Turnout Installation

Issue date: 10/04/08
Review date: 17/02/11

SWMS number:
SMS-06-SW-1038

SWMS Name:
Turnout Installation

SWMS Team:
Track Review Team

Custodian (Position):
Track Works Manager
Commercial / Renewals

Assumptions:

Site specific risks are addressed and assessed in pre- work briefing

Approving Authority (Position):
Safety and Quality Manager,
Commercial / Renewals

Content reviewed by Technical expert (SME) and RailCorp safety professional (position including Div/Group)
Track Works Manager &
SEQ Coordinator Asset Management Group
Commercial / Renewals

Applicable Standards, Codes of Practice and guidance:

- OH&S Act 2000
- OH&S Regulation 2001
- Rail Safety Regulation 2003
- RailCorp Network Rules & Procedures
- RailCorp Safety Management System.
- MSDS for all chemicals and hazardous Substances used on site
- TS3402.Standards TS3501, 3502, 3509, C3102, 3109
- Turnouts - Component Definitions, TS3502 Standard Turnouts, TS3303 Turnout Timbers and Timber Transoms, PCPTO0901 Track Removal – Insitu, PCPTO0902 Track Reconditioning, PCPTO0913 Track Removal – Panels
- AS 2550.5-2002 Cranes, hoists and winches - Safe use - Mobile cranes
- AS 2958.0 2000 Earth Moving Machinery

Equipment/Plant/Tools:

- Front End Loaders,
- Pettibone, Excavators,
- DESEC Machine
- Cranes, Dumper

Records/Reporting:

- Worksite Protection Plan
- Pre-work Brief
- Electrical Permits
- Fuel and Hydraulic Oil MSDS
- Daily Plant Checklist
- Traffic Control Plan

Permits/licences required:

- Front End Loaders,
- Pettibone, Excavators,
- DESEC Machine,
- Cranes, Dumper Operator Certificates
- Dogman Certificate
- Traffic Controllers Certificate
- Electrical Permit Holder

Inspection requirements
Nil

Service schedule:
Nil

Qualification required:

- Construction Industry Induction
- Track Safety Awareness

or
RISI (Rail Industry Safety Induction)

MIMS or METRE Ref:
Nil

Personal Protective Equipment required:

- Safety Boots
- High Visibility Vests
- Hardhats
- Protective Clothing
- Safety Glasses

And as specified below.

- Gloves
- Dust Masks (as required)
- Hearing protection

Turnout Installation

Number	Step	Hazard Or Human Error (Safety/Environmental Hazards Identified, Including Physical Environment, Human Errors, Plant And Equipment)	Risk ranking before controls	Control (to be Implemented to eliminate or reduce the risk to the lowest practicable level)	Risk ranking after controls	Responsibility	Job step to be completed In accordance with (name associated documentation)
1	Turnout Installation	Moving Plant	C+	Wear PPE as specified in WMP. Discuss Hazards during PWB.	D	Team Supervisor, PO Current WorkCover certificate as per SMS-06-SW-1047 Team Supervisor, PO Current WorkCover certificate as per SMS-06-SW-1047 Team Supervisor, PO Current WorkCover certificate as per SMS-06-SW-1047	Plant SMS-06-GD-0225 Pre work Briefing SMS-06-FM-0163 Lifting Equipment Inspection SMS-16-FM-0089 Work on/near Public Roads SMS-06-GD-0372
		Desec Plant	C+	Exclusion Zone	D		
		Finger And Feet Damaged While Lining Up Panels	C+	Only qualified Dogman used until panel in place, then qualified fettlers to plate panels together	C-		
		Struck By Panel While Craning In	C+	Exclusion Zone. Ensure SWL not exceeded Use tag ropes to guide panel	C-		
		Hit By Road Traffic	C+	Traffic Control where needed	D		
2	Top Ballast	Moving Plant	C-	PPE, PWB	D	Current WorkCover certificate Current permit ticket	Plant SMS-06-GD-0225 Pre work Briefing SMS-06-FM-0163 Workplace Risk Management SMS-06-PR-0104 Work Around Elect. Equip. SMS-06-GD-0268 Electrical Permits SMS-06-EN-0577
		Uneven Surfaces	C-	PWB & lighting if required	D		
		Overhead Wire Strike	B+	All operators briefed on power out limits/sign permit before and after starting	D		

NOTE: Each work group or team member must sign off on the SWMS to acknowledge they have been briefed about or instructed in the SWMS

Team member name (Please print)	Team Member signature	Instructor/ Briefer name	Date	Team member name (Please print)	Team Member signature	Instructor/ Briefer name	Date

RailCorp Level 2 Risk Matrix - Regional & Local (Workplace)

		Likelihood/Frequency					
	Event Frequency	Less than once every 1000 years	Once every 100 to 1,000 years	Once every 10 to 100 years	Once every 1 to 10 years	More than once per year up to and including 10 times per year	More than 10 times per year
	Historical (Likelihood)	Unheard of in the rail industry	Has occurred once or twice in the rail industry	Has occurred many times in the rail industry, but not in NSW	Has occurred once or twice in NSW	Has occurred frequently in NSW	Has occurred frequently at specific locations
	Workplace Predictive (Likelihood)	Not expected to occur	May occur only in exceptional circumstances	Could occur at some time but not likely	You would expect it to occur at least once in the next 10 years performing similar activities	You would expect it to occur at least once this year performing similar activities	You would expect it to occur at least once this month performing similar activities
		F1	F2	F3	F4	F5	F6
Consequence		Incredible	Improbable	Remote	Occasional	Probable	Frequent
>10 Fatalities	C6	Disastrous	B-	B+	A	A	A	A
2-10 Fatalities	C5	Catastrophic	C+	B-	B+	A	A	A
1 Fatality (2-10 Major Injuries)	C4	Critical	C-	C+	B-	B+	A	A
1 Major Injury	C3	Major	D	C-	C+	B-	B+	A
1 or more Minor Injuries	C2	Minor	D	D	C-	C+	B-	B+
First aid treatment, or illness/injury not requiring treatment	C1	Negligible	D	D	D	C-	C+	B-

Extreme
High
Medium
Low

Definition for Use - Regional & Local level (Workplace)

Used for workplace hazards and safety risks that do not consider the whole of the network. Indicatively this matrix is appropriate for use where the hazards under consideration are up to 10% of the total network exposure. This includes regional and local workplace risk assessments.

As an example, the Level 2 scale would be used when examining the risk of slips, trips and falls on specific RailCorp platforms within a region or at a particular station, or the risk of fire within a depot.

There are 3 options for descriptors which can be used to determine the frequency category. One set of descriptors is provided for frequency, one for historical likelihood, and one for predictive liklihood in the workplace. Choose the most appropriate.

To score the risk, follow the steps:

1. Identify the magnitude of the credible consequence if the risk were to occur. If applicable, risks should be considered in terms of the safety (this matrix), commercial and environmental impact (using other matricies).

2. Identify the likelihood of this level of consequence occurring. (This is done after considering the effectiveness of the current controls in place)

3. Score the risk using the combination of likelihood and consequence ranking.

Note: Where there are a range of credible consequences which may lead to a different level or risks and/or where the controls may be different. It may be useful to score the risk more than once.