Track Reconditioning

SWMS number:
SMS-06-SW-1036

SWMS Name:
Track Reconditioning

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
Can only happen under LPA

Approver (Position):
Track Works Manager
Infrastructure Renewals

Plant/Equipment/Tools:
- Earth-moving machinery
- G – Train,
- Train Side Dump Wagons (SDW)
- MFS Wagons
- Clippers,
- Hand tools- applicators
- Oxy / LPG Welding Equipment
- Track Jack
- Ballast Trains including Plough Vans

Records/Reporting:
- Worksite Protection Plan
- Pre-work Brief
- Services searches
- Fuel and Hydraulic Oil MSDS
- Daily Plant Checklist
- Environmental Protection Plan
- Daily Site Record as per TS04
- Survey sheets

Permits/licences required:
- Earth-moving machinery Operator appropriate WorkCover Certificate
- Thermit Welders Certificate
- Electrical permit

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

Applicable Standards, Codes of Practice and guidance:
- OH&S Act 2000
- OH&S Regulation 2001
- Rail Safety Act 2008
- Rail Safety Regulation 2008
- RailCorp Network Rules & Procedures
- RailCorp Safety Management System.
- MSDS for all chemicals and hazardous Substances used on site
- ESC 410 – Formation & Earthworks
- TMC 202 – Track Fundamentals
- TMC 403 – Track Reconditioning guidelines
- AS 4839 Portable oxy-fuel gas systems
- AS 1674.1 – Safety in welding processes
- AS 2550.5-2002 Cranes, hoists and winches - Safe use - Mobile cranes

Inspection requirements
- Pre-start Plant Inspections

Service schedule:
Nil

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

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

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	Track strip	Refer SWMS SMS-06-SW-1035					
		Electrical contact	A	Must obtain and complete Electrical Permit.	C-	Site Controller Permit holder	Electrical Permits SMS-06-EN-0577
2	Excavation of ballast and formation material.	Contact with Moving Plant	B+	Work areas to be restricted / isolated to ensure restricted access. PPE to be worn in accordance with SSMP. All employees to remain aware of and stand clear of moving plant. Flashing lights and reverse beeper.	C-	Team Leader/ Work Group Leader Plant Operator.	Plant Risk Assessment SMS-06-GD-0403 Plant SMS-06-PR-0225 Excavation and Earthworks SMS-06-GD-0378
		Dust	C-	Controlled water spraying P2 Masks as required Stand clear	D	Site Controller All staff.	Air Quality Guide EMS-09-GD-0013
		Noise	C-	Hearing Protection	D	All Staff	Noise Management SMS-06-GD-0273
		Strike underground services	A	Service search, cable locators, DSS	C-	Site controller	Excavation Work Plan SMS-06-FM-0376
		Slips, trips and falls due to excavation pit	B-	Adequate Lighting, Correct footwear, Briefing	C-	Site controller All staff	PPE Guide SMS-06-GD-0323
		Contact with Moving work trains	B+	Work areas to be restricted / isolated to ensure restricted access. PPE to be worn in accordance with SSMP. All employees to remain aware of and stand clear of moving work trains. Qualified safe working officer to control train movement. Worksite Protection.	D	Site Controller. All staff. Qualified safe working officer and worksite protection officer.	

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3	Place capping material and reconstruct formation as required	Contact with Moving Plant	B+	Work areas to be restricted / isolated to ensure restricted access. PPE to be worn in accordance with SSMP. All employees to remain aware of and stand clear of moving plant. Flashing lights and reverse beeper.	C-	Team Leader/ Work Group Leader Plant Operator.	Plant Risk Assessment SMS-06-GD-0403 Plant SMS-06-PR-0225 Excavation and Earthworks SMS-06-GD-0378
		Dust	C-	Controlled water spraying P2 Masks as required Stand clear	D	Site Controller All staff.	Air Quality Guide EMS-09-GD-0013
		Noise	C-	Hearing Protection	D	All Staff	Noise Management SMS-06-GD-0273
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4	Place bottom ballast	Contact with Moving Plant	B+	Work areas to be restricted / isolated to ensure restricted access. PPE to be worn in accordance with SSMP. All employees to remain aware of and stand clear of moving plant. Flashing lights and reverse beeper.	C-	Team Leader/ Work Group Leader Plant Operator.	Plant Risk Assessment SMS-06-GD-0403 Plant SMS-06-PR-0225 Excavation and Earthworks SMS-06-GD-0378
		Dust	C-	Controlled water spraying P2 Masks as required Stand clear	D	Site Controller All staff.	Air Quality Guide EMS-09-GD-0013
		Noise	C-	Hearing Protection	D	All Staff	Noise Management SMS-06-GD-0273

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5	Installation of Track	Refer to SWMS SMS-06-SW-1037 Track Laying with Track Laying Machine (TLM) SMS-06-SW-1046 Install and remove track panels SMS-06-SW-1053 Manual Track laying					
6	Drop the Top Ballast (using ballast trains or Dumpers etc)	Refer to SWMS SMS-06-SW-1070 Spot Ballasting using off track plant SMS-06-SW-1040 Top Ballasting by Ballast train					
7	Resurfacing (using tampers, regulators, stablizers etc)	Contact with moving Resurfacing machines	B+	Work areas to be restricted / isolated to ensure restricted access	D	Team Leader/ Work Group Leader Plant Operator.	Resurfacing SMS-06-SW-1060
8	Rail Adjustment and track welding / testing	Burns	C-	Work areas to be restricted / isolated to ensure restricted access	D	Welders	Rail Adjustment - Track Welding SMS-06-SW-1044
9	OHW adjustment	Contact with moving Plant and falling objects	C+	Work areas to be restricted / isolated to ensure restricted access	D	Team Leader/ Work Group Leader Plant Operator.	OHW Adjustments SMS-06-SW-1095

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.