Manual Track Laying

Issue date: 19/11/10
Review date: 19/11/13

SWMS number:
SMS-06-SW-1053

SWMS Name:
Manual Track Laying

SWMS Team:
Track Review Team
Track Reconstruction Manager
Program Engineers
Team Managers
Infrastructure worker

Custodian (Position):
Track Reconstruction Manager
Infrastructure Renewals

Assumptions:
Site specific risks are addressed and assessed in pre- work briefing and Worksite protection Plans
This activity is part of Track reconstruction activity as a whole.

Content reviewed by Technical expert (SME) and RailCorp safety professional (position including Div/Group)
Track Review Team
Track Reconstruction Manager
Program Engineers
Team Managers
Infrastructure worker
Safety Facilitator

Approver (Position):
Track Works Manager
Infrastructure Renewals

Plant/Equipment/Tools:
- Front End Loader, Sleeper Cradle, Bobcat
- Mechanised clipping machines
- Hand tools, Trolleys
- 360 Excavator

Records/Reporting:
- Worksite Protection Plan
- Pre-work Brief
- Services searches
- Electrical Permits
- Chemical Registers and MSDS
- Daily Plant Checklist
- Daily Site Record

Permits/licences required:
- LL (Front End Loader); LE (Excavator)
- LS (Skidsteer). Operator Certificates
- Electrical permits

Applicable Standards, Codes of Practice and guidance:
- OH&S Act 2000
- OH&S Regulation 2001
- SMS and Network Rules
- Rail Safety Regulation 2003
- RailCorp Safety Policy
- RailCorp Network Rules & Procedures
- RailCorp Safety Management System.
- TMC202 – Track Fundamentals
- TMC221 – Rail installation and repair
- TMC223 – Rail Adjustment
- WorkCover NSW Plant Guide
- National Code of Practice for Manual Handling [NOHSC:2005]

Inspection requirements
Pre-start Plant Inspection

Service schedule:
Nil

Training/Qualifications required:
- Construction Industry Induction
- RISI (Rail Industry Safety Induction)

PPE required:
- Safety Boots
- High Visibility Vests
- Hardhats
- Protective Clothing
- Safety Glasses
- Riggers / manual Gloves (as required)
- P2 Dust Masks (as required)
- Hearing protection (as required)

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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	Sleeper placement (using Skidsteer,360 excavator & front end loaders)	Struck by moving plant.	B+	Maintain exclusion zone. Plant to have flashing lights and reversing alarm.	D	Site controller	Plant SMS-06-PR-0225 PPE SMS-06-GD-0323
		Manual Handling (Back strain)	B-	Rotate staff when spacing out sleepers.	C-	Work Group Leader	
2	Rail pads placement.	Strains (repetitive movement)	C-	Rotate Staff	C-	Work Group Leader All Staff	Manual Handling Guide SMS-06-GD-0001
3	Place the Rails.	Struck by plant Struck by moving rail	B+	Maintain exclusion zone. Plant to have flashing lights and reversing alarm	D	Site controller	Plant SMS-06-PR-0225 PPE SMS-06-GD-0323 Pre work Briefing SMS-06-FM-0163
4	Join rails	Crushing from Moving parts	C-	Supervision Keep hands well clear of crush zone	D	Work Group Leader	
		Manual handling injury	C-	Correct manual handling techniques	D	Work Group Leader	Manual Handling Guide SMS-06-GD-0001
5	Jewellery distribution.	Manual Handling injury	C-	Use machine to transport jewellery to required location. Keep jewellery bags to a small size and weight. Rotate Staff	D	Work Group Leader All Staff	Manual Handling Guide SMS-06-GD-0001 PPE SMS-06-GD-0323
6	Clip up.	Struck by flying material	D	Use machine / purpose design tool. Maintain adequate distance between work team members. Wear appropriate PPE, Eye Protection Place foot on clip.	D	All Staff	Manual Handling Guide SMS-06-GD-0001 PPE SMS-06-GD-0323 Pre work Briefing SMS-06-FM-0163
		Manual Handling injury	C-	Correct manual handling techniques	D	Work Group Leader	
7	Corrections	Manual Handling (bending/strains)	D	Ensure Adequate staff number	D	Work Group Leader All Staff	Manual Handling Guide SMS-06-GD-0001

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.