



Queensland Society of Model and
Experimental Engineers Inc.

***QSMEE TRAINEE
NON STEAM LOCOMOTIVE
(MURDOCH)
Ver 4 15/10/2023***

***DRIVER'S
LOGBOOK***

Trainee's Name:

.....

DATE TRAINING COMMENCED: / /

This logbook remains the property of QSMEE and will be kept for certification purposes. Copies will be made available to the Trainee concerned at no cost on request.

REQUIREMENTS FOR ACQUIRING

QSMEE Non Steam Locomotive Train Driver Ticket

To acquire their Non Steam ticket, QSMEE trainee drivers must

- Complete the signalling and track familiarisation components of the course and pass the short oral signalling component test to be conducted by a QSMEE official
- Maintain details of all tasks listed in the appropriate spaces provided in this logbook. Appropriate signatures must be obtained in each case
- Complete a total of two (2) hours of driver training time supervised by a QSMEE Driving Instructor
- Complete a total of two (2) hours of unsupervised driving time before or after public running operations on any running day
- Complete four start up and refuelling procedures
- Complete four stabling procedures
- Obtain a sign off on your knowledge and operation of our signal and points operation. You will take up with a member of the Signalling Team and demonstrate to their satisfaction that you have a competent understanding in the required aspects of safe working and signalling.
- When you have completed the requirements in the log book, the instructor will advise you if they feel you are ready to be tested. The instructor may feel you need more experience before you are tested and will advise accordingly. Once the instructor feels you are ready to be tested, you can then approach a QSMEE boiler inspector and arrange for your examination with the inspector.

QSMEE Non Steam Locomotive Running Procedures

QSMEE trainee drivers must be able to demonstrate competency with the following procedures:-

BEFORE START UP:-

- Turn off the 240 Volt power to the battery charger and disconnect battery charger leads from the locomotive battery. Secure battery terminals and leads of the battery charger.
- Release the park brake and push the locomotive from the carriage shed.
- Check that the unit has sufficient fuel for the days running; - refuel if necessary in the designated liquid refuelling area.
- Lubricate the running gear.

DURING START UP:-

- Engage park brake and ensure that the direction control lever is set to neutral.
- Turn on the fuel line tap located under the fuel tank.
- Turn on the hydraulic oil flow tap, inside the cabin below door level.
- Check that the level of oil in the engine sump is sufficient – top up if necessary.
- Check that the locomotive horn works.
- Put the accelerator in the neutral position.
- Turn on the ignition.
- Pull start the motor.

RUNNING:-

- Check that the track ahead is clear giving way to all trains on the main line.
- Move the accelerator into the required running position.
- Release the park brake and at the same time move the direction lever into the desired position i.e.; forward or reverse.
- Move locomotive forward or reverse, always watch the track ahead and never exceed 10 km/hr. The most common accident at all tracks is hitting the train ahead. At all times maintain a **minimum separation distance of twenty (20) metres from the train in front or behind you when running in reverse.**

EMERGENCY PROCEDURES

LOSS OF MOTIVE POWER ON THE MAIN LINE:-

- Tell guard to flag down traffic behind the crippled train – minimum distance to be at least twenty (20) meters or longer to create a safe siting distance.
- Try and determine the reason for the fault (Blown fuse / out of fuel / loss of hydraulic oil etc. ;) and if practical repair the problem as quickly as possible.
NB! – Locomotive must not be refuelled if out on the track. Locomotive must be towed or pushed to refuelling area.
Get underway as soon as possible. If necessary leave passengers at nearest station, and advise signal cabin of your situation. If necessary move locomotive to a branch line to further investigate the reason for the fault.
- If unable to get back under way, advise Signal cabin of the situation and seek help from others to safely remove train from the main line.
- Report fault to Maintenance Manager as soon as possible.

FAILURE OF LOCOMOTIVE DUE TO MECHANICAL REASONS OR DERAILING:-

- Tell guard to flag down traffic behind the crippled train – minimum distance to be at least twenty (20) meters or longer to create a safe siting distance.
- Advise Signal cabin of your location and that you have broken down or are on the ground and require assistance.
- Ensure that the passengers are safely removed from track side.
- Request assistance to remove train from main line.
- Report fault to the Maintenance Manager as soon as possible.

PARKING LOCOMOTIVE:-

- Park train on a siding, never leave the train parked in the Station.
- Return direction controller to the neutral position.
- Return rev controller to the neutral position.
- Apply parking brake to the locomotive.
- Turn off the electrical system.

END OF RUN PROCEDURE:-

- Return passenger cars (if any) to carriage shed. Ensure that your carriages are correctly coupled to the cars in front before you leave the shed.
- Refuel the locomotive in the approved manner – refer to refuelling procedure.
- Drive locomotive to holding area in the carriage shed.
- Shut down the locomotive:-
 1. Apply the parking brake
 2. Turn off the electrical system
 3. Turn of the fuel
 4. Turn off the hydraulic oil supply line
 5. Connect battery charger to battery
- If you are the last person back into the carriage shed lock both doors of the carriage shed – return the shed key to the work shop.
- Report any locomotive problems to Maintenance Manager / boiler inspector and record any track problems in Track Register located at the front sign in desk.

SIGNALLING INFORMATION

Pine Valley signals and route indicator displays are as follows

<i>SIGNAL</i>	<i>INSTRUCTION</i>
Red	Stop
Amber	Proceed with caution
Green	Go at normal speed
Flashing amber	Next signal at red
Red with lower amber	Branching off to left or right
<i>ROUTE INDICATOR</i>	<i>MEANING</i>
X	Points not working, do not proceed
/	Points set to right
\	Points set to left

If the route control box (green post with a small control panel attached) has a yellow light illuminated this indicates that the track system is in ***unattended mode*** and this means the points are under the driver's control – driver input required. If the yellow light is not illuminated the track system is in ***attended mode*** and in most locations the points are under the control of the signal cabin operator and are not operational from the local control point. There a couple of facing points that are given over to drivers when in “attended mode” – these will be discussed during the Signalling/Points familiarisation.

TRAINEE DRIVER LOGBOOK RECORDS

Below are logbook records for trainee drivers and their supervisors to record times of each operation and sign/date accordingly.

SUPERVISED DRIVING TIME

<i>Time</i>	<i>Date</i>	<i>Instructor's signature</i>

UNSUPERVISED DRIVING TIME

<i>Time</i>	<i>Date</i>	<i>Instructor's signature</i>

QSMEE NON STEAM LOCOMOTIVE START UP CHECK LIST

This checklist has four applications. Please use the checklist for each of the four times you carry out Locomotive Start Up procedures under the supervision of your driving instructor, boiler inspector or any other certified diesel driver. Please tick each box when you've completed the action, and have supervisor sign and date at end of checklist on each occasion.

<i>START UP PROCEDURE</i>	<i>DATE:</i>	<i>DATE:</i>	<i>DATE:</i>	<i>DATE:</i>
Turn off the 240 volt power to the battery charger and disconnect charger leads from the locomotive battery. Secure battery terminals and charger leads of the battery charger.				
Release the parking brake and push the locomotive from the carriage shed.				
Re-engage the parking brake.				
Check for evidence of sump oil or hydraulic oil leak.				
Check that the unit has sufficient petrol – refuel if required in designated refuelling area. <i>Do not refuel locomotive outside the carriage shed.</i> Refer to separate procedure for refuelling				
Lubricate the running gear				
Ensure fuel line control has been turned on.				
Ensure that hydraulic oil line control has been turned on				
Ensure that there is sufficient oil in the engine sump – top up if required.				
Check that the horn works.				
Ensure accelerator is in the neutral position – engage the choke.				
Ensure the direction lever is in the neutral position.				
Turn on the ignition.				
Pull start the motor, disengage the choke after engine continues to fire.				
Disengage the parking brake and move off in an appropriate manner.				

QSMEE official*Date:*.....

QSMEE official*Date:*.....

QSMEE official*Date:*.....

QSMEE official*Date:*.....

QSMEE NON STEAM LOCOMOTIVE STABLING PROCEDURE

This checklist has four applications Please use the checklist for each of the four times you carry out Locomotive Stabling procedures under the supervision of your driving instructor, boiler inspector or any other certified steam driver. Please tick each box when you've completed the action, and have supervisor sign and date at end of checklist, on all four occasions.

<i>STABLING PROCEDURE</i>	<i>DATE:</i>	<i>DATE:</i>	<i>DATE:</i>	<i>DATE:</i>
At end of day return carriages to Carriage Shed. Ensure that you couple up your carriages to the carriages in front before leaving the shed.				
Refuel locomotive in designated refuelling yard – refer to refuelling procedure				
Return locomotive to holding bay northern end of the carriage shed.				
Engage parking brake.				
Return rev and direction control levers to neutral position.				
Turn off ignition.				
Turn off fuel line control valve under the fuel tank				
Turn off hydraulic oil flow valve.				
Connect up battery charger to locomotive battery terminals				
Turn on the battery charger				
Report any running issues to Maintenance Manager / Boiler Inspector as soon as possible.				
Record any track issues in the register at the sign in desk.				

QSMEE officialDate:.....

QSMEE officialDate:.....

QSMEE officialDate:.....

QSMEE officialDate:.....

QSMEE NON STEAM LOCOMOTIVE REFUELLING PROCEDURE

This checklist has four applications Please use the checklist for each of the four times you carry out Locomotive Refuelling procedures under the supervision of your driving instructor, boiler inspector or any other certified steam driver. Please tick each box when you've completed the action, and have supervisor sign and date at end of checklist, on all four occasions.

<i>REFUELLING PROCEDURE</i>	<i>DATE:</i>	<i>DATE:</i>	<i>DATE:</i>	<i>DATE:</i>
Drive the locomotive to the designated refuelling area – western side of the carriage shed adjacent to the coal crusher.				
Engage the parking brake.				
Ensure rev lever and directional control lever are in the neutral position.				
Turn off ignition.				
Close the white gate before obtaining fuel from fuel locker – same area				
Remove fire extinguisher from locker. Check that it is fully charged and freely accessible.				
Fill fuel tank on locomotive using the fuel funnel. Ensure that the tank is not overfilled. Once full replace fuel tank cap and cap on fuel can.				
Return fuel can to fuel locker.				
Wipe off any spilt fuel.				
Return fire extinguisher to fire locker.				
Open the white gate now that the refuelling process has been completed.				
Turn on the ignition.				
Ensure that the rev control lever and direction control lever are in the neutral position.				
Pull start the motor. Use the choke if required.				
Disengage the parking brake.				
Remove the locomotive from the designated refuelling area and resume normal operations.				

QSMEE officialDate:.....

QSMEE officialDate:.....

QSMEE officialDate:.....

QSMEE officialDate:.....

QSMEE Signal/Points Operation

I confirm that _____
has demonstrated a satisfactory knowledge of the Signals/Points operation.

(date) _____

Signature of QSMEE official _____

QSMEE Driving Test

I confirm that

has passed the driving test that I conducted on - Date: / /

Signature of QSMEE Boiler Inspector: -

Drivers Licence Number issued: -

Date Non-Steam Driver Certificate Issued:-...../...../.....