



SteamRanger Heritage Railway

Safety Management System

Rail Safety Worker Competence

Document ARHS-SMS-24

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1.0 PURPOSE OF THIS DOCUMENT

This document outlines the manner in which the SteamRanger Heritage Railway (SHR) will comply with the Rail Safety National Law (RSNL), Section 117-Assessment of Competence.

2.0 INTRODUCTION

SHR has an obligation under the RSNL to ensure that each rail safety worker who is to carry out rail safety work in relation to railway operations has the competence to carry out that work.

In addition, SHR has an obligation under the RSNL and Rail Safety National Law National Regulations (RSNLNR) to maintain records of the competence of rail safety workers who carry out rail safety work on, or in relation to, SHR's rail infrastructure or rolling stock.

The definitions of terms and acronyms used throughout this document are contained in Appendix A, at the rear of this document.

3.0 SCOPE AND APPLICATION

This procedure applies to all SHR workers who undertake rail safety work on behalf of SHR, for all activities for which SHR is accredited to conduct.

For the purpose of this document, the term "worker" applies to rail safety workers, be they volunteer, employed or contracted workers.

3.1 Rail Safety Work

The meaning of Rail Safety Work is defined in Section 8 of the RSNL as:

- (a) *driving or dispatching rolling stock or any other activity which is capable of controlling or affecting the movement of rolling stock;*
- (b) *signaling (and signaling operations), receiving or relaying communications or any other activity which is capable of controlling or affecting the movement of rolling stock*
- (c) *coupling or uncoupling rolling stock;*
- (d) *maintaining, repairing, modifying, monitoring, inspecting or testing—*
 - (i) *rolling stock, including checking that the rolling stock is working properly before being used; or*
 - (ii) *rail infrastructure, including that the rail infrastructure is working properly before being used;*
- (e) *installation of components in relation to rolling stock;*
- (f) *work on or about rail infrastructure or associated works or equipment that places, or may place, the person performing the work at risk of exposure to moving rolling stock;*
- (g) *installation or maintenance of—*
 - (i) *a telecommunications system relating to rail infrastructure or used in connection with rail infrastructure; or*
 - (ii) *the means of supplying electricity directly to rail infrastructure, any rolling stock using rail infrastructure or a telecommunications system;*
- (h) *work involving certification as to the safety of rail infrastructure or rolling stock or any part or component of rail infrastructure or rolling stock;*

- (i) *work involving the decommissioning of rail infrastructure or rolling stock or any part or component of rail infrastructure or rolling stock;*
- (j) *work involving the development, management or monitoring of safe working systems for railways;*
- (k) *work involving the management or monitoring of passenger safety on, in or at any railway.*

Workers who carry out the tasks outlined above are defined as Rail Safety Workers.

3.2 Competence

Rail safety workers who carry out rail safety work must be competent to carry out that work.

Competence is defined as:

“The ability to repeatedly and consistently perform a task to the requirements of the standard described in a training package relating to specific industry functions.”

A rail safety workers competence to perform a task is demonstrated during an on-job competency assessment.

An off-job knowledge assessment may precede the on-job assessment in order to determine that a rail safety worker has a sufficient level of understanding of the subject matter.

4.0 TRAINING AND ASSESSMENT PROCESS

Training and assessment of competence for rail safety workers on SHR is competency-based.

Competency-based training makes certain assumptions about the training and assessment process:

- (a) training and assessment for all tasks must be performed against a standard, published, documented performance criteria for that task;
- (b) no minimum or maximum period of training applies – the time taken for a learner to develop a skill is determined by the learner;
- (c) an assessment of a worker’s subject knowledge or competence to perform a task may be conducted only when the learner is prepared and confident to undertake it;
- (d) the learner must be provided with an adequate opportunity to consolidate theoretical knowledge learned about a subject, through workplace application;
- (e) adequate mentoring must be provided during the period of on-job consolidation;
- (f) an assessment of knowledge or competence shall be confined to the published, documented, standard performance criteria only, and nothing else;
- (g) assessors must not allow personal preferences, likes and dislikes, biases or personality issues to detract from their mandate to assess against the published, documented, standard performance criteria;
- (h) workers may appeal an assessment outcome, and request re-assessment by (wherever possible) a different assessor.

4.1 Attainment of Knowledge

The attainment of the underpinning knowledge required to perform a task will be achieved through study carried out by the learner, followed by a formal assessment of a learner's understanding of such knowledge.

SteamRanger shall provide specific information and where appropriate, formal off-job instruction to workers, in specialised topics such as equipment operation, technical knowledge and railway safeworking.

Study materials shall be provided, based on specific SteamRanger requirements, standard industry practice, original equipment manufacturers instructions, or a combination of these factors.

4.2 Task Performance Expectations

As outlined above, the performance all tasks must be assessed against standard, published, documented performance criteria.

Where a recognised industry-recognised Unit of Competency exists, SteamRanger will apply that Unit of Competency for the training and assessment of workers in the performance of the applicable tasks.

For example, a worker required to shunt rolling stock shall be trained and assessed against applicable Units of Competency, including, but not limited to:

- *TLIC3017 – Shunt rolling stock*
- *TLIC4074 – Shunt, couple and uncouple rail vehicles*
- *TLIF3058 – Apply safeworking rules and regulations to rail functions*
- *TLIF2080 – Safely access the rail corridor*
- *TLIB2122 - Apply awareness of fundamentals of rail operations in yards or sidings*
- *TLIW3026 - Operate stand alone signalling & point control equipment*
- *TLIE2007 - Use communications systems*
- *TLIF2010 - Apply Fatigue Management Strategies*
- *TLIB3019 - Test train braking system*

The selected units of competency for each qualification is detailed in section 5.1.

5.0 ALIGNMENT WITH INDUSTRY QUALIFICATIONS

SHR shall align training and assessment of workers, so far as is reasonably practicable, against applicable industry qualifications, as described in the Transport and Logistics Industry Skills Council (TLISC) Training Package.

The performance of specific SteamRanger practices, policies and procedures shall be assessed in addition to the requirements of the TLISC competencies.

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

The TLI Training Package contains many performance criteria that refers to the conduct of tasks “in accordance with organisational procedures or workplace requirements”.

The specific contextualised requirements of SteamRanger procedures satisfies the “organisational procedures” element where outlined in the TLI Training Package.

The Certificate-Level industry qualifications against which SHR training shall be aligned includes the following:

- TLI 21315 – Certificate II in Rail Infrastructure
- TLI 22115 – Certificate II in Rail Track Vehicle Driving
- TLI 22315 – Certificate II in Rail Customer Service
- TLI 22015 – Certificate II in Shunting
- TLI 33115 – Certificate III in Rail Customer Service
- TLI 33015 – Certificate III in Heritage Locomotive Assistant or Steam Locomotive Fireman
- TLI 42615 – Certificate IV in Train Driving
- TLI 42215 – Certificate IV in Rail Network Control

Additional qualifications are used from time to time, including qualifications and units of competencies from other training packages, such as (for example) the Agriculture, Horticulture and Conservation and Land Management Training Package, for Unit of Competency AHCARB205A - Operate and maintain chainsaws.

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.

5.1 Unit of Competency Matrix

C = Core Unit of Competency

EA = Group A Elective Unit of Competency

EB = Group B Elective Unit of Competency

EC = Group C Elective Unit of Competency

ED - Group D Elective Unit of Competency

EE - Group D Elective Unit of Competency

EG = General Elective Unit of Competency

	TLI 21315 - Cert II in Rail Infrastructure	TLI 22115 - Cert II in Rail Track Vehicle Driving	TLI 22315 - Cert II in Rail Customer Service	TLI 22015 - Cert II in Shunting	TLI 33115 - Cert III in Rail Customer Service	TLI 33015 - Cert III in Heritage Locomotive Assistant or Steam Locomotive Fireman	TLI 42615 - Cert IV in Train Driving	TLI 42215 - Cert IV in Rail Network Control
TLIB1024 - Clean transportation units and facilities for passenger use			EG					
TLIB1028 - Maintain and Use Hand Tools	C							
TLIB2001 - Check and assess operational capabilities of equipment		EG				EG		
TLIB2085 - Apply track fundamentals	EA							
TLIB2091 - Measure and record track geometry	EG							
TLIB2092 - Operate minor mechanical equipment	EA							
TLIB2121 - Maintain rail joints	EG							
TLIB2122 - Apply awareness of fundamentals of rail operations in yards or sidings				C				
TLIB2130 - Diagnose and rectify minor faults on on-track vehicles		EG						
TLIB2131 - Prepare train				EG				
TLIB2133 - Test medium heavy track vehicle braking system		EG						
TLIB3019 - Test train braking system				EG				
TLIB3021 - Conduct train roll-by inspection				EG		EG		
TLIB3075 - Inspect and prepare a motive power unit							C	
TLIB3118 - Apply awareness of railway fundamentals			C		C		C	EG
TLIB3123 - Apply awareness of motive power unit fundamentals						EA	EE	
TLIB3124 - Apply awareness of steam locomotive fundamentals						EB	ED	

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EE = Group E Elective Unit of Competency								
EG = General Elective Unit of Competency								
TLIB3126 - Assist in the testing of heritage train braking systems						C		
TLIB4076 - Inspect and prepare a heritage motive power unit							EE	
TLIB4077 - Inspect and prepare a heritage steam locomotive								
TLIB4079 - Conduct a general train examination							EG	
TLIB4080 - Identify, diagnose and rectify minor faults on motive power units and rolling stock							C	
TLIC0083 - Access rail track to travel track vehicle under a proceed authority		EG						
TLIC2054 - Access rail track to run track vehicle within defined worksite		EG						
TLIC2075 - Drive and monitor medium or heavy self-propelled on-track equipment		C						
TLIC2076 - Establish and operate braking system on medium heavy self-propelled on-track equipment		C						
TLIC2078 - Identify and respond to signals and trackside signs		C					C	
TLIC2080 - Start up, shut down and stable medium/heavy self-propelled on-track equipment		C						
TLIC3017 - Shunt rolling stock				C		EG		
TLIC3028 - Operate and monitor a heritage motive power unit							EE	
TLIC3029 - Stable a heritage motive power unit							EE	
TLIC3030 - Operate and monitor a heritage steam locomotive							ED	
TLIC3072 - Conduct the duties of an assistant on a heritage locomotive						EA		
TLIC3073 - Fire a Steam Locomotive						EB		
TLIC3031 - Stable a heritage steam locomotive							ED	
TLIC4019 - Drive train to operational requirements -							EG	
TLIC4023 - Operate train with due consideration of route conditions							C	
TLIC4026 - Operate and monitor a motive power unit							C	
TLIC4074 - Shunt, couple and uncouple rail vehicles							EG	
TLID1001 - Shift Materials Safely Using Manual Handling Methods	C		EG			C		
TLIE1003 - Participate in basic workplace communication	C	C	C	C				
TLIE2007 - Use communications systems			C	C			C	
TLIE2008 - Process workplace documentation			C	EG		C	EG	
TLIE3022 - Complete workplace documents					C			C
TLIE3023 - Use electronic communications systems								C
TLIF0004 - Work effectively in a train-driving environment							C	
TLIF0008 - Apply safety critical communications in the rail environment				EG				
TLIF1001 - Follow Work Health and Safety Procedures	C	C	C				C	
TLIF2006 - Apply accident-emergency procedures		EG	EG	C		C		
TLIF2010 - Apply Fatigue Management Strategies	C	C		C	EG	C	C	C
TLIF2080 - Safely Access the Rail Corridor	C	C	EG	C	EG	EG		
TLIF2106 - Respond to emergencies and abnormal situations when driving medium heavy on-track vehicles		C						
TLIF3003 - Implement and monitor work health and safety procedures					C			
TLIF3058 - Apply safeworking rules and regulations to rail functions					EG	C	C	
TLIF3085 - Apply local incident response procedures				EG	C			
TLIF3087 - Follow work health and safety, and environmental procedures in the rail industry				C		C		C
TLIF4110 - Respond to abnormal situations and emergencies when driving a train							C	
TLIF4086 - Control and coordinate incident responses								C

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TLIF4090 - Implement safeworking rules and regulations for network control activities								C
TLIG1001 - Work effectively with others	EG		C				EG	C
TLIG3003 - Apply positive behaviours in the workplace					C			
TLII2020 - Provide assistance to customers with specific needs			C					
TLII3022 - Provide customer service in rail operations			C					
TLII4022 - Identify and meet customer requirements								C
TLIJ3002 - Apply quality systems					C			
TLIL4074 - Control and coordinate rail traffic movement								C
TLIL4075 - Implement and amend daily train plan								C
TLIL4034 - Arrange alternative passenger transport								EG
TLIL4037 - Apply and amend rosters								EG
TLIL4077 - Develop out-of-course rail traffic plans and schedules								EG
TLIO2011 - Provide revenue protection measures					EG			
TLIS2030 - Carry out track ballasting	EA							
TLIS2031 - Install railway sleepers	EA							
TLIS2034 - Install and repair rail fastening systems	EA							
TLIS2044 - Carry out rail installation	EA							
TLIU2008 - Apply environmental procedures to rail infrastructure	C	C						
TLIW2001 - Operate Under Track Protection Rules	EG	C						
TLIW3026 - Operate stand alone signalling & point control equipment				C		C		
TLIW2041 - Clip points and apply rail safety equipment				EG				
BSBCUS201 - Deliver a service to customers					C			
SITXCOM401 - Manage conflict					C			
CHCCS020 - Respond effectively to behaviours of concern			EG					
BSBWOR301 - Organise personal work priorities and development								EG
BSBWRT301 - Write simple documents								EG

5.3 Track Maintenance & Construction

SHRI-004-WPQA-06 Competency Matrix

POSITION TITLE	TASKS AND COMPONENTS	COMPETENCIES	NOTES/CLARIFICATIONS
Track Labourer	Use non motor operated hand tools and equipment to assist in the track and civil maintenance/upgrading process	SHR Track Safety Awareness TLIE1003A Participate in basic workplace communication TLIF1001A Follow Occupational health and safety procedures TLIB1028A Maintain and use hand tools	TLIE1003A & TLIF1001A embedded via Track Safety Awareness and Induction. Note also a Track Labourer may not have all competencies provided they are supervised by a Track Maintainer or Supervisor.
Track Maintainer	Base Competencies	Competencies as for Track Labourer plus the following: SHR Railway Safeworking Rail Safety Worker Medical Category 1 HLTCPR211A Perform CPR HLTFA211A Provide basic emergency life support HLTFA311A Apply First Aid	
	Senior First Aid	HLTCPR211A Perform CPR HLTFA211A Provide basic emergency life support HLTFA311A Apply First Aid	
	<u>Worksite Management Practice:</u> (embedded in learning on the job from experienced Track Maintainer or Inspector in heritage rail environment. Standard work procedures apply to these tasks)	TLIE1003A Participate in basic workplace communication TLIF1001A Follow occupational health and safety procedures TLIB1001A Check and assess operational capabilities of equipment TLIU2008A Apply environment procedures to rail infrastructure TLIB2092A Operate minor mechanical equipment TLIE2008A Process workplace documentation	TLIE1003A & TLIF1001A embedded and completed at Track Labourer level.
	<u>Track Maintenance Practice:</u> Consists of all routine tasks in accordance with SHR Work Procedure TMT-01 Track Maintainer's Handbook and Track and Civil COPs.	TLIB2085A Apply track fundamentals TWCU04.1 Maintain Track TWCU04.1 Maintain track incorporates the following: TLIS2034A Install & repair rail fastening systems TLIB2121A Maintain rail joints TLIS2044A Carry out rail installation TLIS2031A Install railway sleepers TLIB3094B Check and repair track geometry TLIC2041A Operate self-propelled equipment on track Hyrail / Road-Rail vehicles (TWCU03.1.1) Section cars (TWCU03.1.2) Motor Inspection Car (TWCU03.1.3)	Will need to review as new type materials come into use TWCU04.3 Maintain track geometry Civil drivers licence for the appropriate vehicle also required
	<u>Track Surfacing Practice:</u> Operate heavy on track plant for spot tasks or project planned work	TWCU03.2 Operate heavy on track plant Gemco Tractor Tamper Electromatic Spot Tamper	
	Tamper Operator	TLIW2032A Principles of tamping machine operations Internal SHR Operators assessment and Competency Log to validate competent operations for tamper Electromatic Mark II E-TD production tamper	The following competencies are required to be used in conjunction: TLIB2085A; TLIB2091A Doc SHR-T&A-LOG-001 to be used where practicable
	Ballast Regulator Operator	TWCU03.2.2 Operate heavy on track plant - Ballast Regulator	
Length Runner (ATHRA Track Patrolman Unit Set)	Weekly track patrol inspections for a given section of railway, conducted in accordance with SHR Work Procedures.	All competencies for Track Labourer and Track Maintainer plus the following TLIB3100A Visually inspect track infrastructure TLIC3045A Operate road/rail vehicle (TWCU03.1.1) TLIB3099A Examine track infrastructure Embedded units: TLIF2062A Apply awareness of safeworking rules and regulations TLIW2001A Operate under track protection rules	Competency only required if this form of vehicle required for task Covered by SHR Safeworking Competency Covered by SHR Safeworking Competency

Track Inspector & Track Work Supervisor (ATHRA Track Inspector & Work Supervisor Unit Set)	Performs certification of track work, inspections for work planning and detailed track infrastructure analysis	<i>All competencies for Track Labourer, Track Maintainer and Length Runner plus the following:</i>	
		TLIB3099A Examine track infrastructure	TWCU05.1 Existing SHR Competency
		TLIB2091 Measure and record Track Geometry (SHR unit TWCU05.2)	
		TLIS3041A Construct timber-composite points and crossings	Need to review the competency paperwork for this and add to ATHRA unit plan
		TLIB4042A Conduct inspection of safeworking procedures and infrastructure	
		TLIS3026A Implement track maintenance and construction	
		TLIG4006A Facilitate work teams	
		TLIP4001A Develop plans to meet customer and organisation needs	
		<i>Embedded units:</i>	
		TUE2001A Present routine workplace information	
		TUE2007A Use communication systems	Also covered by SHR Safeworking Competency
		TUE4006A Collect, analyse and present workplace data and information	
		TUF4014A Develop and maintain safe workplace	Job Start/Finish process form
		TUL4005A Apply conflict/grievance resolution strategies	
		TUU4001A Implement and monitor environmental protection policies and procedures	
		TUB3095A Check and repair points and crossings	

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5.4 Qualification Flow Chart

