

Turnout Construction

Issue date: 11/04/08

Review date: 18/02/11

SWMS number: SMS-06-SW-1067	SWMS Name: Turnout Construction			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	Equipment/Plant/Tools: <ul style="list-style-type: none">Bobcat/ loader / Franna craneBars, Sleeper tongsApproved lifting chainsTenaka Drill, Air Hoses , CompressorsPandrol pullers, Sledge hammer, Track jack,Rail sawOxy / LPG Welding – Cutting Equipment	Records/Reporting: <ul style="list-style-type: none">Worksite Protection PlanPre-work BriefFuel and Hydraulic Oil MSDSDaily Plant Checklist	Permits/licences required: <ul style="list-style-type: none">Bobcat/ loader / Franna crane Operator CertificatesDogman Certificate	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: <ul style="list-style-type: none">OH&S Act 2000OH&S Regulation 2001Rail Safety Regulation 2003RailCorp Network Rules & ProceduresRailCorp Safety Management System.MSDS for all chemicals and hazardous Substances used on siteAS-4839 (Safe use of Oxy-fuel Gas Sys)AS 2550.5-2002 Cranes, hoists and winches - Safe use - Mobile cranesWorkCover NSW Plant GuideNational Code of Practice for Manual Handling [NOHSC:2005]				
				Personal Protective Equipment required: <ul style="list-style-type: none">Safety BootsHigh Visibility VestsHardhatsProtective ClothingSafety Glasses And as specified below. <ul style="list-style-type: none">GlovesLeggingsWelding Goggles / Gloves / SpatsDust Masks (as required)Hearing protection (as required)

Turnout Construction

Issue date: 11/04/08

Review date: 18/02/11

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 Down bearers	Moving Plant	C+	Maintain a safe distance from moving machine	D	Certified operator	Plant SMS-06-GD-0225
		Personal injury	C-	4 men to handle any timbers	D	Platelayers	Manual Handling Guide SMS-06-GD-0001
2	Placement of rails	Franna crane/ Loader	C+	Stand clear of machine and rails	D	Certified operator Certified dogman	Lifting Equipment Inspection SMS-16-FM-0089 Plant SMS-06-GD-0225
3	Placement of track plates	Personal injury	C-	2 men to carry heavy plates over 16 kg	D	Labourer	Manual Handling Guide SMS-06-GD-0001
4	Drilling of timbers	Trouser getting tangled with drill	C+	Use leg protection	D	Labourer	Pre-Work Briefing SMS-06-FM-0163
		Personal Injury	C+	Getting hit by air hose	D	Labourer	PPE SMS-06-GD-0323
5	Fastening of rails	Been hit by Pandrol clip	C-	Use pan puller on crossing plates	D	Platelayers	Manual Handling Guide SMS-06-GD-0001
6	Using jacks to lift rail	Trap fingers or feet under rail when dropping jack	C+	Person operating drop lever on jack to ensure all staff are clear of rail before proceeding	D	Platelayer	Lifting Equipment Inspection SMS-16-FM-0089
7	Cutting/Pulling of rail	Injury by rail saw	C+	Guards, Maintenance records on saw	D	Depot Records	Plant SMS-06-GD-0225
		Injury by oxy cutting	C-	Gloves, long garments, goggles	D	Ticketed oxy cutter	AS-4839 (Safe use of Oxy-fuel Gas Sys) Storage/Handling of Gases SMS-06-SW-0196
		Personal injury	C-	Ensure all staff clear and aware	D	All Staff	Manual Handling Guide SMS-06-GD-0001
		Unclipping/Clipping	C-	Wear correct footwear & hold down clip with foot when unclipping. Use puller to put on	D	Platelayer	PPE SMS-06-GD-0323

Turnout Construction

Issue date: 11/04/08
Review date: 18/02/11

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	<p>Definition for Use - Regional & Local level (Workplace)</p> <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> <ol style="list-style-type: none">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).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. <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	
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-	