

# Turnout Refurbishment

Issue date: 11/04/08

Review date: 18/02/11

<b>SWMS number:</b> SMS-06-SW-1062	<b>SWMS Name:</b> Turnout Refurbishment			<b>SWMS Team:</b> Track Review Team
<b>Custodian (Position):</b> Track Works Manager Commercial / Renewals	<b>Assumptions:</b>  Site specific risks are addressed and assessed in pre- work briefing			
<b>Approving Authority (Position):</b> Safety and Quality Manager, Commercial / Renewals	<b>Equipment/Plant/Tools:</b> <ul style="list-style-type: none"><li>• Tie handler, Tie Crane, Motor vehicles, Excavators, Loaders, Bobcat, Small Dumpers.</li><li>• Spike puller, Hand tools, Rail trolley, Tie Scarifier, Clippers.</li><li>• Cobra's / Hammers</li><li>• Lighting Towers (for night works)</li></ul>	<b>Records/Reporting:</b> <ul style="list-style-type: none"><li>• Worksite Protection Plan</li><li>• Pre-work Brief</li><li>• Fuel and Hydraulic Oil MSDS</li><li>• Daily Plant Checklist</li><li>• Track Certification Report</li></ul>	<b>Permits/licences required:</b> <ul style="list-style-type: none"><li>• Tie handler, Tie Crane, Tie Scarifier , Excavators, Loaders, Bobcat, Small Dumpers Operator Certificates</li><li>• TRMO certificate</li><li>• Track Vehicle Certificate</li></ul>	<b>Content reviewed by Technical expert (SME) and RailCorp safety professional (position including Div/Group)</b> Track Works Manager & SEQ Coordinator Asset Management Group Commercial / Renewals
<b>Applicable Standards, Codes of Practice and guidance:</b> <ul style="list-style-type: none"><li>• OH&amp;S Act 2000</li><li>• OH&amp;S Regulation 2001</li><li>• Rail Safety Regulation 2003</li><li>• RailCorp Network Rules &amp; Procedures</li><li>• RailCorp Safety Management System.</li><li>• MSDS for all chemicals and hazardous Substances used on site</li><li>• WorkCover NSW Plant Guide</li><li>• National Code of Practice for Manual Handling [NOHSC:2005]</li><li>• AS 2550.5-2002 Cranes, hoists and winches - Safe use - Mobile cranes</li><li>• AS 2958.0 2000 Earth Moving Machinery</li></ul>				

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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	Lay out materials	Person Hit by train	B+	Worksite protection in place Protection Officer assigned	D	TRMO certificate Track Vehicle Certificate	Plant SMS-06-GD-0225 Pre work Briefing SMS-06-FM-0163
		Equipment hit by train	B+		D		
		Moving plant and equipment	C-	Instruct workers on hazards in pre work briefing	D		
		Other workgroups on site	C-	Coordinate activities with team leaders	D		
2	Remove jewellery	Back strain	C-	Use correct techniques. Team lift for heavy or awkward items	D	All fastenings and plates removed. Timber removed and placed for recovery, sleeper bay clear	Manual Handling Guide SMS-06-GD-0001 PPE SMS-06-GD-0323 Workplace Risk Management SMS-06-PR-0104
		Repetitive Movement	C-	Minimise manual handling. PPE – gloves & safety boots	D		
	Remove timber/ steelwork	Noise	C-	PPE – hearing protection	D		
	Replace timber/ steelwork	Dust	C-	PPE – dust mask	D		
		Uneven & slippery surfaces	C-	Walk in cress or 6ft where possible or stand on sleepers. Ensure correct stance & firm footing	D		
		Slips and falls	C-	Identify hazards in pre-work briefing and remind workers to take care.	D		
3	Install jewellery	Manual handling	C-	Use correct techniques. If unsure get help or plant.	D	Current WorkCover license & RailCorp certification	Manual Handling Guide SMS-06-GD-0001
		Injury by machine	C-	Ensure that operator can see you. Instruct all other workers to keep clear of machine. PWB	D		Plant SMS-06-GD-0225 Pre work Briefing SMS-06-FM-0163 PPE SMS-06-GD-0323
		UV radiation	C-	PPE – sunscreen, hat and sunglasses. PWB	D		
4	Restore ballast profile and pack ballast underneath the sleeper if required	Manual Handling	C+	Use correct backsafes techniques. Team lift for heavy or awkward items	D	TRMO certificate	Manual Handling Guide SMS-06-GD-0001
		Dust	C-	PPE – dust masks. Wet area down	D		PPE SMS-06-GD-0323

SWMS Custodian: Track Works Manager Commercial Renewals

SWMS Approver: Safety Environment and Quality Manager Commercial Renewals

Number SMS-06-SW-1062

Prepared using SMS-06-TP-0026 v1.1; Custodian: Principal OHS Adviser; Approver: GM Safety Risk; Issue date: 18/06/06; Review date 18/06/09

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	Resurface track. as specified by the scope of works	Repetitive Movement	C-	Task rotation	D	Track Vehicle Certificate	Manual Handling Guide SMS-06-GD-0001
		Moving plant and equipment	C+	Identify hazards in pre work briefings. Instruct workers to keep clear of moving plant.	C-		Plant SMS-06-GD-0225
	Collect redundant materials and stockpile	Noise	C-	PPE – hearing protection. Do not exceed EPA limits	D		Workplace Risk Management SMS-06-PR-
		Pinch points	C-	Identify hazards in pre work briefing.	D		Pre work Briefing SMS-06-FM-0163
		Cuts and abrasions	C-	PPE – gloves	D		PPE SMS-06-GD-0323
		Lifting on uneven surfaces	C+	Team lift if plant not available	D		Workplace Risk Management SMS-06-PR-0104 Lifting Equipment Inspection SMS-16-FM-0089
5	Certify track	Hit by train	C+	Worksite protection plan	D		Network Rules & Procedures
		Uneven surfaces	C-	PPE- and lighting	D		PPE SMS-06-GD-0323 Workplace Risk Management SMS-06-PR-0104

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**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							Definition for Use - Regional & Local level (Workplace)
			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	
Consequence				F1	F2	F3	F4	F5	F6	
			Incredible	Improbable	Remote	Occasional	Probable	Frequent		
>10 Fatalities	C6	Disastrous	B-	B+	A	A	A	A	A	<p>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.</p> <p>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.</p> <p>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 likelihood in the workplace. Choose the most appropriate.</p> <p>To score the risk, follow the steps:</p> <p>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 matrices).</p> <p>2. Identify the likelihood of this level of consequence occurring. (This is done after considering the effectiveness of the current controls in place)</p> <p>3. Score the risk using the combination of likelihood and consequence ranking.</p> <p>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.</p>
2-10 Fatalities	C5	Catastrophic	C+	B-	B+	A	A	A	A	
1 Fatality (2-10 Major Injuries)	C4	Critical	C-	C+	B-	B+	A	A	A	
1 Major Injury	C3	Major	D	C-	C+	B-	B+	A	A	
1 or more Minor Injuries	C2	Minor	D	D	C-	C+	B-	B+	B+	
First aid treatment, or illness/injury not requiring treatment	C1	Negligible	D	D	D	C-	C+	B-	B-	