Diesel Locomotive Driver Performance Checklist

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.

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NOTES

CODING SCHEME FOR THE ATHRA RESOURCES

The coding scheme for the ATHRA Resources is as follows:

2. 2. 8

Code for occupational focus of the resource i.e.
1. steam locomotive driver
2. diesel locomotive driver
3. fireman
4. 2nd person
5. guard
6. tram driver
7. safeworking
8. train examination addendum

Code for the set of performance checks in the resource
(in this case the 2nd set of checks for the diesel locomotive driver)

Code for number of the performance check in the set.
(in this case the eighth check in the 2nd set of performance checks for the diesel locomotive driver)

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
2.1 **Role and responsibilities of a train driver on a diesel locomotive**

*(Under supervision, the learner is to carry out the following tasks)*

2.3.1 Obtained, read and correctly interpreted a copy of the duties of a train driver on a diesel locomotive for the rail operator concerned .................................................................

2.1.2 Obtained, read and correctly interpreted copies of the rail operator’s documents describing the statutory responsibilities of a train driver on a diesel locomotive, including rail safety and safeworking requirements and regulations .................................................................

2.1.3 Obtained, read and correctly interpreted a copy of the standard procedures of the rail operator applicable to a train driver on a diesel locomotive, including record keeping and the reporting of defects and incidents .................................................................

2.1.4 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 hypothetical hazardous situations 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, electrical hazards, broken hand rail, oil on floor, etc.)*

2.1.5 Demonstrated ability to identify and use required personal protective equipment (PPE) as per the railway’s safety management plan and related procedures .................................................................

2.1.6 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 hypothetical handover process 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)*

2.1.7 Blank for additional question? .................................................................................................................................
2.2 **Preparing and starting a diesel locomotive**

(Under supervision, the learner is to carry out the following tasks in a safe and efficient manner as per the Railway’s standard procedures for the locomotive concerned)

2.2.1 Identified and described the following equipment and components on a diesel locomotive (purpose, principal parts, functions and operation, and potential defects and related action).......  

[The following sample indicative list for a mechanical transmission loco would need to be modified and customised to match the type(s) of diesel locomotive and the railway concerned]

### ENGINE COMPONENTS
- Drive belts - integrity & condition
- Emergency cooling cock
- Engine
- Engine overspeed reset
- Fuel filter bypassing
- Fuel priming pump
- Governor - oil level & filling
- Lube oil dip stick
- Lube oil drain
- Lube oil fill
- Mechanical oil filter cleaning (where applicable)
- Oil system priming unit (where fitted)
- Pet cocks & operation
- Radiator fill cock
- Radiator level indicator

### CABIN COMPONENTS
- Battery isolator
- Brake isolating cock
- Brake stand
- Direction lever
- Engine control switch
- Engine monitoring panel
- Hand brake
- Multi switch
- Various indicators, switches and lamps
- Speedo
- Vigilance acknowledge buttons
- Throttle
- Transmission lever

### TRANSMISSION COMPONENTS
- Main transmission
- Main transmission dip stick
- Main transmission oil fill
- Main transmission overspeed reset
- Main transmission filter (cleaning where applicable)

### MISCELLANEOUS COMPONENTS
- Air receivers
- Axle boxes (oiling requirements where necessary)
- Battery bank
- Brake hoses
- Communication equipment provided on the locomotive
- Compressor
- Cooling fan (including functions and checks of all belts)
- Data logger
- Final drives and lube systems
- Head and Marker lights
- Flange lubrication
- Oil level indicator
- Pet cocks
- Reverse box
- Reverse box oil fill
- Reverse box actuating arms and locking arrangements
- Sand boxes
- Vigilance control system
2.2.2 Signed on and confirmed that the second person had signed on ..........................................

2.2.3 Checked roster, notices, locomotive assignments and located the locomotive to be prepared for service .................................................................

2.2.4 Conducted pre-start checks ........................................................................................................

(Using the Railway’s checklist for the locomotive concerned)

2.2.5 Checked the brakes ..................................................................................................................

2.2.6 Pumped up fuel with priming pump (if required on class of loco concerned) .....................

2.2.7 Switched on batteries and control circuits ............................................................................

2.2.8 Primed the oil system where required ....................................................................................

2.2.9 Pre-heated engine ..................................................................................................................

2.2.10 Started locomotive ...............................................................................................................

2.2.11 Switched on monitoring panel .............................................................................................

2.2.12 Checked locomotive systems are operating correctly ..........................................................

2.2.13 Checked locomotive for any oil, fuel, water or air leaks ....................................................

2.2.14 Recorded, rectified, isolated and/or tagged defects and deficiencies (as applicable) and/or reporting them to relevant personnel .....................................................

(This may include simulated faults or defects posed by the assessor)

2.2.15 Blank for additional question? ............................................................................................

2.3 Moving a diesel locomotive

(Under supervision, the learner is to carry out the following tasks in a safe and efficient manner as per the Railway’s standard procedures for the locomotive concerned)

2.3.1 Obtained and interpreted authority to move and position a diesel locomotive ......................

2.3.2 Adhered to yard instructions and safeworking rules .............................................................

2.3.3 Operated locomotive controls correctly .................................................................................

2.3.4 Moved the locomotive to the required position ......................................................................

2.3.5 Secured the locomotive in position .......................................................................................
2.3.6 Blank for additional question? .................................................................................................................

2.4 Conducting train operations

(Under supervision, the learner is to carry out the following tasks in a safe and efficient manner as per the Railway’s standard procedures for the locomotive concerned)

2.4.1 Interpreted and applied an ‘Authority’ to move a train ................................................................................

2.4.2 Interpreted and applied a ‘Cancellation of authority to move a train’ ...............................................................  

2.4.3 Followed correct procedures where there are worksites on track .................................................................

(This may include a simulated scenario of a worksite on track)

2.4.4 Followed applicable safeworking procedures .................................................................................................

2.4.5 Adhered to safeworking rules throughout the train journey ..............................................................................

2.4.6 Shunted rollingstock correctly ........................................................................................................................

2.4.7 Coupled and uncoupled locomotive to and from rollingstock ........................................................................

2.4.8 Handled train correctly during journey ...........................................................................................................

2.4.9 Followed required precautions and procedures when approaching and traversing level crossings ...........

2.4.10 Adhered to speed limits ...................................................................................................................................

2.4.11 Interpreted hand signals correctly particularly during the stopping and starting of trains at stations ........

2.4.12 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 ......

2.4.13 Stopped, protected and secured a train in a simulated emergency ...............................................................

(This may include a simulated emergency situation)

2.4.14 Identified faults and defects and conducted associated trouble-shooting activities ................................

(This may include simulated faults or defects posed by the assessor)

2.4.15 Dealt with abnormal situations during train operations, including applicable emergency communication and evacuation procedures .................................................................

(This may include hypothetical abnormal situations posed by the assessor at various times during the journey requiring a verbal explanation by the candidate of what they would do if the abnormal situation occurred)
2.5 **Shutting down and stabling a diesel locomotive**

*(Under supervision, the learner is to carry out the following procedures in a safe and efficient manner as per the Railway’s standard procedures for the locomotive concerned)*

2.5.1 Uncoupled locomotive from rollingstock .................................................................

2.5.2 Moved locomotive to its stabling position .................................................................

2.5.3 Oiled, greased, checked, refuelled and cleaned the locomotive ................................

2.5.4 Carried out required post-operational checks ........................................................

2.5.5 Secured locomotive .................................................................................................

2.5.6 Completed post-operational paperwork ....................................................................

2.5.7 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)*

2.5.8 Blank for additional question? .................................................................................
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