



Heritage Railway

Safety Management System

General engineering and operational systems safety requirements

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SteamRanger Safety Management System

Approved by: **SteamRanger Board of Management**

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POLICY

SteamRanger will maintain and / or have access to engineering standards, procedures and operational systems, to cover the following areas:

- Rail infrastructure.
- Rolling stock.
- Operational systems.

GENERAL

SteamRanger has responsibility over the Mt Barker Junction to Victor Harbour railway for maintaining engineering and operational safety as a Rail Infrastructure Manager (RIM) and as Rolling Stock Operator (RSO) of rail services of the railway.

The SteamRanger Heritage railway starts at Mt. Barker Junction (50 Km point) and terminates at Victor Harbour Station (132 Km point). The line is occupied by way of a licence agreement between the Minister for Sustainability, Environment and Conservation and the ARHS.

ADOPTION OF EXISTING PRACTICES**Rail infrastructure**

The track and infrastructure were constructed by the South Australian 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 SteamRanger Perway Code of Practice and in accordance with procedures described in this SMS.

Rollingstock

Rolling stock used in SteamRanger operations, such as locomotives, carriages, and wagons were built to operation standards set by the former South Australian Railway system. They were used by the South Australian Railways for many years after being commissioned and have since been acquired by SteamRanger to operate tourist rail services. SteamRanger follows the operational mechanical standards previously specified by the South Australian Railway system together with standards developed by RISSB to meet current safety standards.

DEFINITIONS

Victor Harbour	The station at Victor Harbor will retain the name of Victor Harbour as part of the railways historical character. Any reference to the locality of the town or district shall be spelt Victor Harbor.
RIM	Rail Infrastructure Manager
RSO	Rolling Stock Operator
RISSB	Rail Industry Safety and Standards Board
RSNL	Rail Safety National Law 2020 act and Regulations
ONRSR	Office of the Rail Safety Regulator
ARHS	Australian Railway Historical Society (SA Div) Inc.
SMS	Safety Management System
DEW	Department for Environment and Water

REFERENCE

RSNL Regulations	Clause 19 in Schedule 1 RSNL Regulations 2012
HRSA-RSR-2020	Heritage Rail South Australia Rail Safety Rules 2020
ARHS-SMS-21	Asset Management
ARHS-SMS-20	Process Control
ARHS-SMS-12	Management of Change
ARHS-SMS-07	Document Control Arrangements and Information Management
ARHS-SMS-24	Rail Safety Worker Competence.
Staff Section	SteamRanger website -
DEW and ARHS	License agreement
RISSB	Various Standards

DESIGN AND DEVELOPMENT

Engineering and operation systems safety requirements shall cover all stages in the lifecycle of rail infrastructure and rollingstock operations including its specification, preliminary design, detailed design, procurement, construction, commissioning, operation, maintenance and decommissioning phases.

Because of the heritage nature of its operations SteamRanger does not design and develop new equipment. However, repair and maintenance of SteamRanger rolling stock and equipment can sometimes require the modification of new or second-hand materials and equipment when exact replacements are not available. When this is required a Management of change process shall be carried out to identify safety implications as set out in ARHS-SMS-12 Management of Change. Any available manufacturer's manuals or directions relevant to the materials and equipment are considered as part of the management of change process.

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 electronically and with a hard copy in log books, 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.

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.

TRACK

SHR has responsibility for managing the track and infrastructure on the Mt Barker junction to Victor Harbour Railway. The track and infrastructure were constructed by South Australian Railways to the standards of that era, and care and maintenance of the track follows these previously defined standards.

Procedures and Documentation

Track maintenance procedures, safety notices and appropriate forms are documented and downloadable from the SteamRanger web site at

<http://www.steamrangerheritagerailway.org/track-infrastructure/>

- a) Perway code of practice Document TMT01
- b) Track work procedures are set out in the SHRI-004-WPT series of documents
- c) Track maintenance forms are covered by the SHRI-004-WFTC series of documents
- d) Track maintenance work procedure quality assurance is covered by the SHRI-004-WPQA series of documents
- e) Track inspection schedule and maintenance procedure is covered by the ISP-TC-WPT series of documents
- f) Plant check lists, Tamper and Ballast Regulator Inspection & Service Sheets including Rail Wheel Profile Inspection Records are covered by the SHRI-004-WFTQA series of documents.

SIGNALING SYSTEMS

Signaling infrastructure on the SHR is maintained according to relevant standards based on previous South Australian Railway system procedures. Design and construction of new signaling or active level crossing equipment will be carried out and certified by a suitably qualified person.

Procedures and Documentation

Signal maintenance procedures, signal safety notices and appropriate forms are documented and downloadable from the SteamRanger web site at

<http://www.steamrangerheritagerailway.org/signal-and-telegraph/> .

- a) Signal maintenance and equipment Procedure is set out in the SHRI-004-WPST series of documentation.
- b) Signal Maintenance forms are covered by the SHRI-004-WFST- series documents
- c) Work Health and Safety procedures and forms are set out in the SHRI-005-WHSF- series of documents.

MECHANICAL SERVICES

Rolling stock

Rolling stock used in SHR operations, such as locomotives, carriages, and wagons were built and operated to standards set by the former South Australian Railway system. They were used by the South Australian Railways for many years after being commissioned and have since been acquired by SHR to operate Heritage rail services.

SHR follows the operational mechanical and electrical standards previously specified by the South Australian Railway system together with improvements to meet current safety standards.

All rolling stock when first recommissioned into service with SHR is certified as being fit for intended purpose in accordance with the provisions of;

- a) rolling stock outline diagrams
- b) appropriate and sufficient drawings and plans to adequately maintain rolling stock operated by SHR
- c) relevant parts of the applicable Railways of Australia Manual of Standards and Recommended Practice, and/or ARA Codes of Practice, South Australian Railways (SAR) Practice Cards
- d) the South Australian Railways Car and Wagon Examiner's Handbook, and
- e) additional drawings and equipment manuals for additional safety equipment fitted to rolling stock.
- f) Various Australian Standards as required published by RISSB
- g) RISSB Boiler Code covering Pressure Vessels.
- h) RISSB Wheel Defect Manual.
- i) Westinghouse Air Brake information
- j) ARHS-SMS-12 Management of Change and this SMS.

Rolling stock is frequently inspected in accordance with SMS procedures to ensure its safety while in service. Details of all SHR rolling stock, whether owned, leased or on loan, are recorded in the Rolling Stock Register. These documents are kept in the SteamRanger office at Mt Barker and other locations as required.

OPERATIONAL SYSTEMS

Train Control

Rail operations on the SHR are conducted according to the SteamRanger Heritage Railway Document – HRSA-RSR-2020 together with additional local rules and procedures which can be found in the SHR Working timetable Document – SHR-WTT-21 and Train Notices issued by email as required. These documents are available on the SteamRanger web site at <http://www.steamrangerheritagerailway.org>

SteamRanger shall establish and maintain a train control facility using the Train Order System of safeworking as detailed in SteamRanger Heritage Railway Document – HRSA-RSR-2020. Communications to and from the train controller shall at present be by telephone system using either fixed or mobile telephones. Train controllers shall be trained and assessed in the duties before undertaking the tasks.

Where single train operations are provided a train control graph is not necessarily used but when multiple trains are in operation a train control graph is to be used. A log book detailing daily operations shall be used to record details of train orders and authorities issued and include details of hand over from one train controller to another.

TRAINING

The Transport and Logistics Skills Council Training Package is the training package applicable for Rail Safety Work, and SteamRanger is committed to aligning, so far as reasonably practicable, its training curriculum, and assessments against the Qualifications and Units of Competency contained within the most recent version of that Training Package.

Tourist and Heritage sector training courseware developed by peer organisations, and the Association of Tourist and Heritage Rail, Australia (ATHRA) are also utilised as appropriate.

The performance of specific SteamRanger practices, policies and procedures shall be assessed in addition to the requirements of the TLISC competencies. Units of Competency required by SteamRanger personnel are set out in the matrices found in document ARHS-SMS-24 Rail Safety Worker Competence.

SteamRanger-specific requirement shall not prevail above those stipulated within any qualification or unit of competency, but shall be assessed in addition.

INFRASTRUCTURE

SHR has responsibility for managing the infrastructure on the Mt Barker Junction to Victor Harbour Railway.

Procedures and Documentation

Infrastructure documentation is kept on line (“in the cloud”) in SteamRanger’s One Drive “Infrastructure” folder.

Within this folder the following sub folders are located for the following:

- A) Administration (“Admin_XXX”) for record keeping of relevant standards and codes of practice, documentation and communications with suppliers, contactors, ONRSR and government departments.
- B) Bridges (“Bridge_XXX”) for record keeping of documentation of each significant bridge and inspection plan / register.
- C) Depots (“Depot_XXX”) for record keeping of documentation for our 2 depots.
- D) Land (“Land_XXX”) for record keeping of documentation for the rail corridor under our control.
- E) Inspection Pits (“Pits_XXX”) for record keeping of documentation for our railway inspection pits outside of depots.
- F) Stations (“Station_XXX”) for record keeping of documentation for our stations, including platforms.
- G) Turntable (“Depot_XXX”) for record keeping of documentation for our railway turntables.
- H) Steam locomotive watering facilities (“Watering_XXX”) for record keeping of documentation for our water supply for steam locos.

Note: “XXX” is the continuation of the subfolder name which is either descriptive, or the location by km mark of the particular piece of infrastructure (to the nearest whole km) followed by further description.

Bridges are inspected in accordance with SHRI-004-WPT-13.

DOCUMENTATION

None applicable