

# Steam Locomotive Train Driver Performance Checklist

(Generic Version)

**Version 1** 

### IMPORTANT NOTICE

This booklet is one of a series of generic training and assessment templates developed by the Association of Tourist & Heritage Rail Australia Inc (ATHRA) as guides for heritage railway operators seeking to develop or upgrade their local training and assessment resources.

This booklet and others in the series are not intended to be training resources in their own right but rather to be suitably customised, embellished and adapted by railway operators to match the specific context of their own railway, e.g. types of locomotives, rollingstock and associated equipment, the track layout and infrastructure, the local standard procedures and rules, the safety management and safeworking systems, the railway organisational structure, and the roles and functions of personnel in the railway, etc.

Railway operators seeking to use this booklet and others in the series should initially refer to the *ATHRA Customisation Guidelines Booklet* which provides important information on how the generic templates should be used.

### **Disclaimer**

The information contained herein is made available by the Association of Tourist & Heritage Rail Australia Inc (ATHRA) as part of a set of **generic training and assessment templates** for use by individual heritage railway operators.

It is intended that heritage railway operators will be able to create their own local training resources by suitably modifying, embellishing and customising the generic templates to meet their own requirements.

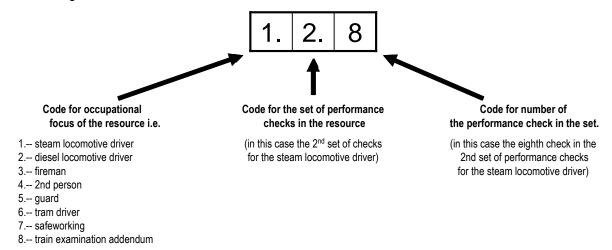
ATHRA does not assume any legal liability or responsibility for the accuracy, completeness or usefulness of any information provided in these generic resources.

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### **NOTES**

### **CODING SCHEME FOR THE ATHRA RESOURCES**

The coding scheme for the ATHRA Resources is as follows:



# CUSTOMISATION OF QUESTIONS AND ANSWERS IN THE 'PERFORMANCE CHECKLIST'

As explained in the ATHRA Customisation Guidelines, this *Performance Checklist* is a generic document designed to be customized and adapted, if necessary, by local heritage railways to match their own railway configuration, equipment, procedures, safety management systems, etc. Performance checks in the booklet may be modified by updating the content of the existing templates to incorporate appropriate information about the railway's own operating system, equipment, road, procedures, safety management system, etc. This may involve appropriate alteration to existing performance checks or the insertion of additional suitable performance checks.

To aid in the addition of performance checks, if needed, a blank row has been provided at the end of each set of checks in the generic checklist. The following is a step-by-step process to incorporate any additional performance checks:

- 1. Using the mouse, select the blank row
- 2. In the 'TABLE' drop down menu at the top of the document select 'Insert'
- 3. Click on 'Insert rows below'
- 4. Repeat as many times as necessary until you have sufficient rows for the additional performance checks (including the original blank row in the generic document)
- 5. Insert the text for each of the additional performance checks
- 6. Insert the codes of the additional performance checks as per the coding scheme for the ATHRA training and assessment resources

1.1	Role and responsibilities of a train driver on	
	a steam locomotive	
	(Under supervision, the learner is to carry out the following tasks)	
1.1.1	Obtained, read and correctly interpreted a copy of the duties of a train driver on a steam locomotive for the rail operator concerned	
1.1.2	Obtained, read and correctly interpreted copies of the rail operator 's documents describing the statutory responsibilities of a train driver on a steam locomotive, including rail safety and safeworking requirements and regulations related to the operation of boilers	
1.1.3	Obtained, read and correctly interpreted a copy of the standard procedures of the rail operator applicable to a train driver on a steam locomotive, including record keeping and the reporting of defects and incidents	
1.1.4	Demonstrated ability to recognise hazards and hazardous situations that may be faced by a locomotive driver and to implement appropriate risk management strategies as per the railway operator's standard operating procedures	
	(This may include <b>hypothetical hazardous situations</b> posed by the assessor requiring a verbal explanation by the candidate of what risk management strategies they would adopt if the hazardous situation occurred e.g. bushfire conditions, a fire incident, exposed steam pipes, broken hand rail, leaking steam pipes, etc.)	
1.1.5	Demonstrated ability to identify and use required personal protective equipment (PPE) as per the railway's safety management plan and related procedures	
1.1.6	Demonstrated ability to hand over responsibility of the locomotive to an incoming locomotive crew as per the railway operator's standard operating procedures	
	(This may include a <b>hypothetical handover process</b> posed by the assessor requiring a physical demonstration or verbal explanation by the candidate of what actions they would take to handover responsibility for a locomotive to a relieving driver)	
1.17	Blank for additional performance check?	П

1.2	Preparing and starting a steam locomotive	
	(Under supervision, the learner is to carry out the following tasks in a safe and efficient manner per the Railway's standard procedures for the locomotive concerned)	er as
1.2.1	Identified and described equipment and components on a steam locomotive (purpose, principal parts, functions and operation, and potential defects and related action)	
	[The following list may be adjusted and customised to match the locomotive and the railway concerned]	
	<ul> <li>ashpans</li> <li>blower</li> <li>blower valve</li> <li>blow down valve</li> <li>boiler barrel</li> <li>brick arch</li> <li>clack valve</li> <li>communication equipment provided on the locomotive</li> <li>crosshead</li> <li>dampers</li> <li>dome</li> <li>expansion brackets</li> <li>fire-hole</li> <li>firebox</li> <li>firebox wrapper plate and backplate</li> <li>foundation ring</li> <li>fusible plug</li> <li>gauge glasses</li> <li>gudgeon pin</li> <li>injector</li> <li>piston rods</li> <li>regulator or throttle</li> <li>safety valves</li> <li>slidebars</li> <li>steam pressure gauge</li> <li>steam stop valve (also known as the manifold or turret)</li> <li>superheater elements (if applicable)</li> <li>tube plates</li> <li>vital part of a boiler</li> <li>washout plug</li> <li>water gauge</li> <li>(including: the water gauge glasses, the steam way cock and the water way cock)</li> <li>whistle valve</li> </ul>	
1.2.2	Signed on and confirmed that the fireman had signed on	
1.2.3	Checked roster, notices, locomotive assignments and located the locomotive to be prepared for service	
1.2.4	Lighted fire and raised steam in conjunction with fireman	
1.2.5	Conducted pre-start checks(Using the Railway's checklist for the locomotive concerned)	
1.2.6	Checked the brake equipment on the locomotive	
1.2.7	Recorded, rectified, isolated and/or tagged defects and deficiencies as applicable) and/or reporting them to relevant personnel	
1.2.8	(This may include <b>simulated faults or defects</b> posed by the assessor)  Oiled and greased the locomotive	
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1.2.9	Maintained steam pressure	
1.2.10	Conducted start and initial movement of the locomotive	
1.2.11	Correctly used injectors	
1.2.12	Checked locomotive systems are operating correctly	
1.2.13	Blank for additional performance check?	
1.3	Moving a steam locomotive  (Under supervision, the learner is to carry out the following tasks in a safe and efficient mann per the Railway's standard procedures for the locomotive concerned)	ner as
1.3.1	Obtained and interpreted authority to move and position a steam locomotive	
1.3.2	Adhered to yard instructions and safeworking rules	
1.3.3	Operated locomotive controls correctly	
1.3.4	Moved the locomotive to the required position	
1.3.5	Secured the locomotive in position	
1.3.6	Blank for additional performance check?	
1.4	Conducting train operations  (Under supervision, the learner is to carry out the following tasks in a safe and efficient manner per the Railway's standard procedures for the locomotive concerned)	ner as
1.4.1	Interpreted and applied an 'Authority' to move a train	П
1.4.2	Interpreted and applied a 'Cancellation of authority to move a train'	
1.4.3	Followed correct procedures when there is a train broken down in a section  (This may include a <b>simulated</b> scenario of a train broken down or failed in a section)	
1.4.4	Followed correct procedures where there are worksites on track  (This may include a simulated scenario of a worksite on track)	
1.4.5	Followed applicable safeworking rules throughout the train journey	
1.4.6	Adhered to safeworking rules throughout the train journey	

1.4.7	Shunted rollingstock correctly	
1.4.8	Coupled and uncoupled locomotive to and from rollingstock	
1.4.9	Handled train correctly during journey	
1.4.10	Followed required precautions and procedures when approaching and traversing level crossings	
1.4.11	Adhered to speed limits	
1.4.12	Interpreted hand signals correctly	
1.4.13	Observed fixed signals, point stand indicators, check points, track side signs and level crossings correctly throughout the train journey This will include either one of the locomotive crew calling the indication which is then repeated by the other locomotive crew member	
1.4.14	Stopped and secured a train in a simulated emergency	
	(This may include a <b>simulated emergency</b> situation)	
1.4.15	Identified faults and defects and conducted associated trouble-shooting activities (This may include <b>simulated faults or defects</b> posed by the assessor)	
1.4.16	Dealt with abnormal situations during train operations, including applicable emergency communication and evacuation procedures	
1.4.17	Blank for additional performance check?	
1.5	Shutting down and stabling a steam locomotive	
	(Under supervision, the learner is to carry out the following procedures in a safe and efficient as per the Railway's standard procedures for the locomotive concerned)	t manner
1.5.1	Uncoupled locomotive from rollingstock	
1.5.2	Moved locomotive to its stabling position	
1.5.3	Oiled, greased, checked and cleaned the locomotive	
1.5.4	Carried out required post-operational checks	
1.5.5	Secured locomotive	
1.5.6	Completed post-operational paperwork	

1.5.7	Recorded, rectified, isolated and/or tagged defects and deficiencies (as applicable) and/or reported them to relevant personnel	
	(This may include simulated faults or defects posed by the assessor)	
1.5.8	Blank for additional performance check?	

## RECORD OF THE PERFORMANCE ASSESSMENT

Name of Rail Operator
Date assessment completed
Name of candidate
Signature of candidate
Name of the person conducting the assessment
Signature of the person conducting the assessment
COMMENTS OF THE PERSON CONDUCTING THE ASSESSMENT