

	PO Box 299	Version	Author	Reviewed	Reference
	Oberon NSW	<b>A - Rev 1</b>	SM		<b>SOP-009</b>
	2787	25 May 2012			
	ABN 98 107 506 208	<b>TMV OPERATING MANUAL</b>			

## Introduction:

The operation of Track Maintenance Vehicles (TMVs) is required to inspect and maintain the Oberon to Tarana Line (OTL) also known as the Oberon Tarana Heritage Railway (OTHR).

TMVs for the purposes of this SOP are defined as rail vehicles that:

- Have three or four wheels
- Can tow a small maintenance trailer
- Carry two or more occupants

**NOTE:** Vehicles that have three wheels and/or are motorized are designed to carry one occupant only and shall:

- be used on the OTL for the purpose of line inspections and line preparation for operation.
- cannot tow a trailer
- have driver responsibility to set and unset Level Crossing warning signs before proceeding

Authorization for the limited and conditional use of these vehicles must be obtained from the Operations Manager prior to use on the OTL.

## Limits of Travel:

The operation of TMVs is only permitted between Oberon Station precinct and Tarana:

**NOTE:** At no time are TMVs to proceed past Hazlegrove Station unless specific permission from the Operations Manager is obtained.

## Speed Limits:

All TMV's used on the OTL shall be fitted with compliance plates stating the maximum safe speed of operation for normal operation and when towing un-braked/un-powered TMV trailers. The maximum speed of operation for TMVs on the OTL shall be:

Normal Operation - 20km/h

Towing an unbraked /unpowered TMV trailer - 10km/h

**NOTE:** Only TMV trailers fitted with compatible towing apparatus shall be towed.



### TMV Operators and Second Persons:

TMV Operators shall be trained and accredited in the use of TMVs. TMV Operators shall be issued with Certificate of Competency (COC)s endorsed with "Track Maintenance Vehicle Operator".

TMVs MUST be operated with a competent Second Person on board at all times.

TMV Second Persons may be any person with a current Track Safety Awareness (TSA) accreditation. If the TMV Second Person is not an accredited TMV Operator themselves, the TMV Operator in charge of the vehicle must instruct the TMV Second Person on how to stop the TMV in the event of an emergency.

**NOTE:** In all instances, the TMV Operator must ensure that the TMV Second Person is capable of and able to stop the TMV in the event of an emergency.

**Prior to TMVs being placed on the track, the TMV operator must ensure that authority to occupy the track is obtained from the Operations Manager**

Prior to entering any section as a part of a journey, the authority to occupy the section must be in the possession of the TMV Operator. TMVs and TMV convoys are to be block-worked at all times. For safe working purposes a TMV Convoy is to be treated as a one whole train.

### Pre-Journey Checks

TMV Operators MUST check the following prior to commencing any journey on a TMV:

#### TMV On Board Equipment

- Protection kit is on board the TMV
- 2 Red Flags
- 1 Green Flag
- Safeworking Forms
- Track Occupancy Authority
- Special Proceed Authority
- First Aid Kit is on board the TMV
- Fire Extinguisher is charged
- Spare High-visibility Vests are available

#### TMV Operational and Mechanical Checks

- Rock wipers are in place
- TMV Lifting handles, if applicable, are secured in holders
- Oil Level
- Fuel Level - with adequate reserve
- Ensure fuel supply is turned on
- Wheels and rigging for any defects or loose gear
- Brake Operation
- Hand Brake Operation
- Headlight and Tail Light Operation (for each direction, where fitted)
- Rotating Beacon Operation
- Horn Operation
- Battery is indicating charge on ammeter when motor and rotating beacon are running



### TMV Trailer Mechanical Checks

- Towing apparatus in good condition. Tow bar pins must be secured with a safety clip once inserted into the tow bar pin socket.
- . Brakes are not applied for normal running

### Running Procedures

The operation of TMVs shall be consistent with OTHR Standard Operating Procedures. TMVs must always have the Rotating Beacon in operation when in motion. Headlights may be used for additional visibility or to work the TMV back to the home depot if the Rotating Beacon fails.

**All TMV occupants must wear at all times class a D/N high-visibility clothing as per AS/NZS 4602:1 999.**

### Level Crossings

Level crossings represent a risk to TMV operations; therefore care must be taken at these places on the OTL. The TMV Operator shall apply the following procedure on approach to level crossings:

- Slow the TMV to a stop and ensure that all traffic warning signs are set
- Switch on headlight for increased visibility
- Together with the Second Person, ensure that all traffic has come to a stop and that road vehicle drivers have observed the TMV at the crossing
- Sound horn as required before moving across crossing at 5kph

In the case of a three wheeled TMV where there is only a driver present, The TMV must be brought to a stop, the traffic warning signs must be set and the TMV can proceed using extreme caution when all the traffic has come to a stop.

### **CAUTION**

- As there are several unprotected level crossings on the OTL, extreme care must be taken at these locations.
- Some level crossings are unsealed. The TMV Operator **MUST STOP** prior to these crossings and ensure that crossing flange ways are clear of dirt and debris. Dirt and debris must be cleared prior to the TMV proceeding across the crossing. Where this is required, either the TMV Operator or Second Person should clear the debris, while the other observes for approaching road traffic.

### Worksites

TMVs are to enter worksites as per normal worksite safeworking arrangements, with the agreement of the worksite protection officer. When transiting worksites TMV Operators and Second Persons **MUST** take extreme care and be on the lookout for:

- Tools, equipment and material foul of the track
- Other workers



### TMV Convoys

TMVs may be worked in a convoy to expedite transit to a worksite. When TMVs are worked in convoy, the following shall apply:

- The convoy **MUST** be worked as a single unit for safeworking purposes. If the convoy must be split, this should be done within yard limits and normal safeworking arrangements for the separate TMV movements will apply. Where this is not possible, special working may be implemented by the OTHR Train Controller.
- TMVs shall be coupled together where possible

### Low-Light or Night Operation

The operation of TMVs in low-light or night must be avoided. Where it is required to operate TMVs at night, the following shall apply:

- TMV Operator and Second Person shall each carry a working torch
- The Rotating Beacon AND Headlight shall be used at all times
- All TMV occupants must wear class D/N high-visibility clothing as per AS 4602:1 999.

**Three wheel TMV with a single driver will not be operated in low-light or night operations.**

### Leaving the TMV

Whenever the TMV Operator leaves the TMV, but remains within 2m of the TMV the following **MUST** be carried out:

- Handbrake firmly applied

When the TMV Operator needs to move greater than 2m from the TMV, the following **MUST** be carried out:

- Engine shutdown
- Handbrake Firmly applied
- Where the gradient is greater than 1:100, a wooden chock shall be placed under the vehicle

When a TMV Trailer is uncoupled from a TMV while on track, the trailer **MUST** be chocked with wood or spraged.

**NOTE:** Steel or ballast shall not be used to chock TMVs

### Stabling Procedures

When the TMV is to be stabled, it shall be secured off the track. TMV Operators must ensure that:

- Fuel Supply is turned off
- All electrical accessories are off
- TMV battery is connected to a trickle charger, if required

TMV Trailers stored outdoors in unsecured areas must be secured by chain and padlock when not in use



### TMV Faults and Failures

All TMV Faults must be reported to the Infrastructure Manager for attention. Where a TMV fails in a section, assistance may be sought from another TMV.

### **TMV Operational Rules:**

Prior to placing a track maintenance vehicle (TMV) on the track, the TMV operator must obtain the necessary authority to occupy the track, by -

- obtaining the approval of the Operations Manager or his delegate;
- obtaining the relevant Token for the section to be traversed;
- making an entry in the Movement Register noting the date and time and the section of track concerned,
- keeping the authority to occupy the section on the TMV and in the possession of the operator;
- if any issues arise from a track inspection, notifying the Operations Manager of any special restrictions which will apply for the safe movement of rail traffic on the inspected portion of the Oberon-Tarana Line.

### Track inspection prior to train operations:

Between trains running days - which may be a week or more apart - the track must be inspected by the Track Manager or his delegate to ensure that it is fit for rail traffic. If train operations (or an inspection) have not occurred in the previous 36 hours, an inspection must be carried out before the proposed train operation (other than TMV operations) can take place.

### Track fit for rail traffic:

The Track Manager or delegate must -

- make an entry in the Train Register noting the date and time the inspection concluded and the portion of track that was inspected;
- notify the Operations Manager of any special restrictions which will apply for the safe movement of rail traffic on the inspected portion of the OTHR; and
- complete a Pre-Train Track inspection form.

### Track NOT fit for rail traffic:

The Track Manager or delegate must -

- notify the Operations Manager that the inspected portion of the OTHR is not fit for rail traffic, and provide a preliminary forecast of the work and time required to make the affected portion of track fit for rail traffic;
- make an entry in the Train Register noting the date and time the inspection concluded and the portion of track that was inspected, and that the track is not fit for traffic;
- complete a Pre-Train Track inspection form.