TRACK WORKER STRUCK BY A PASSENGER TRAIN: SHARED LEARNING

LAVERTON INCIDENT
PLANNING WORKSITE
PROTECTION

TOOLBOX 2
OUR SAFETY PLEDGE

AS A RAIL SAFETY WORKER (RSW), I HEREBY PLEDGE TO ACKNOWLEDGE AND UNDERSTAND THE PLANNING AND IMPLEMENTATION OF THE REQUIRED WORKSITE PROTECTION PRIOR TO ENTERING THE RAIL CORRIDOR.

ZERO HARM
INTRODUCTION

Work activities occur in the Rail Network every day. Worksite Protection is a crucial part of the planning phase to ensure the safety of all RSW’s.

This booklet provides clear information about the importance of Planning Worksite Protection and how it related to the Laverton incident. This is the second of ten toolbox talks created to share learnings with industry.
The Australian Transport Safety Bureau (ATSB) identified 1,779 safe work on track occurrences between July 2009 and July 2014. Of these occurrences, the most common events exposing track workers to highest risk were:

<table>
<thead>
<tr>
<th>Event Description</th>
<th>Occurrences</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>The type of protection being insufficient or incorrect</td>
<td>581</td>
<td>33%</td>
</tr>
<tr>
<td>The incorrect positioning of the worksite protection</td>
<td>267</td>
<td>15%</td>
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</table>
PROTECTION TYPE INSUFFICIENT/INCORRECT AND SUBCATEGORIES

- Not fully implementing the procedures associated with the worksite protection selected: 112 (19%)
- Implementing inadequate protections for the level of work undertaken: 168 (29%)
- Not implementing protections: 275 (47%)
- Other: 26 (5%)

PROTECTION INCORRECTLY POSITIONED AND SUBCATEGORIES

- TOA issued while train was in location: 8 (3%)
- By the NCO not placing electronic protections (blocking) on correct signalling infrastructure: 30 (11%)
- Flagman/lookout/signalman in wrong position/looking wrong way/absent: 61 (23%)
- By the worker (PC/flagman) positioning protections in incorrect location: 70 (26%)
- Other: 98 (37%)

SOURCE: AUSTRALIAN TRANSPORT SAFETY BUREAU (2017), SAFE WORK ON TRACK ACROSS AUSTRALIA, ANALYSIS OF INCIDENT DATA, 2009 - 2014
HTTPS://WWW.ATSB.GOV.AU/MEDIA/5773636/RI-2014-011_FINAL.PDF, P. 11-12
On the morning of Friday 2 October 2015, a workgroup was assembling track-side in Laverton, Victoria. They planned to undertake dog spike removal works in preparation for re-sleepering of a section of track on the Altona Loop Line.

At around 0910, the supervisor for the works commenced marking the track to identify those dog spikes to be removed. He was working in a track crossover about 400 meters on the Melbourne side of Laverton Railway Station. A lookout had been placed for his protection.

At about 0916, a Metro Trains Melbourne suburban commuter train arrived at Laverton station, bound for Flinders Street Station in central Melbourne. After its scheduled stop, the train departed Laverton and approached the worksite. The lookout observed the train, warned workers of its approach and signalled to the driver that the track was clear. However, as the train took the crossover, the supervisor was foul of the track, and was struck by the train that was travelling at about 59 km/h. The supervisor suffered serious injuries.
All RSW's must attend and sign the relevant Pre-Work Brief prior to works commencing. This is to ensure they have a clear understanding of the worksite protection limits, hazards and controls in place for their safety.

The TFPC must conduct a Rail Safety Pre-Work Brief with the Protection Team and the Work Group Supervisor (WGS) prior to works commencing. It is the responsibility of the WGS to ensure all members of the workgroup understand the intended worksite protection to be used.

The Track Force Protection Coordinator (TFPC) must complete a Rail Safety Worksite Hazard Assessment (RSWHA) to assess the level of worksite protection required prior to works commencing.

The TFPC must implement the worksite protection prior to authorising the Rail Safety Workers (RSW’s) to commence work.

All RSW’s must clearly understand the Emergency Evacuation Procedures, Position of Safety (POS) and the audible warnings that will be used to alert of the approach of rail traffic.
WHAT IS WORKSITE PROTECTION?

Worksite protection is the process of providing early warning of approaching rail traffic, controlling the approach of rail traffic or the exclusion of rail traffic from a worksite.

The method or level of worksite protection required is determined by the TFPC after completing a RSWHA.

When the TFPC has determined the appropriate level of worksite protection, the required control measures will be put in place prior to the works commencing to ensure that all RSW’s and the worksite is protected.

A summary of the information gathered from the RSWHA is delivered to all RSW’s at the relevant Pre-Work Brief.
The primary duty of a TFPC regardless of their qualification is to keep all the RSW’s and the worksite safe from rail traffic.

The TFPC must complete a RSWHA prior to any works commencing in the rail corridor.

By completing the RSWHA, the TFPC can determine the appropriate level of protection required to protect the worksite and the RSW’s from rail traffic while the task is being performed.

The TFPC will implement the appropriate level of worksite protection required to protect the worksite before the works commence.

WHO PLANS WORKSITE PROTECTION?
Worksite protection is required anytime the intended works have the potential to or will intrude into the danger zone.

The TFPC will determine the level of worksite protection required by the nature and location of the work.

The WGS must have effective communication with the TFPC at all times to ensure that the workgroup and all RSW’s are protected from rail traffic.

If there are any changes to the location, scope of works or weather conditions, the TFPC must reassess the current worksite protection in place and determine if the protection is still appropriate.
GLOSSARY

**All Right Hand Signal:**
The All Right hand signal is one arm held in the horizontal position. By night a white light held steady.

**Australian Transport Safety Bureau (ATSB):**
The ATSB is Australia’s national transport safety investigator.

**Danger Zone:**
Is all space within 3 metres horizontally from the nearest rail and any distance above or below this zone including being on the line, unless a Position of Safety exists or can be created.

**Flagman/Handsighnaller:**
Is a rail safety worker who displays hand signals to the operators of rail traffic movements. A Handsignaller is also referred to as a Flagman.

**Metro Trains Melbourne (MTM):**
Metro Trains Melbourne, known colloquially as simply Metro, is the franchised operator of the suburban railway network in Melbourne, Australia. Metro Trains Melbourne is a joint venture between MTR Corporation, John Holland Group and UGL Rail.

**Office of the National Rail Safety Regulator (ONRSR):**
An independent body corporate established under the Rail Safety National Law (South Australia) Act 2012. The primary objectives of the ONRSR are to encourage and enforce safe railway operations and to promote and improve national rail safety.

**Protection Officer (PO):**
The qualified worker responsible for rail protection (NSW, SA, QLD, WA).

**Position of Safety (POS):**
Is a place where people or equipment cannot be struck by rail traffic.

**Rail Safety Pre-Work Briefing:**
Is a formal briefing on the worksite protection arrangements provided by the Track Force Protection Coordinator to all rail safety workers associated with the worksite protection and the Work Group Supervisor.

**Rail Safety Worksite Hazard Assessment (RSWHA):**
Is an assessment of the rail safety hazards to determine the method/level of protection requirement for a worksite.
Rail Safety Worker (RSW):
Is a person who has carried out, is carrying out or is about to carry out, rail safety work, and includes:

a) a person who is employed or engaged by a rail operator to carry out rail safety work
b) a person engaged by a person (other than by a rail operator) to carry out rail safety work
c) a trainee
d) a volunteer.

Track Access Desk (TAD):
Provides a single approval point for access by internal and external stakeholders requiring track access within the Rail Corridor and Danger Zone.

Track Force Protection
Track force protection is a method of protecting work on track between rail traffic movements.

Work Group Supervisor (WGS):
Is the individual ultimately responsible for the supervision of the programmed activities within a Work Site.

Work Group Supervisor Pre-Work Briefing:
Is a formal briefing on the task related activities provided by the Work Group Supervisor to the work group and Track Force Protection Coordinator.
FURTHER INFORMATION

If you require any further information, please discuss with your supervisor.

INFORMATION SOURCES

- Australian Transport Safety Bureau (ATSB) (2017), Safe work on track across Australia, Analysis of incident data, 2009 - 2014
- MTM General Operating Procedures
- MTM Planning Worksite Protection in the Rail Corridor
- MTM Rail Safety Worksite Hazard Assessment
- MTM RSWHA Briefing Note