

SWMS number: SMS-06-SW-1042	SWMS Name: Rail Sets	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	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: <ul style="list-style-type: none"> Pettibone/Loader Geismar Cranes Bolster pins, Webbing and Baulk timbers Hand Tools, Rail Tongs Communication devices 	Records/Reporting: <ul style="list-style-type: none"> Worksite Protection Plan Pre-work Brief Fuel and Hydraulic Oil MSDS Daily Plant Checklist 	Permits/licences required: <ul style="list-style-type: none"> Pettibone Operator Certificate (C2 and MR drivers licence) Loader (LL) Rough cutters ticket
Applicable Standards, Codes of Practice and guidance: <ul style="list-style-type: none"> 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 Rail Identification Standard ESC 220 – Rail and rail joints. TMC 202 – Track Fundamentals. TMC 221 – Rail installation and repair. National Code of Practice for Manual Handling [NOHSC:2005] AS 2958.0 2000 Earth Moving Machinery AS 2550.5-2002 Cranes, hoists and winches - Safe use - Mobile cranes 	Inspection requirements <ul style="list-style-type: none"> Nil 	Service schedule: Nil	PPE required: <ul style="list-style-type: none"> Safety Boots High Visibility Vests Hardhats Protective Clothing Safety Glasses Gloves (as required) Dust Masks (as required) Hearing protection (as required) Body harness and lanyard Horizontal static line Welders Gloves Face shield Training/Qualifications required: <ul style="list-style-type: none"> Construction Industry Induction RISI (Rail Industry Safety Induction)

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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	Loading Rail. Back Loading/ Loading Empty Rail Sets. Move Rail In Suitable Lengths To Loading Area	Back Strains	C-	Manual Handling techniques	D	All staff	PPE SMS-06-GD-0323 Manual Handling Guide SMS-06-GD-0001
		Hit By Moving Rail	B-	Exclusion zone	D	Site controller All staff	
		Poor communication between driver and site controller	C+	Radio Discrete channel between driver and site controller	D	Site controller Train Driver	
2	Cut Holes In Ends Of Rail For Unloading	Burns, Fires	C+	Exclusion zone Correct PPE Knapsack	D	Site controller All staff	PPE SMS-06-GD-0323
3	Remove Bolster Pins, Webbing And Baulk Timbers	Back Strains, Slips And Falls	C+	Gloves to be worn, staff to observe correct manual lifting procedures. Staff to take care when on train	D	Site controller All staff	PPE SMS-06-GD-0323 Manual Handling Guide SMS-06-GD-0001
4	Load Geismar Cranes	Hit By Swinging Objects	B-	All unauthorised staff to stand clear.	D	Supervisor	Plant SMS-06-PR-0225
		Fall from height	C+	Use designated access ladder	C-	Staff member	
5	Load Rail Onto Rail set	Back Strains, Burns, Fires, Hit By Moving Rail	C+	Operators to wear hearing protection, crane chasers to wear hard hats and gloves	D	Current Work-Cover Tickets (Crane Chaser)	Plant SMS-06-PR-0225 PPE SMS-06-GD-0323
6	Replace Baulk Timbers Not Used In Loading Between Rail Levels & Replace Pins In Inner Holes Where Possible	Cuts/Pinches	C+	Gloves to be worn, staff to observe correct lifting techniques.	D	Site controller All staff	Lifting Equipment Inspection SMS-16-FM-0089 PPE SMS-06-GD-0323
7	Tie down load on wagons	Slips, Trips and falls	C-	Correct PPE. Avoid trip hazards.	D	All staff	
8	Remove Geismar Cranes & Fasten The Webbing Straps Around Rail Load	Hit By Swinging objects	D	All unauthorised staff to stand clear.	D	Supervisor	Plant SMS-06-PR-0225
		Fall from height	C+	Use designated access ladder	C-	Staff member	

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9	Unloading rail using drag chains	Fall from height	C+	Use designated access ladder	C-	Staff member	
		Hit by moving rail	B-	Stand in designated safe place off wagon	D	Supervisor	
10	Begin Unloading The Rail By Moving The Train Forward, Pulling The First Two Rails Off	Struck By Rail	C+	Stand in designated safe place off wagon, all others to remain clear.	D	Site controller All staff	Plant SMS-06-PR-0225 Lifting Equipment Inspection SMS-16-FM-0089 PPE SMS-06-GD-0323
		Excessive noise	C+	Hearing protection	D	Site controller All staff	
11	Remove Straps And Place Them On The Floor Of The Rail set	Hit By Straps	D	Staff to stand well clear.	D	Site controller All staff	PPE SMS-06-GD-0323
12	Stockpile Rail In The Cess	Struck By Rail	C+	Stand clear of moving rail.	D	Site controller All staff	Plant SMS-06-PR-0225

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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

RailCorp Level 2 Risk Matrix - Regional & Local (Workplace)		Likelihood/Frequency							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 likelihood 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 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. Note: Where there are a range of credible consequences which may lead to a different level of risks and/or where the controls may be different. It may be useful to score the risk more than once.
		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-	