theft	Passengers, personnel or external persons	VL

From the above table, the key areas identified for development of security planning were:

- site security measures such as, locking of sheds and facilities and a key register
- revenue security measures such as limiting cash on site, keeping cash on site in a safe, documenting ticket sales and revenue received,
- All passenger vehicles, and rail motors, are locked with square keys. Diesel Locomotives are padlocked and slide bolted preventing cabin entry. Brake handles are removed from diesel locomotives and locked in the safe working box when not in use. Scotch blocks are utilised to secure stabled rolling stock
- There is no practical way to prevent access to steam locomotives but the operational engines are secured in the loco compound. A standard key system is being invoked. Rolling stock keys and locks will eventually be coded with "M" for mechanical.

### 12.3 Responsibilities for security risks

The Operations Manager is responsible for the implementation and maintenance of all security arrangements on the railway. Where appropriate, the Operations Manager refers security incidents to local police for further investigation.

The Board of Management is responsible for ensuring that the risk assessments and associated security controls are audited each year. Data collected from incident report forms are analysed as part of the risk management review process.

CMR personnel are responsible for reporting, security related incidents, using the Incident and Defect Report Form ([CMR F 009](#)).

CMR personnel are provided with information relating to security through:

- distribution of copies of security information to relevant personnel
- inclusion of security matters in the periodic members' newsletter
- circulation of security bulletins to personnel when particular security issues are identified.

## 13 Safety culture

CMR recognises the importance of developing and maintaining a positive safety culture both around the railway and within its neighbouring community. This can be achieved by:

- strong leadership
- consultation and communication with workers at all levels
- encouraging workers to watch for and report safety issues and
- acknowledging workers who take action to ensure safety outcomes are met.

The Board of Management fosters a positive safety culture by:

- communicating to all personnel, through newsletters, meetings and social gatherings, the importance of good safety performance in ensuring the continuing operation and community support for CMR's heritage railway operations
- ensuring human factors issues are identified and addressed in risk assessments and by developing risk controls and operational procedures
- ensuring all relevant personnel are actively involved and consulted during risk assessments, the development of operational procedures and the review of procedures and systems
- promoting open communication among all members, no matter what role they play
- ensuring personnel are encouraged to report safety problems, errors and occurrences
- ensuring that reported problems, errors, and occurrences are dealt with fairly and justly and
- ensuring personnel who demonstrate initiative in identifying and promoting safety improvements are openly thanked and recognised.

As defined in the Safety Management Policy, the organisation is committed to ensuring that the safest possible operation is conducted, and it is incumbent upon all staff to ensure that safety issues, and potential risks are addressed. As a means of ensuring the continued improvement of our safety procedures all staff are asked to report any discrepancy, preferably in writing to a supervisor or Manager. The supervisor shall deal with the problem by following the Incident/Defect Reporting procedure

The Board of Management and Branch Managers will provide timely feed back and consultation to to all staff and volunteers who provide details of safety related incidents and issues.

All IDR's shall be subject to review at the routine management meetings, and also shall be verified for effectiveness of any corrective actions at the Management Review Meeting.

## 14 Consultation

CMR recognises the importance of effective consultation with personnel and other stakeholders in developing and maintaining the SMS.

Structures and processes to facilitate effective internal consultation include:

- meetings where the Board of Management reports to members on the railway's activities and where members have the opportunity to raise matters of concern and suggestions for improvement
- informal discussions ('tool box talks') at the beginning and end of the conduct of railway operations to ensure personnel are informed about recent changes to procedures or operating conditions, and they have the opportunity to provide comments and suggestions
- active involvement of relevant personnel in risk assessments and the development and review of systems and procedures.

The Board of Management acknowledges that as the railway is part of the local community, consultation with other organisations and stakeholders is important and beneficial. -

### 14.1 CMR's contacts:

- Local Shire Council
- Vicroads
- Emergency Services – Police, Ambulance, CFA, SES
- Community Service Organisations
- Community Progressive Associations
- Association of Tourist Railways
- VicTrack Heritage Liaison Meetings
- PTSV workshops.

All changes proposed for the railway are subjected to internal and external consultation as part of the risk assessment process to ensure that the impact of the change on all parties and stakeholders are considered as part of the process.

## 15 Internal communication

CMR recognises the importance of providing personnel with the necessary information to enable them to discharge their safety responsibilities effectively.

To ensure the timely and effective communication of safety related information CMR:

- holds regular Board of Management meetings and circulates the outcomes of relevant Committee proceedings to all personnel
- ensures that controlled copies of the SMS and all procedures and standards are readily accessible to personnel (at relevant places throughout the railway)
- encourages personnel to use an Incident Report Form ([CMR F 009](#))
- regularly disseminates safety related information, through regular newsletters to members
- circulates safety bulletins to all operational staff and members when particular safety issues are identified (which may require an acknowledgement receipt to be returned)
- uses electronic media such as emails and the organisation's website to discern information to members.
- Safety and operational updates through the quarterly news letter.
- Use of training days, BBQ's, etc to bring members together.

Each worksite area at CMR has an official notice board on which the Rail Safety Policy and other key safety notices are displayed. All members and staff are required to check the notice board before commencing any work on the railway, and where required, to initial the notice to indicate that they have read it.

It is the responsibility of the appropriate branch manager to ensure that all subordinate staff are aware of any procedural changes affecting their areas of operation and responsibility.

## 16 Risk management

The CMR Board are committed to fully implementing the risk management principles contained in the Rail Safety Act and Regulations.

This section outlines how CMR will identify, assess and control all reasonably foreseeable risk exposures.

### 16.1 Processes to ensure, so far as is reasonably practicable, compliance with section 65 of the Act.

To ensure compliance with S. 65 of Rail Safety Act, CMR will comply with sections 50 to 52 of the Act, which require;

- Identification of all hazards and incidents that have or could occur
- Documentation of all hazards and incidents
- Comprehensive assessment of hazards & incidents
- Assessment to include; nature of hazards, likelihood of occurrences, severity, cumulative as well as individual risks, appropriate methodologies
- Reasons for any judgements on risks or controls
- Consideration of range of available controls and their effectiveness
- Control measures will follow the "hierarchy of control" e.g. eliminate risks if possible, if not possible reduce the likelihood so far as reasonably possible or if minimise severity of the incident
- Prepare emergency plans (refer SMS section S.25), in consultation with emergency services, to address all foreseeable events, these plans to be maintained, copied to emergency services and other required stakeholders and tested to ensure effectiveness.

To deliver the above, CMR will:

#### 1) Ensure all hazards or potential incidents are identified by;

- Conducting routine inspections of all rolling stock, infrastructure and areas, per SMS section 22.
- Operating a widely known hazard reporting system, per SMS section 16.
- Conducting periodic audits and assessments of operational risks e.g. internal & external audits, ad hoc risk assessments, per SMS section 8.
- Assessment of all workplace changes including; new, different or modified equipment, amended operating procedures, or any other changes, per SMS section 11

#### 2) Ensure all incidents that occur are reported and investigated by;

- Maintaining procedures for all workers to report any incident, per SMS section 18.
- Managers monitoring that all incidents are reported and investigated
- Risk register and operating systems being amended if incident investigations require

#### 3) Ensure all hazards & incidents are documented by;

- Including this instruction in all induction training undertaken for volunteers, contractors, employees or casual workers
- Maintaining standing instructions on all appropriate notice boards that all hazards and incidents are to be reported and documented by relevant personnel
- Maintaining forms and records of all reported hazards and incidents, per SMS safety records section 19.

#### 4) Assessment of all hazards & incidents by;

Once hazards have been identified the associated level of risk is to be assessed by use of CMR's risk matrix (as **attached** to section 16 of SMS). The risk assessment is to include consultation with affected parties.

The risk assessment is to be repeated for each different control considered to identify the most appropriate and cost effective solution for the particular circumstances.

## Priority for Actions

**Very High Risk** Immediate action required, including urgent interim actions e.g. consideration given to whether cessation of the activity is necessary to ensure safety. Relevant manager must be notified, who is to ensure the Board is advised.

**High Risk** Interim actions required *e.g. warning operators, signage, spotter*  
Relevant manager to be notified if unable to fix immediately

**Moderate Risk** Interim actions required *e.g. signage*

**Low Risk** Risk likely to be acceptable with indicated controls in place, if not implement additional controls

**Very Low Risk** Risk almost certainly acceptable with controls in place

The CMR Board is to review the Risk Register regularly (*e.g. at monthly meetings*) to ensure the risk exposure listing is complete, up to date and that the controls are still appropriate and correctly maintained.

## 16.2 Description of the control measures adopted by the rail operator

The CMR risk register will include a summary description of each control measure for identified hazards or exposures. If considered necessary, clarification of the intended controls will be referenced elsewhere in the SMS or attached to the risk register to ensure allocated personnel are clear on the required action or controls to be put in place or maintained.

When conducting risk assessments CMR will consider hazards cumulatively as well as individually and use assessment methodologies that are appropriate for the hazards. To achieve this, risk assessment training for appropriate personnel will include this aspect and the CMR SMS committee will consider cumulative risks, as may be evidenced by trends in; incident, inspection, maintenance or hazard reports when reviewing the risk register at the regular SMS meetings.

Due to historical circumstances the key engineering, operational or maintenance standards are not readily available for many items in the risk register, however, CMR will apply our proven general safe rail practices to these items.

## 16.3 CMR will maintain a risk register which includes;

- a) Comprehensive listing of hazards
- b) Risk associated with each hazard (per use of risk matrix)
- c) Control measures (summary or reference to details)
- d) Person nominated to co-ordinate the controls
- e) Key engineering, operational & maintenance standards
- f) Any relevant cross referencing to SMS or regulations

## 16.4 Process to ensure rail safety work is prioritised to give priority to hazards with the highest risk

CMR will prioritise all ongoing controls and corrective action for identified deficiencies.

This will be confirmed by the “risk level” column on the Risk Register, and supported by the nominated responsible person and the level of monitoring of the control per the Risk Register column for reference to the SMS or any regulation requirements.

CMR will, so far as reasonably practicable, identify hazards, assess the risks, prioritise rail safety work so that hazards with greatest risk are given priority and control the associated risks.

Priority will be given to in descending order to those risks rated as Very High, High and Medium Risk.

**The Risk Management Plan is reviewed at each monthly meeting of the Board of Management and the review is minuted .**

## Risk Assessment Matrix

		LIKELIHOOD						
		A	B	C	D	E	F	G
SEVERITY (CONSEQUENCE)	7							
	6							
	5							
	4							
	3							
	2							
	1							

**OVERALL RISK LEVEL**

Risk Level: \_\_\_\_\_ Recommended Response: \_\_\_\_\_

**Very High risk** Immediate action required, including urgent interim actions e.g. consider if cessation of activity is necessary to ensure safety. Senior managers & Board must be advised immediately.

**High risk** Prompt action required, including interim actions. Senior managers & Board to be advised if departmental team unable to fix promptly or if additional resources are required.

**Moderate risk** Schedule action, including any interim countermeasures e.g. implement safe work procedures, signage & instructions.

**Low risk** Risk likely to be acceptable, if not plan for corrective action.

**Very Low risk** Risk almost certainly acceptable.

## Likelihood

Likelihood (of adverse event occurring)	
<b>G</b>	Almost certain or imminent e.g. Happens almost every time
<b>F</b>	Highly likely e.g. Common occurrence – multiple times per year
<b>E</b>	Likely or could occur e.g. Known to occur once in last 12 months. Has occurred at this railway
<b>D</b>	Not likely, but possible e.g. Has not occurred in many years of activity, but known to occur a number of times per year at other T&H railways
<b>C</b>	Unlikely e.g. Has not occurred in over 10 years of same activity, but has occurred in another T&H railway
<b>B</b>	Rare event e.g. Has not occurred in over 40 years of activity, but some records of events in Australian rail industry
<b>A</b>	Extremely rare event e.g. Theoretically possible, but not heard of in Australia

Note: In deciding the level of “likelihood” from the table above, consider:

- frequency of exposure *e.g. how often the task is carried out*
- ability to avoid the hazard *e.g. speed & sight distance of approaching vehicle*
- skills, training & experience *e.g. greater likelihood if inexperienced operator*
- available data *e.g. past experience or test results*
- quality and extent of systems in place to control the hazard
- frequency of minor events (*e.g. small fires*) and possibility of catastrophic fire
- level of supervision *e.g. working alone or in a remote area*

# Safety (Severity)

## SEVERITY (LIKELY CONSEQUENCE)

### 7. Catastrophic Event

e.g. Typical event / activity causing multiple fatalities

- Major fire, explosion or uncontrolled release of toxic gases or substances
- Team overcome or trapped in confined space
- Grossly inadequate emergency exits in heavily populated building with high fire load
- Accident with special event *e.g. bus trip to hazardous area (ie snow) or on treacherous roads*

### 6. Fatality

e.g. Typical event / activity

- Fall risk from significant height *e.g. greater than 3 m*
- Crushed in powerful plant or equipment
- Electrocution risk *e.g. lead plug in water or exposed live conductors*
- Pedestrian struck by forklift or high speed vehicle
- Regular driving in course of work *e.g. truck driver or salesperson*

### 5. Serious or Permanent Injury

e.g. Typical event / activity

- Fall risk from height *e.g. greater than 2 m*
- Exposure to harmful chemicals *e.g. serious burn or loss of eye sight*
- Loss of finger or limb *e.g. amputation from being caught in plant or equipment*
- Mobile plant or vehicle exposure
- Manual handling in gross non-compliance with code of practice *e.g. constant & repetitive*

### 4. Lost Time Injury

e.g. Typical event / activity

- Fall risk from small height *e.g. less than 2 m*
- Manual handling hazard *e.g. lifting or repetitive actions or requires poor posture*
- Broken limb or temporary illness
- Non permanent burn or eye injury
- Finger or hand injury requiring medical treatment & time off work *e.g. caught in equipment*

### 3. First Aid Injury

e.g. Typical event / activity

- Cut or abrasion injury
- Slips, trips or falls *e.g. requiring splint or support bandage*
- Dermatitis or minor chemical irritation or burn injury

### 2. Minor Injury (no treatment)

e.g. Typical event / activity

- Soreness in shoulders or back from poor posture at desk *e.g. rest stretch & recover*
- Paper cut
- Minor bruise from bumping into furniture

### 1. No Injury Incident

e.g. Typical event / activity

- Drop light non-sharp object on foot
- Spill of non harmful chemical on skin or clothes *e.g. only need to wash off*
- Faulty or damaged equipment detected by routine inspection or audit program

## 17 Personnel management

### 17.1 Drugs and alcohol

Part 6 of the Rail Safety Act 2006 prohibits a person who is under the influence of alcohol or drugs from carrying out rail safety work.

The CMR Alcohol and Drugs Control Policy (**CMR P 005**) prohibits any person who is affected by drugs and alcohol from taking any part in its operations, whether rail safety work or non-rail safety work. Personnel are required to advise their supervisors if taking any medication which may affect performance.

CMR managers rely on visual and verbal assessments to form a reasonable impression as to whether a person's behaviour is affected by drugs or alcohol. Where necessary, to determine whether a person is affected by alcohol, a breath test and/or breath analysis may be arranged with the local police. In these cases the supervisor must refer the matter to the Board, who has responsibility for making the final decision.

No worker is to present to work affected by drugs (whether prescription, over the counter or illegal) alcohol (zero), illness or fatigue which could affect safe completion of the rostered shift. CMR managers are to stand down any worker who they believe, on reasonable grounds, may be unable to safely carry out their tasks on the day.

A person may wish to challenge the decision which prevents them from taking part in CMR operations due to the belief they are affected by drugs. To do this, the person must be referred to a qualified medical practitioner for drug urine analysis.

CMR has arrangements with local police to undertake post-incident drug and alcohol testing on an as-required basis.

### 17.2 Fatigue Management

CMR is aware that fatigue may be an issue for its personnel. In particular, this could arise during peak summer operations when a large number of services are run each day. To support these services some personnel commence duties at 7am to check and assemble rolling stock, while the need to shunt and stable rolling stock after a day's operations may require some staff to work until 6pm. CMR rosters its staff in such a way that no one works for extended periods and that CMR staff have appropriate rest breaks.

The following fatigue management conditions apply to all CMR personnel:

- All workers must have a minimum of 8 hours off between shifts
- All workers must not work more than 12 hours on any shift. / *IN ANY 24 HOUR PERIOD?*
- All workers must not work more than 5 hours on any one portion of a shift without a meal break
- Minimum meal break duration must be 30 minutes
- No more than 12 shifts may be worked in any 14-day period
- CMR is also aware that staff could become fatigued mixing their normal working hours with work for CMR. Personnel are required to have the minimum break between completing their paid work duties and taking up duty with CMR
- Branch Managers rely on visual assessment to ensure personnel are sufficiently rested and alert to perform their duties. Personnel are encouraged to report any feelings of fatigue so they can be given the opportunity to rest.

Also Refer Tourist Railway Rules and General Instructions Section 1- Fitness for Duty

### 17.3 Health and fitness

CMR complies with the requirements of the National Standard for Health Assessment of Rail safety workers (NSHARSW) in managing the health and fitness of its rail safety workers.

The duties and medical requirements for all rail safety workers and non-rail safety worker positions have been documented in each Position Description. Each position has been assessed for risk and categorised according to the NSHARSW using the Rail Safety Worker Health Risk Assessment Template (**CMR F 010**).

Relevant personnel are medically assessed in accordance with the NSHARSW and copies of the completed health assessments are held at the CMR office.

CMR arranges for personnel to have a medical assessment using a Medical Practitioner approved by CMR. It also reviews any assessment conducted on behalf of another railway operator to ensure that the level of health assessment performed by the original rail organisation is equal to or greater than that required for the tasks performed by the person at CMR.

No one is allowed to carry out rail safety work unless they have been certified fit for the work according to the NSHARSW.

The Record of Medicals (**CMR F 011**) is to be updated on or by the first day of each month by the Operations Manager or nominated delegate.

The Operations Manager or delegate will monitor medical certificate expiry dates and issue reminders for listed workers scheduled for expiry within 30 days.

### 17.4 The following categories of rail safety tasks exist:

- Category 1: High Level Safety Critical Worker (HLSCW)
- Category 2: Safety Critical Worker (SCW)
- Category 3: Around the track personnel (ATTP) in an uncontrolled environment
- Category 4: Around the track personnel (ATTP) in a controlled environment.

The NSHARSW requires periodic health assessments at the following intervals:

#### Category 1

- Before commencing Category 1 tasks, then
- Every five years to age 50, then
- Every two years to age 60, then
- Yearly

#### Category 2

- Before commencing Category 2 tasks, then
- Every five years to age 50, then
- Every two years to age 60, then
- Yearly

#### Category 3

- Before commencing Category 3 tasks, then
- At age 40, then

- Every five years

#### Category 4

- No periodic health assessment required

In addition, health assessments may be triggered by:

- an extended period of ill health reported to the Manager
- a traumatic event
- an incident or
- a request from the worker

Triggered health assessments are arranged by the Manager as needed.

The NSHARSW utilises the following forms as part of the health assessment process:

- Safety Critical Worker Health Assessment Request and Report Form ([CMR F 012](#))
- Safety Critical Worker Notification and Health Questionnaire ([CMR F 013](#))
- Safety Critical Worker Health Assessment Record ([CMR F 014](#))
- Screen-Based Equipment Examination Request and Report Form ([CMR F 015](#))
- Screen-Based Equipment Eye Examination Record for Health Professional ([CMR F 016](#))
- Track Safety Health Assessment Request and Report Form ([CMR F 017](#))
- Track Safety Health Assessment Record ([CMR F 018](#))

Following the health assessment, the rail safety worker will be identified by the health professional as:

- fit for duty
- fit for duty subject to review
- fit for duty subject to job modification
- temporarily unfit for duty subject to review
- unfit for duty

The date and result of the health assessment and any conditions are entered in the Record of Medicals ([CMR F 021](#)) along with the anticipated date of the next health assessment in accordance with the requirements of the National Standard.

The Operations Manager ensures that necessary arrangements are made following the health assessment. For example:

- where the volunteer is identified as being fit for duty subject to other conditions or job modifications, the Operations Manager arranges, and in consultation with the worker, for modifications to be made or conditions to be observed
- where the volunteer is identified as temporarily or permanently unfit for duty, the Operations Manager arranges alternative duties in consultation with the RSW.

Short term and casual workers or volunteers may on occasions be involved in some activities covered in the perimeter of rail safety work, such as cleaning, assisting in the maintenance of track (labour only), painting or similar works on infrastructure or rolling stock.

Several groups of workers fall onto this category. For instance, correctional services attendees, interstate volunteers, contractors. Their involvement is short term or casual (normally within a period of up to four weeks). These workers are not subject to a health assessment but may only perform tasks if they:

- are working in a controlled environment, either when no train operations are being carried out, or in an area away from train movements

- have a demonstrable ability to perform the tasks required (physically and mentally) and are aware of relative safety issues, or have an ability to learn and be assessed by an appropriately trained worker who is subject to a health assessment
- are supervised while working by an appropriately trained worker who is subject to a health assessment and
- have all tasks checked upon their completion by an appropriately trained worker who is subject to a health assessment.

## 18 Rail safety worker competence

The Board of Management develops and regularly reviews position descriptions for all rail safety work. These reviews identify the competencies deemed necessary to ensure that the person undertaking the duties has the knowledge, skills and experience to carry out the duties in a safe manner.

All personnel working on site including staff, members, visitors visiting non-public areas and contractors undergo a General Safety Induction (**CMR P 006**).

All CMR personnel hold rail safety qualifications and/or appropriate competencies for their positions, and are regularly assessed for necessary competencies related to their work responsibilities. Competencies and training requirements for the railway are detailed in the Training Matrix (**CMR F 019**)

Competency assessments are organised by the relevant Branch Managers.

Whenever possible, assessments are carried out by the ATR. In cases where there is no appropriate course available, however, assessments are carried out by people within the organisation who have qualifications and/or experience in the field of expertise being assessed.

Records of Training (**CMR F 020**) and Records of Qualifications and Competencies (**CMR F 021**) are held in personnel files in the Manager's Office.

### 18.1 Curriculum and Identification of Training Needs

Identification of training needs relating to operations, safety, mechanical and civil engineering matters, shall be conducted, as required for all operations staff, by the responsible manager. Identified training requirements shall be recorded by the appropriate manager and a copy of defined training requirements shall be provided to the Training Officer. Training needs for any employee shall be identified by managers, other staff, via reports, IDR's, via audits, or based upon recommendations from suitably qualified individuals. Where it is perceived that a training need exists, this shall be conveyed to the Training Manager, who shall record the requirement on a central file, and after evaluating the request, shall arrange for the training, at the earliest opportunity.

In general, due to the voluntary nature of all staff, courses shall be conducted, on an 'as required basis'. The syllabus for training shall be as determined by the instructing officers or the training manager, with validation of course content being made by the relevant branch manager. The syllabus shall also satisfy the examination requirements of the ATR Safeworking Examiners. (If Applicable). Training of all non-operational staff shall be via "On the Job" means, and it is not envisaged that formal training courses shall be conducted unless a specific and identifiable need arises.

A person shall be deemed as trained in non operational roles on the basis of Education, Qualification and/or Experience. Such assessment shall be made by the appropriate management, and shall be recorded as defined above.

As the organisation develops, requirements for induction training of new operational staff and members shall be addressed as appropriate, by the Operations Manager. Induction training shall embrace such aspects as follows including, but not limited to:

- Workplace safety briefing
- Operating safety briefing
- Basic railway operational considerations, hazards, and situations.
- The location of safety related equipment and assistance.
- Behaviour whilst on railway premises.

When induction training has occurred, it shall be recorded as defined above.

## 19 Information, instruction and training

### 19.1 Provision of the SMS to rail safety workers

Rail safety workers on CMR can access the SMS via the member's page of the VGR website [www.vgr.com.au](http://www.vgr.com.au). The website will contain the Controlled Copy of the SMS manual. Uncontrolled hard copies are located in the Maldon Engine Shed and the Castlemaine Signal box. The Responsible Officer also has a hard copy. Other non controlled copies of the SMS are also available at various locations around the railway.

### 19.2 Understanding safety objectives of the SMS

To ensure that rail safety workers understand the safety objectives of the railway, all training of rail safety workers includes the key safety responsibilities and competencies for that position, with trainees undertaking, where identified by the relevant branch manager, assessment on these responsibilities in addition to the competencies required for the position.

When major changes are made to the SMS, workshops are held to explain the changes to rail safety workers, and information fact sheets are sent out with the new and/or replacement pages for their copy of the SMS so that they are aware of the changes and the reasons for the changes. As the electronic copy of the SMS will be updated

Regular newsletters and notices on notice boards remind rail safety workers of their obligations. These messages are often targeted following risk assessments or incidents to ensure that the education received is current.

Personnel are encouraged to contribute to reviews of the SMS through unsolicited suggestions and participation in review workshops.

### 19.3 Training for workers

All workers on CMR shall be assessed for their competency to carry out tasks and where necessary training or additional training will be provided. (See Section 18). It is a requirement that as many as possible Rail Safety Workers will be trained to level 2 in First Aid.

#### 19.3.1 Standard And Assessment Of Competency (Operational Staff)

The railway shall operate with suitability qualified staff. Operational Staff shall hold Records of Examination Certificate (ROE) issued by the Association of Tourist Railways following the applicant passing suitable examinations as conducted independently by an ATR appointed examining officer. Such examinations shall include but not be limited to:

- Safe working as per Tourist Railway Rules and General Instructions,
- Knowledge of operation, preparation, control and maintenance of locomotives and vehicles including detailed knowledge of the Westinghouse air brake System.
- Knowledge of local instructions, Working Timetables, Supplementary Instructions, etc.

Operational staff positions requiring ROE's include, but are not limited to:

- Signalman
- Guards
- Drivers
- Firemen
- Motorised Track Vehicle Operator (used for passenger carrying activities only)
- Hi rail vehicles

Where staff have been absent from duty for a period greater than 6 months they shall be required to undertake a re-qualification/update examination. This examination shall be as defined by the Operations Manager or his delegated representative (e.g. loco running inspector, training officer etc.) and shall be either written or verbal in content.

The examination for train crews will be a re familiarisation trip over the running section with a qualified Driver, Fireman or Guard/Signalman as appropriate. The Operations Manager may require the competency of Drivers from other railways to be checked, with a qualified Driver or as appropriate, by up to six piloted trips over the length of the Railway.

### **19.3.2 Certification**

All persons who have successfully undertaken a prescribed course of training, and subsequent examination that results in them being endorsed in an operational role, ie Driver; issued with a Record of Examination (ROE) from the ATR. These certificates are valid for a period of 5 years.

When an individual requires to be qualified to a certain level, they shall apply to the Operations Manager in writing , requesting examination or be recommended in writing by the Training Officer. The Operations Manager shall vet the application via the relevant managers and shall recommend examination, or further training. The Operations Manager shall liaise with the examiners accordingly and shall request an examination in writing. Individuals may directly contact the examiners.

All personnel requiring ROE's must hold a current Medical Certificate as defined in section 3.2 of this manual. Before any certificates expire the holder has to make themselves available for re examination to update qualifications for a further 5 years. No personnel whose medical certificate or record of examination has expired shall perform any operational duties until such certificates have been renewed.

The Operations Manager may decline to accept appointment of any individual in an operational role, even if they are suitably qualified. The individual will be advised in writing by the Operations Manager of the reasons for being not being accepted and may re-apply at not less than 12 month periods for acceptance.

The Operations Manager shall assess and maintain a register of staff deemed competent to operate trolleys for track and patrols only.

The Civil Manager shall assess personnel and maintain a register of staff deemed competent to operate mechanical plant including backhoes, rail track maintenance machines etc.

### **19.3.3 Examination and Training Records**

All training and examination records shall be controlled by the Training Manager, who shall ensure that results are recorded in the appropriate individual training records and are on the skills matrix. Managers shall have viewing access to the training records, with the exception of the Medical records which are maintained by the Operations Manager.

### **19.3.4 Monitoring Of Training.**

Branch Managers shall be continually monitoring the standard of training of their staff and where a training requirement is perceived shall address this as defined in 19.3.2 above. Persons shall not be rostered in any operational roles until certificates of competency and medical fitness have been received, and recorded.

Where evidence of poor levels of competency has been demonstrated, , individuals concerned shall be assessed by the appropriate manager, and if a poor standard of competency is demonstrated, and where safety is jeopardised, the person may be stood down from those particular duties, until such time as retraining has been successfully undertaken

## **19.4 Training of contractors in SMS requirements**

Where contractors are used on CMR, their site induction includes information on the SMS requirements that they are required to observe.

## **20 Procurement and contract management**

### **20.1 Goods & services procurement**

All purchases must have the consent of the Branch Manager (although this may be varied from time to time as the Board sees fit). All goods purchased from any business with whom CMR holds an account must be accompanied by an order slip bearing task and job numbers, the signature of the relevant Branch Manager, and an outline (of what the goods are going to be used for).

Purchasing records for materials and fuel are held by the relevant Branch Manager.

#### **20.1.1 Off the shelf items**

Goods and services for rolling stock or infrastructure are specified and ordered by personnel, taking into account any specifications that are available.

In the case of everyday items such as general timber, wood glue, tacks, standard screws, cable and timber finishes, these are always known products and brands that are supplied 'off the shelf'.

For smaller products such as light globes, electric cable, and insulating material, the specifications are provided to the supplier (usually verbally), the suitable products acquired and then checked by personnel before use.

#### **20.1.2 Specially manufactured items**

All major component items such as wheels or axles are obtained from a reputable industry supplier. For rail safety purposes all such items are to be individually marked to enable traceability. In the event of failure, the purchase, supply and manufacture date and, if applicable, batch number can be traced for subsequent inquiry.

Should CMR personnel be in any doubt concerning a relevant supplier for any component destined for railway use, other railway operations are contacted for advice.

#### **20.1.3 Second hand items**

Many items purchased for the restoration and operation of heritage rolling stock operated by CMR and for the maintenance of rail infrastructure are second-hand items, so do not have the usual quality guarantees that come with the purchase of new materials and equipment. Purchasing of such materials requires special care in terms of judging quality, serviceability and safety. All second hand items must be checked for suitability, condition and tolerances/wear prior to use.

### **20.2 Tender documentation**

Where CMR tenders for the supply of an item or service, the tender stipulates that the tenderer must comply with CMR's SMS policies and procedures, and meet the obligations under Safety Duties as a Contractor. Where necessary, interface coordination plans are established between CMR and the tenderer to ensure that both parties understand their responsibilities.

The seller of any goods, equipment or services must provide any training for the safe use of the equipment or service.

All goods and services must comply with the requirements of the Occupational Health and Safety regulations, Rail Safety regulations etc.

### **20.3 Contractor management**

When engaging contractors CMR requires that they provide appropriate safety documentation for the work to be carried out, and may be in the form of Safe Operating Procedures or Safe Work Method Statements. These documents are assessed before work commences to make sure they are relevant to the work environment at CMR, and to ensure that the contractor has systems in place to meet their Safety Duties.

Where necessary, interface coordination plans are developed between CMR and the contractor so that responsibilities are identified.

Contractors are also required to prove that they hold any necessary certification for particular work tasks or to operate particular plant and equipment. They may also be required to provide a Job Safety Analysis (JSA) prior to commencing work.

Contractors will be required to show evidence of current insurance policies, they have trained and qualified workers for the work specified and they can comply with appropriate safety regulations such as Rail Safety Act and Occupational Health and Safety.

Contractors are given an induction to the CMR worksite before they start work.

A CMR representative monitors the quality and safety of the work while contractors are carrying out their duties. They will also check the work upon completion to ensure it complies with specifications and standards. Where audits and inspections identify areas of concern, these will be reviewed by the Board of Management and where necessary a revision of the contract will be made.

CMR shall ensure that all subcontractors are appropriately qualified for the task required. Use of subcontractors may include the provision of goods and services. Evidence of qualification may be required prior to commencement of any contractual agreements, dependent upon the scope of the requirements and any impacts upon safety related activities.

Similarly, where applicable, procurement of non-standard product shall be subject to limitations imposed by specification or design.

All specifications, drawings, standards and specialist requirements shall be referenced, if required, in all applicable purchase documentation.

The Civil Manager shall be responsible for all contractors working on or around the railway, or on infrastructure. The Mechanical Manager shall be responsible for all sub-contractors working on vehicles, or in workshops and depots.

## 21 Engineering and operational safety systems

### 21.1 General

CMR has responsibility for maintaining engineering and operational safety as a Rail Infrastructure Manager of the Castlemaine and Maldon Railway and as Rolling Stock Operator of rail services over the railway.

#### 21.1.1 Track and infrastructure

CMR has responsibility for managing the track and infrastructure on the Castlemaine and Maldon Railway. The track and infrastructure were constructed by Government Railways to the standards of that era, and care and maintenance of the track follows these previously defined standards.

The track is maintained to the requirements of the Permanent Way Manual and in accordance with procedures described in this SMS.

##### 21.1.1.1 Infrastructure Description

The Victorian Goldfields Railway covers the entire ex Victorian Railways branchline from Castlemaine to Maldon and is situated within the Central Victorian Goldfields Tourist District. The line is split into two sections. One section covers the West side of Castlemaine Station including the 3rd Platform, 'A' Signal Box and the track up to the Maldon Junction points which forms part of the VicTrack owned line between Castlemaine and Maryborough. The other section begins at Maldon Junction on the Castlemaine-Maryborough Line and continues to Maldon for a combined overall distance of approximately 16 Km. Muckleford Station is the only other station on the line and is situated approximately half way between Maldon Junction and Maldon.

The track is predominantly 60lb/yd (30kg/m) rail with sections being upgraded to 80lb/yd (40kg/m) rail progressively. There are seven timber trestle bridges and one wrought iron girder bridge located on the line and gradients are as steep as 1 in 40.

Refer "Order in Council" for a detailed description of the line.

##### 21.1.1.2 Ownership of Infrastructure

Ownership and operation of the line is covered by an "Order in Council". A separate lease is held by the CMR on the island platform building at Castlemaine.

The ownership of the infrastructure is divided between two parties;  
VicTrack/Department of Infrastructure

- Rails
- Maldon Station building
- Maldon Goods Shed
- Castlemaine Island Platform and buildings
- Castlemaine Turntable
- Railway easement

#### 2. Castlemaine and Maldon Railway

- Locomotives
- Rolling Stock
- Replacement Sleepers and track
- Muckleford Platform, Buildings and Goods Shed
- Maldon Loco shed and workshop equipment
- Security fencing

Maintenance of all infrastructure except for the island platform surface at Castlemaine and the two Castlemaine level crossings is the responsibility of the CMR. Under the terms of the lease VicTrack is responsible for maintenance of the platform surfaces at Castlemaine.

The maintenance of the Maclise Street crossings in Castlemaine is the responsibility of VicTrack. All other crossings are maintained by CMR.

### 21.1.1.3 **Infrastructure Maintenance**

#### **Inspection;**

Inspections will be carried out by the relevant manager as detailed below. In accordance with the organisation structure responsibility will be delegated upwards where positions of responsibility are vacant.

STRUCTURE	RESPONSIBLE PERSON	MAX. INSPECTION PERIOD
Platforms and Buildings	Civil manager	12 months
Electrical Installations- Buildings yard etc	Mechanical Manager/Qualified Electrician	As required when alterations are made
Track including bridges and reservation	Civil Manager	6 months
Signals	S & C Manager	6 months
Level Crossing installations	Civil Manager	6 months
Communication equipment	S & C Manager	6 months
Track Patrol	Track Patroller	as per Tourist Railway Rules and General Instructions Section 9.2

The responsible person will be responsible for carrying out regular inspections in accordance with the above table.

Every 12 months the track, bridges and platforms shall be inspected by Consulting civil engineers and certified as being fit for purpose for the following 12 months, subject to normal maintenance requirements being carried out.

#### **Maintenance Scheduling;**

Set requirements for inspection and maintenance established by statutory bodies shall be undertaken when required.

Each Branch Manager shall be responsible for compiling their maintenance requirement lists and their adherence thereto and they shall ensure that records of all maintenance conducted are retained.

#### **Specialised requirements;**

When it is necessary to call in external resources to provide specialist services, the appropriate Branch Manager shall make an application to the Board for expenditure approval following submission of appropriately prepared plans and documentation. The Branch Manager shall prepare a base Statement of Requirements for the contractor, and shall obtain suitable quotes, and assurances that all work conducted shall meet appropriate standards especially where work relating to safety aspects is to be conducted. Consulting Engineers may be utilised during this determination phase, if required.

#### **Maintenance/Usage Information Systems**

All maintenance activities are to be recorded in log books, lever Arch folders etc as determined by the Branch Managers or the Board of Management.

If the position of the responsible person is not filled then the responsibility for inspection and maintenance records is delegated upwards as per the organisation chart in section 3 of this manual.

The Civil Manager shall maintain the following systems-

- A log book of inspections and defects identified during these inspections.
- A Track Repair Log for recording of repairs and rectification works carried out.

### 21.1.2 Rolling stock

Rolling stock used in CMR operations, such as locomotives, carriages, and wagons were built to operation standards set by the former Government Railway system. They were used by the Government Railways for many years after being commissioned and have since been acquired by CMR (by way of purchase, lease and loan) to operate tourist rail services.

CMR follows the operational mechanical standards previously specified by the Government Railway system together with improvements to meet current safety standards, which include such information as:

- rolling stock outline diagrams
- appropriate and sufficient drawings and plans to adequately maintain rolling stock operated by CMR
- relevant parts of the applicable Railways of Australia Manual of Standards and Recommended Practice, and/or ARA Codes of Practice, Victorian Railways (VR) Practice Cards
- the Government Railways Car and Wagon Examiner's Handbook, and
- additional drawings and equipment manuals for additional safety equipment fitted to rolling stock.

All rolling stock when first recommissioned into service with CMR is certified as being fit for intended purpose in accordance with the provisions of the Rolling Stock Mechanical Standards (**CMR S 002**) and this SMS.

Rolling stock is frequently inspected in accordance with SMS procedures to ensure its safety while in service.

Details of all CMR rolling stock, whether owned, leased or on loan, are recorded in the Rolling Stock Register (**CMR F 024**).

### 21.1.3 Signaling and telecommunications systems and equipment

Signalling infrastructure on the Castlemaine and Maldon Railway is maintained according to relevant standards based on previous Government Railway system procedures.

#### 21.1.3.1 *Signalling Systems*

Signalling systems are at present of the two position semaphore type.

MALDON -A single home signal at the up end of the yard.

MUCKLEFORD- Two single home signal at the down and up end of the yard.

CASTLEMAINE -Numerous home and subsidiary signals are controlled from 'A' box. May be reinstated as needs require.

- Design Standards- Refer to Victorian Railways Signals Design.
- Installation Standards.-Refer to Victorian Railways Signals Design.
- Maintenance Criteria.- Condition of signal basis to be checked annually by Civil Engineers.

Signals are maintained on as required basis as reported by signalman.

Signal equipment is checked every 12 months for correct operation by Signals and Communications Manager . Records of signal equipment inspections and maintenance are recorded in a log book and an entry made in the Train Register (TR) book.

- The Production- Working Diagrams. Refer to Victorian Railways Signals Design.
- Testing & Commissioning - Refer to Victorian Railways Signals Design.

#### **21.1.4 Operations and train control systems**

Rail operations on the CMR are conducted according to Tourist Railway Rules and General Instructions 1994, together with additional local rules and procedures which can be found in:

- CMR Working timetable and Supplementary Instructions
- VCR Standing Instructions 2010

In addition, personnel comply with the:

- Procedure for Safety in Cabs of Steam Locomotives (**CMR P 012**)
- Procedure for Casual Footplate Rides (**CMR P 013**) and
- Procedure for 'Driver for a Day' (**CMR P 014**).
- Steam Locomotive Pre-Service Checklist

#### **21.1.5 Interface with other transport modes**

CMR has joint responsibility for level crossing equipment standards together with VicRoads and the local council. These standards cover condition of the track, road surface, approach roads, fencing and warning signs. Refer to Section 22.1 for other provisions for level crossing protection.

Further details on the level crossing interface arrangements are detailed in the Supplementary Instructions.

### **21.2 Responsibilities and accountabilities**

Responsibilities and accountabilities are detailed in Section 3 and below

#### **PRINCIPAL OPERATIONS OFFICERS:**

The organisational chart in Section 3.1 of this Manual details the various areas of responsibility and reporting chain for the railway and its associated bodies. It is possible for an individual to hold more than one position, due to the shortage of manpower, but it is the Board's intention that each position be an individual's responsibility.

The identified principal officers responsible for safety in the organisation include but are not limited to :

- Responsible Officer
- Operations Branch Manager
- Mechanical Branch Manager
- Civil Branch Manager

Detailed position descriptions including responsibilities and authorities for the above personnel are detailed in Section 3.2 of this manual.

### **21.3 Design and development**

Because of the heritage nature of its operations CMR does not design and develop new equipment.

However, repair and maintenance of CMR rolling stock and equipment does often require the modification of new or second hand materials and equipment when exact replacements are not available. When this is required a risk assessment is carried out on the planned modification to identify safety implications.

Any available manufacturer's manuals or directions relevant to the materials and equipment are considered as part of these risk assessments.

## 22 Process control

### 22.1 Process control

CMR has a series of operational and engineering procedures to ensure the safe operation of its rail services. These procedures set out processes for identifying and responding to risks in rail operations, responding to emergencies, managing changing circumstances and making sure the procedures are understood and effectively applied to allow CMR to operate with safety.

To report and record inspections and works carried out on Rollingstock and Track several different forms are used and stored in appropriate folders ([CMR F 043](#))

#### 22.1.1 Track and infrastructure

Maintenance work, inspection and testing of track on the Castlemaine and Maldon Railway is undertaken in

#### 21.1.1 Limitations on Railway Operations

The operational limitations shall be established by consultation and negotiation with the appointed consulting civil engineers. The consulting civil engineers have been given authority to examine all civil engineering aspects of the railway, and to recommend any operational limitations accordingly. It is the responsibility of the Civil Manager to address these limitations and restrictions and to prioritise and implement all work requirements.

The consulting engineers shall inspect the railway a minimum of once per annum and provide a written report on the railway to the Board on the condition of the track and infrastructure.

Other operational limitations may be imposed by the relevant section managers or the board of management, as required.

Limitations may be placed on the railway due to;

- Condition of culverts
- Condition of bridges.
- Condition of track.

The consulting engineers shall be advised of the following requirements for consideration, which include, but are not limited to:

- Tonnage of trains which shall operate.
- Frequency at which the trains are proposed to operate.
- Types of vehicles intended to operate.

This information shall then enable the engineers to advise the railways management as to any suggested limitations to operations that may be required.

## **22.1.2 Rolling stock**

### **22.1.2.1 Rolling stock certification**

All work, inspection and testing on CMR rolling stock is undertaken to ensure the rolling stock meets the Rolling Stock Mechanical Standards (**CMR S 002**).

Locomotives and other rolling stock used on CMR trains are inspected by suitably qualified and competent persons and certified as being fit for purpose and meeting the Procedure and Standards for Certification of Rolling Stock (**CMR P 007**).

The persons conducting these inspections certify that, at the time of inspection, the rolling stock meets the Rolling Stock Mechanical Standards (**CMR S 002**) and is in a structural and mechanical condition that is safe for its intended use.

Rolling Stock Certification Forms (**CMR F 042 and F 043**) are issued and signed by the person conducting the inspection. Rolling stock not certified in accordance with these conditions is never used for operational purposes.

Locomotives and other rolling stock that fail either the engineering or operational mechanical inspection process are not used on CMR train services or moved on track outside the yard boundaries. These locomotives and rolling stock are not used until all matters requiring attention have been addressed, re-inspection carried out and certification issued.

Only rolling stock listed in the Rolling Stock Register (**CMR F 024**) as approved and certified is used on CMR train services. The Register also indicates the certification status of all rolling stock held by CMR.

Additional rolling stock acquired by CMR for operational requirements is examined and certified as fit for purpose in accordance with this section. Where required by the Change Management Procedure (**CMR P 003**) or by legislation, a request for variation to CMR's accreditation is submitted to PTSV for approval before the rolling stock is used on CMR trains.

Certificates of compliance signed and issued by Consulting Engineers are retained on files at the Maldon loco shed.

#### **22.1.2.1.2 Vehicles Not Certified**

The railway has numerous locomotives and vehicles which are under or awaiting restoration. These are stored on & off the running lines at Maldon, Muckleford and Castlemaine. Uncertified vehicles on running lines are identified by a red X stencilled next to the class letter.

#### **22.1.2.1.3 Movement of Uncertified Vehicles**

These vehicles are not to be attached to any passenger train under any circumstances. Uncertified vehicles are not to be used on running lines between stations except under the following conditions:

The Mechanical Manager or his deputy authorises and provides written authority to the Operations Manager for movement of the vehicle from one station to another.

Prior to movement of the vehicle it is inspected by a competent running gear repairer, to ensure that the air brake is operational and that axle boxes, journals etc have been oiled and they are satisfied damage is not likely to occur to the vehicle, other vehicles or the track and that the vehicle can safely be moved. Where the air brake is not operational refer below.

If after examination of the vehicle it is determined that it cannot be safely moved by rail, the vehicle must be not be moved and arrangements made for either repair of the vehicle in-situ or transfer of the vehicle by road.

The requirements of the Tourist Railway Rules and General Instructions - are complied with where uncertified vehicles are moved, particularly where the air brake is not operative.

Uncertified vehicles may be moved in yard limits subject to the following :

The vehicle can be safely moved without damage to the vehicle, other vehicles or the track.

#### **22.1.2.1.4 Track Maintenance Vehicles:**

A number of vehicles are used for track maintenance these are as follows

Hi Rail vehicles (two)

Plasser tamper

Sleeper remover

Scarifier

Trolley

Trolley trailer

These vehicles are not subject to certification by the consulting engineers but are maintained on an as required basis.

#### **22.1.2.1.5 Consulting Mechanical Engineers**

The appointed consulting engineers are tasked with inspecting and verifying that all operational vehicles have been maintained to a standard suitable for operation on a Tourist railway.

The engineers shall inspect all operating vehicles annually, and shall inspect all mechanical and safety related aspects of the vehicles integrity. They shall inspect and satisfy themselves that records of maintenance are current and up to date.

They shall report any limitations to be imposed on a vehicles operation, and shall recommend any remedial work or maintenance activities that shall be required for any mechanically deficient vehicle.

#### **22.1.2.1.6 Consulting Boiler Inspector**

The appointed boiler inspector is tasked with inspecting and certifying the steam locomotive boilers in accordance with the Occupational Health and Safety Act (Plant) 1995.

### **22.1.2.2 Rolling stock operating standards**

Rolling stock operating standards (axle loads, tare, capacity, draw gear and speed) are documented in the Rolling Stock Mechanical Standards ([CMR S 002](#)).

Approved track speed on the railway is a maximum of 40km/ph (generally well below the rolling stock approved standard). Movement within the station yards is limited to 6km/ph. Speed limits apply to various sections of the Railway. Details are set out in the Supplementary Instructions. Approval to exceed this speed restriction for test purposes must be obtained in writing from the Operations Manager.

Trailing load ratings for each locomotive are based on the former Government Railway's approved ruling grade loads as defined in historical information and rules for the line. Normal operations work well within the approved ruling grade load. CMR train services operate at less than the approved ruling grade load as the maximum trailing load of the current CMR certified fleet is 280 tonnes. Reference should also be made to the Supplementary Instructions

Temporary restrictions, in addition to the documented standards, are imposed through the issue of Special Train Notices and the placement of temporary restriction signage.

### **22.1.2.3 Rolling stock maintenance**

Rolling stock operated by CMR, whether owned, leased or on loan, is maintained in accordance with the Rolling Stock Inspection Procedure ([CMR P 009](#)) to make sure it meets the standards detailed in the Rolling Stock Mechanical Standards ([CMR S 002](#)).

Repairs to rolling stock shall be booked by the card system and shall also be reported on the "Incident Defect Report" ([CMR F009](#)), which shall be filled in by the Driver or person identifying the defect.

Where defects are identified by drivers during train exams on passenger stock, the defect must be notified to the Officer - in Charge who shall attach the "Incident Defect Report" form to the OIC form for the running day. The vehicle is to be "green carded". If the defect is such that it affects passenger safety the vehicle is to "red" carded and removed from the train.

### **22.1.3 Communications**

Communications for main line operations and shunting activity on CMR is occasionally by radio using the standard operational channels. Back up facilities are the Telstra phones located at the Railway Station for train operations information, and shunting hand signals for shunting activities.

The Operations Manager is responsible for the safe storage, testing and maintenance of all hand held radios. Radios are tested and their batteries recharged before being issued.

Communications between the train guard and stations is provided by mobile phone. Locomotive crews are not issued with any railway mobile phone, but generally have access to a mobile phone supplied by themselves.

Special rules apply for the section Castlemaine to Maldon Junction which are set out in the Working timetable and Supplementary Instructions.

#### **22.1.4 Operations systems**

Operations on the CMR railway are performed in accordance with:

- Rules for Operation of Castlemaine & Maldon Railway as set out in the SMS and
- CMR Working timetable and supplementary instruction
- Association of Tourist Railways Rules and General Instructions
- VGR Standing Instructions 2010

Staff are trained in these operational systems.

Train crew are provided with the following information before taking responsibility for their train:

- written notification ( S Notice) of any special operational requirements for the service.

Drivers must not allow their train to enter the branch line until they have a current Train Order and staff from the OIC.

On public operating days, CMR operates under the direction of the OIC, which is the primary duty of the Train Controller/Station Master. On non-public days, where only one train is operating for works purposes, the staff may be issued with an Authority to Occupy the Line. When more than one work train operates, a Train Controller must oversee operations.

All rail traffic is controlled under the Tourist railway Rules and General Instructions, utilising the Train Staff and Ticket system of safeworking.

##### **22.1.4.1 Train Planning and Scheduling.**

Trains are scheduled to operate under the control of the Operations Manager in accordance with the Working Time Table as approved by the Board of Management.

Timetables and schedules shall be promulgated throughout the organisation as required, via the Working Timetable, or S notices.

Special trains and unscheduled workings shall be operated in accordance with the Tourist Railway Rules and General Instructions, Section 8.2 and notice of their operation shall be advised to operations personnel via 'S' notices. 'S' Notices shall be issued by the Operations Manager or his deputy, and shall include details of the required working, timetable, consist, requirement, special arrangements, and relevant authorities.

##### **22.1.4.2 Communications.**

All field communications shall be via mobile telephones. Dedicated phones are provided as follows :

Mobile 1 -Train Guard

Mobile 2 - 2nd train guard or for track communications

These phones have been programmed with emergency numbers to relieve stress in an emergency and a general phone contact list is kept in the carry case

- Maldon Station
- Police Maldon
- Police Castlemaine
- Fire Brigade Maldon
- Bus Lines

No telephones or other communications devices have been supplied to the locomotive crew, but the majority of crews have privately owned communication devices which are recorded on the "Contact List" located at Stations and in the carry case.

Each phone is equipped with a spare battery which must be changed each alternate day of use and put on charge. All phones are to be locked away at the end the day in the Safe working locker.

#### **22.1.4.3        *Procedures for Safe Operation of Railway under normal condtions***

The railway shall operate at all times in a Safe and Efficient manner.

The following is a list of procedures that address identified circumstances, for the railway when operating under normal conditions. These procedures shall be reviewed on an annual basis by the CMR safety committee , and any amendments required shall be implemented as per this SMS I.

Criteria for review of these procedures may also evolve as a result of Management Reviews, IDR's, Corrective Actions, observations, and other reporting mechanisms. Should such criteria evolve, they shall be referred to the Responsible Officer for consideration and implementation.

##### **22.1.4.3.1        *Interface with road traffic.***

Interface with road traffic is kept under strict control, and procedures for the control of train operations over level crossings are as defined in the Tourist Railway Rules and General Instructions Sections 5.1, 6.20, 7.1, 7.7, 10.1-10

All level crossing signage shall be maintained by the railway, in liaison with local authorities who shall be responsible for road markings.

All level crossings shall be marked in accordance with AS1742.7 - 1993. (Refer figures 1 & 2 for passive level crossings, and figures 6 & 8 for active level crossings.)

The Emergency Response Plan addresses the actions to be taken, by whom, in the eventuality of a level crossing incident occurring.

##### **22.1.4.3.2        *Special Traffic.***

All special trains, traffic and vehicles shall only operate under the permission of the Operations Manager, and special notice shall be given to all concerned in accordance with Tourist Railway Rules and General Instructions Section 8.2.

##### **22.1.4.3.4        *Special Loadings including Out of Gauge.***

No special or out-of-gauge loadings are envisaged. Should such movements be required, appropriate arrangements shall be made, by the Operations Manager at that time.

##### **22.1.4.3.5        *Overloaded Vehicles.***

It is not envisaged that any overloading of vehicles should occur or be required.

Under the terms of the "Order in Council" the CMR is not permitted to act as a common carrier or carry goods for reward.

Goods vehicles may carry loads for demonstration purposes or for railway purposes only, such loads shall not exceed the vehicles designed loading conditions.

Passenger vehicles shall not be permitted to exceed 50% of the seating capacity with standing passengers.

##### **22.1.4.3.6        *High Fire danger Periods.***

In accordance with the Tourist Railway rules and General Instructions - NO STEAM TRAINS will operate if the Country Fire Authority has declared a "**Total Fire Ban**" in the North Western Zone.

In such a case the Diesel Electric Rail Motor or Diesel locomotive hauled services may replace steam locomotive hauled services as per the Working Time Table.

If weather conditions are EXTREME then all services may be cancelled at the discretion of the Operations Manager in consultation with the Civil and Mechanical Managers if available.

Fire patrols may operate as determined by the Operations Manager during the period of CFA imposed fire restrictions and/or at other times,

#### **22.1.4.3.7 Track Inspections.**

Normal Running Days

Before the operation of any "Fare Paying Passenger Service" operates, the track shall be patrolled by the Guard of the train or Qualified Ganger at before the scheduled departure time of the first service in the WTT as per Tourist Railway Rules and General Instructions GI 9. 2 along the full length of the line that services are to be operated over.

The track patroller must be Safeworking Qualified and must take the sectional staff after entering details in the "Train Register Book" and also take the portable telephone which must be switched and battery checked before departure plus, 2 Red Flags and 1 Green Flag. Records of the track patrol must be entered in the TR book at completion as per the Tourist Railway Rules and General Instructions. Track defects identified must be recorded on the Track Defect Report form and attached to the OIC report for the days running.

#### **22.1.4.3.8 Track Patrol by Ways & Works.**

If Ways & Works are passing through the complete running section and will be clear before running time they may conduct the patrol and phone results to the OIC or Guard in Charge at Maldon who shall appropriately record the inspection in the TR book.

- Works Trains. All Works Trains shall operate as trains in accordance with the Tourist Railway Rules and General Instructions with emphasis on Section 9.
- Abnormal Conditions. In times of extreme weather conditions such as Gales, Heavy Rain, Electrical Storms, Fire, Flood etc, the track patrol will not be undertaken until the conditions have abated.

#### **22.1.4.3.9 Train Marshalling.**

All shunting shall be conducted in accordance with the Tourist Railway Rules and General Instructions.

No special circumstances apply with regards the marshalling of trains, other than those covered in the Tourist Railway Rules and General Instructions, in particular Appendix II, Sections 8 & 9. Also refer WTT if applicable.

#### **22.1.4.3.10 End of Train Indicator**

All End of Trains shall be marked by a white tail disk in daylight hours and with Red and White kerosene or electric light markers after dusk.

#### **22.1.4.3.11 Maximum Speed of Any Train.**

The Maximum Speed of any train shall not exceed those specified in the WTT or any special instructions which have been invoked from time to time by the Operations Manager, who shall make such decisions in liaison with the Civil and Mechanical Branch managers.

#### **22.1.4.3.11 Dangerous Goods**

No bulk quantities of Dangerous Goods will be carried by the railway on any Passenger or Works Train.

#### **22.1.4.4 Procures for the safe operation of the Railway under abnormal conditions**

NB : IN ALL CASES BELOW THE EMERGENCY PLAN MUST BE REFERRED FOR DETAILS OF ACTIONS TO BE TAKEN.

The railway shall operate at all times in a Safe and Efficient manner and no risks are to be taken which could jeopardise safety in any form.

The following is a list of procedures ( and additional requirements) that address identified circumstances, for the railway when operating under abnormal conditions. These procedures shall be reviewed on an annual basis by the Operations Manager, and any amendments required shall be implemented as per this SMS.

Criteria for review of these procedures may also evolve as a result of Management Reviews, IDR's, Corrective Actions, observations, and other reporting mechanisms. Should such criteria evolve, they shall be referred to the Operations Manager for consideration and implementation.

- Major Incidents and/or accidents.
- Fatalities and injuries.
  - Refer also Tourist Railways Rules and General Instructions Section 10.2, 9 and 10.
- Protection of Defective Trains.
  - Tourist Railways Rules and General Instructions Section 10 Clause 3
- Protection of Level Crossing during Failure of Protection Devices.
- The Recovery of Defective Vehicle.
  - The recovery of defective vehicles shall be in accordance with a number of clauses in the Tourist Railway Rules and General Instructions, Sections 7, 8 & 10.
- The Handling of Defective Vehicle Equipment.
  - As the railway does not carry any freight or operate any vehicles with complex external equipment, any contingency that may arise under this heading shall be in most cases addressed either within the Tourist Railway Rules and General Instructions and/or Section 6 of this manual.
- Evacuations.
- Fire Involvement.
- Explosions.
  - Refer Tourist Railway Rules and General Instructions Section 10 Clause 2, 3, 7.
- Rail over Road Bridge.
  - In the event of a road vehicle coming in contact with any Rail over Road Bridge all services must be suspended immediately and no train is permitted to transverse the structure until a clearance has been obtained from our Civil Engineers.
  - Refer Tourist Railways Rules and General Instructions Section 10 Clause 2, 3, 4, and 10.
- Level Crossings.
  - Refer also Section 3.7.16 of this manual and Tourist Railways Rules and General Instructions Section 10.

#### **22.1.4.5 Procedures for the safe operation of the Railway under maintenance conditions**

The railway has to operate at all times in a Safe and Efficient manner and no risks are to be taken which could jeopardise safety in any form.

The following is a list of procedures that address identified circumstances, for the railway when operating under maintenance conditions. These procedures shall be reviewed on an annual basis by the CMR Safety Committee, and any amendments required shall be implemented as per this SMS.

Criteria for review of these procedures may also evolve as a result of Management Reviews, IDR's, Corrective Actions, observations, and other reporting mechanisms. Should such criteria evolve, they shall be referred to the Responsible Officer for consideration and implementation.

**THESE RULES NEED TO BE READ IN CONJUNCTION WITH THE LATEST WORKING TIMETABLE AND SUPPLEMENTARY INSTRUCTIONS.**

- Obtaining Authority to work on Track

Before any trackwork can commence on any section of the running track approval must be obtained from the Civil Manager.

- Obtaining Total Possession.

Total Possession of the operational track is granted to the Civil Manager by the Operations Manager when circumstances demand.

- The Working of Traffic During Maintenance

Perway work during running times is usually only performed under exceptional circumstances.

The Operations Manager is to be notified along with the Train Crew the location of work. The Civil Manager shall be responsible for the provision of the required number of persons to protect crews.

- The Working of Works Trains

When Works Trains operate then they shall operate on "STAFF" and the guard in charge shall record all operational requirements in the Train Register Book.

Also refer Standard Operational details in this manual Section

- Advising Employees of Pending Maintenance.

Train Timetables are displayed in the Station Master's Office and any Special Trains are advised by Special Train Notice used to notify staff of Special Trains at short notice. S notices shall be promulgated, in advance, by the Operations Manager. Also refer Tourist Railways Rules and General Instructions Section 8.2 and the Supplementary Instructions

- Worksite Protection.

The worksite shall be protected as per Section 9 of the Tourist Railway Rules and General Instructions and the WTT & SI.

- Providing Train Running Information.

The chief Ganger and Guard shall make themselves acquainted of any operational services in their work area.

- Imposing Temporary Speed Restrictions

The Track or Civil Manager can instruct the Operations Manager to apply Speed Restriction for specify perway works, or track requiring attention. All crews are informed by Special Notice which are filed in the Notice Book which has to be read and notices signed off by all qualified personnel when signing on for duty.

- The Use Hi Rail Vehicles.

Hi-rail Vehicles can only be used by suitably qualified RSW who have been trained and assessed as competent in their operation in accordance with CMR Road Rail training instructions.

- Track Circuit Assurance.

Track circuits are currently not used at this time.

- Level Crossing Protection.

Refer Section 22.1.4.3.5 of this manual. Particular attention should be paid to protection of personnel from road vehicles when working on track. The Civil Manager shall notify the local Police of any requirement to disrupt traffic while working on level crossings and make such other arrangements as required to minimise traffic disruption.

In addition the Civil Manager shall liaise with the local council regarding works. Appropriate signage shall be supplied by the local council in accordance with road worker practice. If Council is unable to supply appropriate signage and or personnel the Civil Manager shall obtain the required signage and supply the necessary personnel to protect persons working at the crossings.

- Maintenance Activities On Other Organisations Track

Where the CMR undertakes track maintenance activities on other organisations track the requirements of this section shall be implemented as appropriate. If required by the organisation a separate procedure shall be developed to protect workers involved in the maintenance activities.

As a minimum the Civil Manager shall appoint a Works Supervisor for the work who shall ensure

- ascertain from the organisations nominated representative any expected rail movements
- that the work site is protected from rail movements in the work site.
- that the work site is protected from rail movements originating outside the work site.

if deemed necessary shall appoint look-out personnel

#### **22.1.4.5.1 Control of Non Organisational Staff.**

Train & Station crew are to ensure patrons and other non-operational staff entering operational areas of the railway maintain safe distances from moving rolling-stock and other hazards. Train operations are to modified and staff are to control patrons access as required to maintain a safety of all concerned.

When special Groups visit the railway then such groups shall be provided an escort to take them around the railway in numbers which are manageable and not likely to infringe safety requirements in work areas.

No members of the public shall be allowed into any safeworking area, without the permission of the safeworking officer being granted in advance.

## 22.2 Calibration of equipment

Equipment or devices used to measure quantities relating to the railway shall be calibrated to ensure proper operation of the railway. The following table lists such devices and procedures for testing:

DEVICE	TEST PROCEDURE	FREQUENCY	VARIANCE	RESPONSIBLE PERSON
Safety valves	Application of air pressure measured by a calibrated gauge	During major overhaul of rolling stock or every 2 years	180 to 182 psi	Mechanical Manager
Air/steam gauges (loco and carriage)	Gauges are tested by independent contractor	During major overhaul of rolling stock or every 2 years	+/- 3lb/sq	Mechanical Manager
Wheel Profile Gauges	Check against drawing	Annually	Go/No gauge	Mechanical Manager
Gauge bars	Check measurement	Annually	To Track Gauge	Civil Manager

A record of all calibration of equipment or devices used to measure quantities relating to the Railway is maintained by the appropriate Branch Manager.

## 22.3 Inspection and testing

Inspection and testing are conducted by persons who are experienced in the relevant activity or as part of a team under the supervision of a person with the relevant competencies.

## **22.4 Inspection and testing procedures**

### **22.4.1 Track and infrastructure**

#### **22.4.1.1 Pre accreditation inspection and testing**

Track owned and managed by CMR is inspected by appropriately qualified people and certified as being fit for CMR operations before commencement of rail operations under rail safety accreditation.

#### **22.4.1.2 Ongoing inspection and testing**

Ongoing track inspections of the railway are the responsibility of the Civil Manager. Details of inspections are in the Permanent Way Manual.

### **22.4.2 Rolling stock**

#### **22.4.2.1 Pre-accreditation inspection and testing**

All rolling stock to be used for operational purposes by CMR is inspected by appropriately qualified people prior to entering service and is certified as being fit for service, including:

- having no modifications to the rolling stock that degrades operational or passenger safety
- being structurally sound, at the time of the inspection, for the intended use and operating standards specified by CMR, and
- being maintained to the operational mechanical standard required by CMR's maintenance schedules.

Signed certifications are provided to PTSV as part of the change management process and copies are stored in the office.

#### **22.4.2.2 Rolling stock train examination**

Train examinations are conducted in accordance with the Tourist railway rules and General Instructions, . Refer to clause 8.9, Appendix A clause 3 and are based on requirements of the V/line Brake Book of Instructions - 1989 Section 2.

##### **22.4.2.2.1 Full Examinations.**

These are conducted by the Driver on marshalling of any train. Full examinations shall be conducted in accordance with the Tourist Railway Rules and General Instructions, Appendix 2 clause 3.3.

##### **22.4.2.2.2 Modified or partial Examinations.**

Conducted by the Driver after the coupling of locomotive at the conclusion of run round or after adding or removing rolling stock from the consist, as defined in the Tourist railway rules and General Instructions Appendix A clause 3.4.

##### **22.4.2.2.3 Arrival Examinations**

Arrival examinations may be conducted at completion of train running requirements.

##### **22.4.2.2.3 Departure Examinations**

Refer section 22.4.2.2.1

#### **22.4.2.2.4 Roll By Examinations**

Roll By examinations may be undertaken by any staff member observing a passing train. The Mechanical Manager may also conduct random roll-by inspections as deemed required. Persons conducting such examinations shall observe that there are no obvious defects with the train's:

- brake operating system, ie rigging, pipe and hose connections, piston travels, etc
- brake shoes, ie shoes are not worn excessively to affect brake operation
- wheels, ie flat spot
- axle boxes, ie, not cracked, leaking oil, classified as hot boxes for repairs
- springs are not broken or sagging
- bolsters and side bearer clearance is all right
- fouling of vehicles, loads or bogie equipment on body/ under frame.
- goods loads, ie, not excessive or misplaced
- body work, ie, broken windows, broken handrails affecting safety, etc.
- couplers, ie decoupling bars, links and auto coupler hands.
- coupler height, ie excessive miss-match (being more than half coupler hand height).

If a defect is observed, the examining person shall immediately notify the mechanical manager or authorised representative of the vehicle's condition.

#### **22.4.2.2.5 Special Examinations**

Not used

#### **22.4.2.2.6 Defective Equipment.**

Where vehicles that are found to have defects the following must occur:

The driver and guard must take steps to remedy any defect which might interfere with the safe running of the train, failing which the vehicle is to be detached.

Any vehicle not safe to travel must have a "Red Card" stating "Not to Go" affixed by the driver or running gear repairer. The Mechanical Manager must be notified, and the vehicle not used for traffic until it has been repaired.

If there are repairs of a non-urgent nature and the vehicle is declared safe to travel, the driver must affix a "Green Card", "For Repairs" and the vehicle may remain in traffic.

The driver must inform the guard, officer in charge or others concerned of the occurrence and are responsible to report it, on the "Notice of Rolling Stock Defect" form. The Officer in Charge (OIC) shall attach the form to OIC sheet for the days running. Refer also section 6.6.1.3 of this Manual.

Repair cards may only be removed by the Mechanical Manager or his authorised representative once repairs are complete.

Standard PTC cards will be used for defect notification on vehicles.

#### **22.4.2.2.7 Defect Notification and Documentation**

Any defective vehicle shall have a suitable card attached (refer also above);

Red Card- Withdrawn immediately from Service

Green Card- Requires work, but may continue in service.

##### Rolling stock card notification system:

As referenced by the "Tourist Railway Rules and Regulations" section 8.9.

If a vehicle has a serious defect affecting safe operation it is to be red carded, "Not to GO" and is not to be used until the vehicle fault has been rectified.

If a vehicle requires repair it is to be green carded "For Repairs". This vehicle may still be used in service after consultation with the Mechanical Manager

Limitations on vehicle operation may be imposed on "green carded" vehicles once consultation has taken place between the Mechanical Manager and the Operations Manager.

#### **22.4.2.2.8 Train Examination Certification.**

Train examinations are conducted by the Driver, refer 22.4.2.2; 22.4.2.2.1 and 22.4.2.2.2 above. A certificate is not required to be completed.

#### **22.4.2.2.9 External Certification Examination**

All operational rolling stock including locomotives are to be subjected to a certification mechanical inspection by the CMR's consulting Mechanical Engineers once every 12 months. This inspection is a requirement of the "Order in Council" to operate a Tourist railway. The examination covers a general examination of the vehicle including but not limited to:

- Wheel profile
- Running gear inspection
- Body work integrity
- No broken windows in passenger carriages
- Door locks are functional
- Examination of maintenance records.

#### **22.4.2.2.10 Internal Examinations**

A series of examinations for each class of vehicle utilised on the railway has been prepared and is based on the Victorian Railways Rolling Stock Branch Book of Instructions - 1943 methodologies for the inspection of locomotives and Rollingstock. Note that ABCD and ABCDE exams are to be developed as the need arises. These exams are recorded and stored in the appropriate Rollingstock folders ([CMR F 042](#))

The schedules listed in the Book of Instructions have been modified to take account of the reduced mileage's covered by vehicles during a 12 month period on the railway compared to those encountered when in VR service.. In addition specific critical exams have been implemented for passenger carriages relating to passenger safety which are conducted on a more frequent schedule.

#### **22.4.2.2.10.1 Locomotive Railmotor Passenger and Van Rolling stock Inspections**

Inspections for locomotives railmotors and passenger and guard van rolling stock is based on the following mileages or every 12 months, whichever comes first. Where vehicles do not run more than 1000 kilometres per year 'A' exams only will be conducted every 12 months. For Diesel locomotives and "A" minor exam will be conducted at least every 12 months as they are predominantly used for rescue and work train purpose only. :

Kilometres from

1 January 1997	Examination type
<1000	A and "A Minor"
2,500 - 3,000	A
5,500- 6,000	AB
8,500 - 9,000	A
11,500 - 12,000	AB
14,500 - 15,000	A
17,500 - 18,000	ABC
20,500 - 21,000	A
23,500 - 24,000	AB
26,500 - 27,000	A
29,500 - 30,000	AB
32,500 - 33,000	A
35,500 - 36,000	ABCD

The above shall be repeated until the following mileage is reached

99,500 - 100,000	ABCDE
------------------	-------

Exams shall then repeat.

The Mechanical Manager shall ensure that the above exams are conducted , by suitably qualified personnel. Where the nature or scope of an exam or repair falls outside the scope of experience of existing staff, the Mechanical Manager shall organise appropriately trained external resources to assist.

#### **22.4.2.2.10.2 Boiler Inspections**

Steam locomotives are subject to external boiler examination by the consulting boiler inspector. Unless locomotives have had minimal use these are scheduled for 12 months but can be extended by written consent of the consulting boiler inspector.

#### **22.4.2.2.10.3 Passenger Carriage Safety Inspections**

All passenger carriages are to be inspected once every 4 months by the Mechanical Manager for the following:

- Broken glass in windows
- Window catch operation
- Seat upholstery serviceable.
- Door catches and locks functioning correctly
- Concertina connection curtains in place
- Fire extinguishers in vehicles and serviceable

The result of the inspection shall be recorded on the "Passenger Carriage Safety Inspection" form and filed in the appropriate vehicle maintenance record file.

Vehicles with identified defects in the above may be green or red carded depending on the severity of the defect found. For example a tear in a seat may be unsightly but not present a hazard, but a seat spring projecting through is a hazard.

#### **22.4.2.2.10.4 Passenger Vehicle Running Gear Inspections**

All operational passenger carriages and guards vans shall be subjected to the following inspections:

TYPE OF INSPECTION	SCHEDULE
Brake Blocks and running gear generally	3 months

The records for these inspections shall be kept in the carriage and vans maintenance file.

### **GOODS VEHICLES INSPECTIONS**

Goods vehicles on the railway are used infrequently for demonstration purposes and track maintenance activities only. As a result the major maintenance requirement is to check for deterioration due to lack of use. Goods vehicle mileages will not be recorded and as a result examinations will be based on expiration of time. The following inspection schedule shall occur.

TYPE OF INSPECTION	SCHEDULE
A exam	3 years
AB exam	10 years
Westinghouse Brake PV exam	A exam
Lift	AB exam - optional for 4 wheel stock
Auto Coupler	A exam
Side Bearer Clearance Check	A exam, Whenever vehicle used (by driver)
Brake Blocks and running gear generally	Whenever vehicle used (by driver)

### **22.4.3 Signaling and communications**

Signalling equipment is regularly inspected by the Civil Manager while carrying out track inspections.

The Operations Manager or OIC inspects all communications equipment before it is issued and on its return. An external service provider carries out repairs to faulty equipment if the fault is not easily remedied by CMR workers.

#### **22.4.3.1 Testing.**

A/ Routine Testing

Independent Home Signals shall be checked every operational day by the Signaller on duty as provided under the Tourist railway rules and section D following.

B/ Following Repairs

All signals shall be checked by the Manager Signals and Communications or his delegate for correct operation after repairs or maintenance and the results recorded in the Train Register Book.

C/ Following Track Maintenance Activities.

All signals and Points shall be tested immediately all trackwork in the vicinity of Levers, Plunger Locks and signal cables has been completed to ensure all apparatus is working as designed and not damaged.

D/ Testing Instructions

Signals shall be checked as follows.

TESTS FOR SEMAPHORE SIGNALS, shall include, but not be limited to:

- Signal cannot be operated unless locking bar is inserted correctly.
- Signal cannot be operated with “Plunger Locks” open.
- Signal will pull off fully when lever clip is captive
- Signal cannot be tripped when locking pin is inserted in the Proceed Position.
- Record results in Train Register Book.

E/ Identification of Responsible Persons.

Signals can only be operated and tested by Qualified “Signalman” who shall conduct functional testing as defined above, and in accordance with the Tourist Railway Rules and General Instructions Section 7.

F/ Independent Wire Count Practices

Not Applicable

G/ Wire Count Records

Not Applicable

H/ Testing Plans

Since signals are regularly checked as part of normal operations and any defects will be identified during these procedures no additional testing plans are deemed necessary.

I/ Control of Testing Documentation.

The log book shall be kept in the Maldon Station office, except when in use by the Signal and Communications Manager. The TR book is kept in a secure area at the relevant station. In the case of Muckleford, the TR book is returned to Maldon for security purposes at the end of each days running.

#### **22.4.3.26 Communications Systems**

The railway has adopted the mobile cellular phones for Train to base communications. There may be use of portable hand held U.H.F. short distance radios for on-train communication. Portable radios may also be used for track gangs or other workers who are working within a relatively short distance of each other.

Details of Mobile Phone numbers are located at stations.

Station to Station communication is via the normal public telephone network.

#### **22.4.4 Operations**

The Operations Manager conducts regular safe working compliance inspections on CMR and takes necessary corrective action where rail safety requirements are not being observed.

Compliance safety audits are conducted in accordance with the process set out in Section 8.

The Manager follows up all notifiable occurrences and keeps records of all instances where rail safety requirements have not been observed, records them on personnel records where relevant, and reports them to Board of Management meetings along with any corrective actions.

## **22.5 Interface with other operators or systems**

CMR's normal sphere of operations does not involve any interface with any other rail operators or rail systems. However, on occasions for special events, rolling stock from CMR may operate on other systems, or rolling stock from other systems may operate on the CMR network. In these circumstances, the following procedures will apply.

There is a special interface with other rail operations between Maldon Junction and Castlemaine. This is covered with an access agreement with VicTrack and reference should be made to the agreement and CMR's Supplementary Instructions.

### **22.5.1 Operating CMR rolling stock on another system**

Before operating CMR rolling stock on another system can be considered, the rolling stock must be checked for compatibility with the compatibility host system.

The following are examples of what should be considered:

- fuel and/or power supplies
- gauge
- track profile
- overhead power collection methods
- curve radii
- gradients
- undulations in track conditions
- rolling stock clearance
- operational speed
- brake performance and documentation, including, where possible, brake charting
- accreditation conditions and status, including securing approval for a Material Change for the operation of the rolling stock on the host system
- a risk assessment detailing the operation of the rolling stock on the host system.

The Mechanical and Operations Managers or their delegated representative must satisfy him/herself of the compatibility between the system and the CMR rolling stock.

Where compatibility is deemed to exist, the rolling stock is to be operated on a trial basis without passengers prior to it being put into passenger service. The rolling stock shall be inspected, and a pre-start check of all equipment carried out, prior to it entering service, to ensure it is safe to operate.

An agreement of understanding regarding the operation of the rolling stock on the host system must be in place before the rolling stock is transferred. This agreement should cover in writing all essential aspects of the rolling stock's operation, but need not necessarily be in the form of a single document. Fine points of running may be agreed upon verbally between the Manager or delegated representative and a senior official of the host system. This agreement may be in the form of a legal contract.

The agreement shall include details of the insurance cover of the rolling stock while in transit between CMR and the host system and while operating on the host system. The Manager must view appropriate insurance documents or arrange for CMR's insurance to cover the rolling stock, before the rolling stock is transferred.

At the time of transfer, the rolling stock must meet or exceed all requirements as per the Rolling Stock Mechanical Standards (**CMR S 002**), in addition to requirements for vehicles on the host system, together with any additional requirements determined from the risk assessment and material change.

CMR must instruct the host system as to the correct maintenance procedures for the rolling stock. While operating on the host system the CMR maintenance schedule and mileage records must be maintained. Current servicing and mileage records will be supplied with the rolling stock. If the host system's maintenance scheduling demands a higher frequency of servicing, then their service schedule shall apply. All appropriate mileage and record keeping must be provided when returning the rolling stock to CMR.

CMR shall instruct the host systems driver instructor(s) in the operation of the rolling stock so they may instruct other drivers, or alternatively the host systems driver instructor shall instruct CMR drivers on route knowledge and the host systems procedures, whichever is determined as the method of operation in the agreement of understanding.

The rolling stock may be operated to the various timetables and follow other operational instructions of the host system provided these do not compromise the operational safety of the rolling stock (e.g. attempting to operate an older rolling stock to the same schedule speeds as a modern fleet).

CMR will supply to the host system contact information for CMR, including a 24-hour phone contact number in case additional information is required.

The host system will obtain appropriate accreditation from PTSV.

### **22.5.2            *Operation of other rolling stock on CMR network***

Should any rolling stock with equipment or operational characteristics not covered by CMR procedures operate on CMR either temporarily or permanently, instructions for their use will be issued in a supplementary manual.

The same basic procedure as detailed at 22.5.1 shall be used, except that CMR shall assume the role of host system.

Rolling stock refurbished for other operators or museums by CMR shall meet the requirements and specifications as detailed by the owner. If the rolling stock is to be operated on CMR for trials or demonstration prior to its departure to its owner, the rolling stock shall meet the requirements as detailed in the CMR procedures.

#### **22.5.2.3            *Maintenance of other Rolling stock***

All maintenance of visiting rolling stock shall be the responsibility of the owning organisation, unless agreed in writing otherwise. CMR may provide materials, facilities and human resources in order to assist the owning group in operation/ maintenance of their vehicles on the railway.

## **22.6    Inspection frequency**

The inspection frequency for each process has been established by taking into account the following:

- traffic volume, operational speed and load limits
- known or estimated rate of deterioration of critical elements
- consequence of failure of any part of the system
- adverse environmental factors
- incident or accident experience.

## **22.7 Inspection and test records**

Records of all certifications, inspection and tests of the track, rolling stock and equipment are verified on appropriate forms and are maintained as safety records in accordance with provisions of this SMS.

All completed maintenance check sheets shall be contained in the appropriate vehicle maintenance records file.

### **22.7.1 Boiler Inspections**

Boiler inspection records and materials certificates used in boiler repairs will be contained in the locomotive maintenance records file.

In addition defects, repairs and adjustments to locomotives and railmotors shall be recorded in the logbook located on the unit.

Vehicles shall have "PV" and Lift examination dates stencilled on the under frames of vehicles.

The Mechanical Manager shall maintain a schedule of when exams are due for all vehicles.

### **22.7.2 Mileage Recording**

For passenger trains the Officer-in Charge check sheet records the numbers of trips and locomotives and vehicles used. The Mechanical Manager shall calculate mileage's for each vehicle from these forms. The mileage's for vehicles shall be updated at least every 2 months. Reference shall also be made to the locomotive/railmotor log books.

Goods vehicle mileage's will not be recorded

## **23 Asset management policy**

### **23.1 Standards**

Standards as used by CMR for asset management are principally based on the former Government Railways standards and the adoption or adaptation of new or improved practices.

These have been captured or have been developed by CMR and are detailed in the relevant procedures.

### **23.2 Works and procedures**

All works performed on items of rolling stock and infrastructure that fall under the descriptions referred to in any CMR policies and procedures are to be in accordance with such policies and procedures, with the monitoring and auditing of such works to be in accordance with procedures as defined in Section 8.

### **23.3 Rolling stock and infrastructure life cycle**

As the aim of the CMR is to preserve and operate heritage rolling stock in a period atmosphere, the commonly accepted form of life cycle is not appropriate in that the aim is to maintain the existing in operational condition, rather than replacing and decommissioning the item.

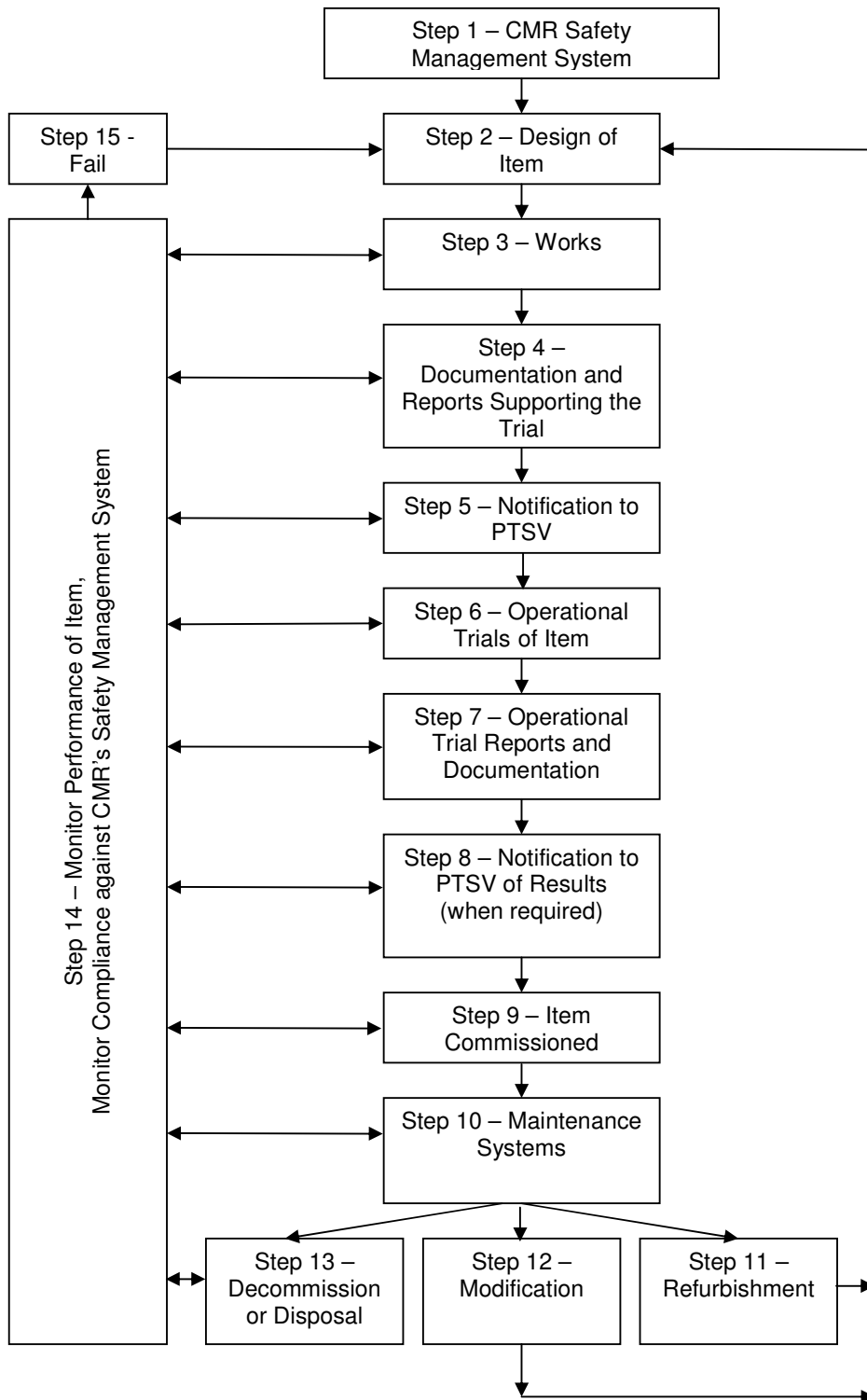
To meet the needs of CMR, the common life cycle format has been amended in that steps 12 and 13 return back to the design stage at the point where normally an item would be decommissioned (step 14).

This allows for the design of an item to be revisited to determine if any safety or other improvements can be made as part of the modification or refurbishment.

Decommissioning and disposal are still factors in the process, however it is usually a component which has been renewed rather than a whole item of rolling stock or infrastructure. The decommissioning and disposal of the component still need to meet the requirements of the SMS, and any environmental or other legislated disposal criteria.

The following diagram shows the life cycle process as adopted by CMR.

## CMR life cycle process



## 23.4 Rolling stock

Rolling stock operated by CMR is primarily ex Government Railway rolling stock owned by CMR. In some cases, rolling stock originating from other railways and rolling stock owned externally are also operated, either under a loan agreement or under an operating agreement.

Refer to Sections 21 and 22 for further information regarding the provision of rolling stock, its maintenance requirements, and the standards used to determine the vehicle's integrity and safety.

To ensure availability of sufficient and suitable rolling stock, five categories of rolling stock are provided for, with categories 1 to 4 having the proposed number of rolling stock needed to meet the requirements of that category. Each individual item of rolling stock is categorised into one of these five categories, which determines the level and standard of regular maintenance that the vehicle receives.

Operational fleet:		Number of motive power	Number of carriages
Category 1	Regular service fleet	3	12
Category 2	Reserve fleet	0	6
Category 3	Special purpose vehicles	1	2
Out of service fleet:			
Category 4	Display purpose only	3	25
Category 5	Storage only	All others	All others

The Mechanical Manager maintains a Rolling Stock Register (**CMR F 024**) which details the rolling stock's current category, its current condition, and its next proposed overhaul date. Formulation of which items of rolling stock are needed to operate the railway is carried out in conjunction with the Operations Manager.

In addition to regular scheduled maintenance, each operational item of rolling stock is targeted to be overhauled on the following frequency to ensure safe life cycle:

- painting & minor overhaul every 10 years
- major overhaul every 20 years

## 23.5 Track

The total system comprises 16 km of broad gauge 1600 mm single track (excluding sidings and yards) constructed to the standard Government Railway specifications. All pointwork on the line is manually operated.

Speed limits/restrictions on CMR are as follows:

- open line - 40 kph.
- curves and special work - 20 kph.
- yards – 10 kph
- location specific as indicated by a yellow sign – as denoted on sign.

The life expectancy of the track network, including the rails, checks, pointwork, and sleepers can and will vary, depending on usage.

Rails that are worn more than 70% of original head width or depth shall be considered for replacement or repair. Second-hand rails with more than 50% wear or suffering extensive foot or web corrosion shall not be used in new branch line work.

### **23.6 Signaling system**

The signalling system operates in conjunction with the operation of pointwork on the railway. The Civil Manager monitors and maintains the signalling system and arranges for repairs as required, as part of the monitoring and maintaining of the track.

Regular inspections will identify wear patterns and items which require attention.

- Signalling cable – 40 to 60 years
- Signalling rodding – 50 to 75 years
- Signal towers – 75 to 100 years
- Signal levels – 100 years

### **23.7 Other infrastructure**

Infrastructure that relates directly to the track, such as bridges, culverts, and platform faces, are monitored and maintained as part of the maintenance program managed by the Civil Manager.

Other infrastructure, such as station buildings, car and loco sheds, and picnic areas are monitored and maintained as part of a maintenance program managed by the Operations Manager.

Regular inspections will identify wear patterns, and items which require attention.

## 24 Interface management

The Board of Management is responsible for identifying and recording interfaces between CMR operations, other organisations, and individuals. A Proforma Safety Interface Agreement is used as the basis for all interface coordination plans. An Interface Register is kept which is reviewed by the Board of Management each year to determine whether any changes have arisen with interfaces.

The primary interface is between CMR and motor vehicles at road crossings along the railway. Some of the crossings are on roads maintained by VicRoads, with others maintained by Castlemaine Shire Council. There are also a few private crossings which lead to private farm properties.

CMR has arrangements with VicRoads and the Council that allow the Civil Manager to raise with the VicRoads Traffic Engineer and Council's Traffic Engineer any issues regarding the maintenance of the level crossings, including the condition of warning signage on approach roads. CMR negotiates directly with private property owners regarding the maintenance and other requirements of private crossings. Operations are subject to a speed limit of 40 km/hr and trains sound a warning as they approach the crossing.

Other interfaces include those with services and utilities which intersect the railway either under the track or above it, or utilise the rail reserve. Individual access arrangements are maintained with the service and utility providers.

CMR publicises to the local community its operational activities, including normal service times and special event activities. This is done to ensure local residents, landholders and motorists are aware of CMR operations. Advertisements are placed in the local community paper, leaflets provided to local shops and announcements made on the district community radio station.

CMR has a major interface agreement with VicTrack for the section from Maldon Junction to Castlemaine station. This arrangement is covered by a special interface agreement which is maintained by the Civil Manager.

## 25 Emergency management

### 25.1 Emergency planning

CMR's Emergency Plan addresses the following areas:

- the consequences of a major incident occurring
- methods to prevent an emergency from escalating
- initial response procedures for dealing with an emergency and the provision of rescue services
- recovery procedures for the restoration of rail operations and for the assistance of persons affected by the occurrence of an emergency
- the allocation of roles and responsibilities to persons employed by the rail operator relating to emergency management, including arrangements for communication and co-operation between organisations in the event of an emergency
- processes for the training of personnel who will be responsible for implementing the emergency plan and arrangements to maintain the competence of those persons in emergency management
- call-out procedures
- the allocation of personnel for the on-site management of the emergency
- procedures for liaison with relevant emergency services, including information about the circumstances in which the emergency services should be immediately contacted
- procedures to ensure that emergency services are provided with all the information that is reasonably required to enable them to respond effectively to an emergency
- the intervals within which the plan must be reviewed, being intervals not longer than three years.

An Emergency Planning Committee will be the Safety Committee, and will be made up of the Board of Management and key personnel from the railway. The Safety Committee are responsible for the establishment of an Emergency Plan and its review and revision as necessary. The Board of Management confirms and adopts the Emergency Plan on the recommendation of the Emergency Planning Committee.

The Emergency Planning Committee will work in conjunction with the emergency services, and any government agencies with emergency management functions that relate to the railway or its surrounds, to develop the CMR Emergency Plan ([CMR P 004](#)) that takes into consideration all of the components and requirements suggested by each organisation.

To improve CMR's response to any emergency incident it is the Board of Managements intention to have as many Rail Safety Workers trained in First Aid to level 2.S

### 25.2 Copies of the emergency plan

The master copy of the CMR Emergency Plan ([CMR P 004](#)) is kept in the Maldon Station Master's office and on the VGR web site.

Controlled copies will be located in the SMS and are held by Branch Managers and Supervisors and by each of the emergency services and government agencies named in the Emergency Plan.

Uncontrolled copies of the CMR Emergency Plan are located at various locations around the railway, including in some rolling stock, the locations being detailed in the Document Control Record on the first page of the CMR Emergency Plan.

### 25.3 Review and revision of emergency plan

The Emergency Planning Committee will ensure the currency of the emergency plan annually as part of the Management Review process, and will review the emergency plan in conjunction with the emergency services and government agencies:

- at intervals as specified in the developed emergency plan (being intervals of not greater than 3 years), or

- following the occurrence of a major incident on the railway, or
- following the occurrence of a major incident on another railway, which highlights a gap in the CMR Emergency Plan.

#### **25.4 Details of the emergency plan**

All other details and requirements are contained in the CMR Emergency Plan ([CMR P 004](#)). Emergency duties are located in the Position Descriptions in section 3

## 26 Investigations

CMR will facilitate the involvement of authorised authorities in the investigation of any occurrence involving CMR rail operations.

The Board of Management investigates occurrences to determine what happened and to discover all contributing factors.

The level of investigation is determined by the severity of the incident, as detailed in Schedule 4 of the Rail Safety (General) Regulations 2006:

Item accident or incident category	Severity level	Required information
1	An accident or incident that results in major consequences, for example, extensive property damage or fatalities or serious personal injuries.	Detailed report of a systemic nature. The report must include: <ul style="list-style-type: none"> <li>• a description of the occurrence</li> <li>• the consequences that resulted</li> <li>• the contributing factors established by the investigation</li> <li>• the safety actions arising from it.</li> </ul>
2	An accident or incident involving appreciable property damage but with only minor injuries. Includes an accident or incident that had the potential to be more serious, possibly involving death.	A brief report including analysis of the incident and, where appropriate, including those matters listed for a severity level 1 accident or incident.
3	An incident of minor consequence with either no damage or only superficial damage or injury where it is unlikely that a more serious incident may have occurred.	An initial occurrence report prepared and retained for trend analysis and, where possible, a brief report including analysis of the incident.

Escalation of the reporting criteria may occur:

- at the request of PTSV or other government agency or regulator
- at the request of the various Branch Managers
- at the request of the Board of Management .

When an occurrence happens on the CMR, staff report the occurrence on an Incident Report Form ([CMR F 009](#)) to the appropriate Branch Manager.

### 26.1 Information to be sourced by investigation panel

Staff are required to provide the following details about the occurrence:

- where the occurrence happened
- when the occurrence happened (date and time)
- a list of witnesses, with their addresses and telephone numbers

- details of damage
- action taken in response
- train crew names
- any other relevant and appropriate information.

These details shall be submitted on an Incident Report Form (**CMR F 009**).

Evidence shall be collected whenever possible, be it physical items, documentation, electronic, or photographic records.

## **26.2 Investigation team**

The investigation team shall consist of:

- the RSW(s) involved
- the Branch Manager and Responsible Officer
- representatives from the Board of Management
- representatives from the Emergency Planning Committee

and may also involve:

- PTVS staff or other government agency or regulatory staff
- witnesses to the occurrence
- representatives from other affected stakeholders
- any other person as requested by one of the above.

In circumstances where the scope of the accident or incident exceeds the competencies or qualifications of the Investigation Team, assistance shall be sought from suitably qualified persons.

## **26.3 Investigation results**

The recording of all accidents and incidents that require investigation shall be the responsibility of the Responsible Officer.

All investigations shall be tabled in a report which details the circumstances of the occurrence, the cause if determinable, and any recommendations for actions or improvements. A Proforma Investigation Report (**CMR F 031**) is used as the basis for compiling and presenting the report.

Any recommendations made in an investigation report are considered promptly and implemented as necessary.

As part of the SMS Review process (see Section 10), all Investigation Results shall be tabled and compared with previous accidents and incidents to determine any trends or patterns.

Action required as a result of an investigation, such as changes to procedure, shall be the responsibility of the Branch Manager to ensure it is followed through.