

Remove and Install and Grout Polymer Sleepers City Underground

Issue date: 10/04/08
Review date: 18/02/11

SWMS number: SMS-06-SW-1055	SWMS Name: Remove and Install and Grout Polymer Sleepers City Underground			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	Plant/Equipment/Tools: <ul style="list-style-type: none">FlagsLightsDetonatorsElectrical TesterCement MixerDust extractorPolymer sleeper and platesJackhammersHi-Rail truck and lightsPolymer blocksPlatesClips and BarsCircular SawPlywoodMPV Grout 60Electric Eel14pound HammerCrow barWater tank and hoses	Records/Reporting: <ul style="list-style-type: none">Worksite Protection PlanPre-Work BriefCUG Tunnel RegisterPossession NotesElectrical Tester log bookSite InductionProduction ReportConstruction Shift logDaily Plant ChecklistMaterial Safety Data Sheets	Permits/licences required: <ul style="list-style-type: none">Relevant Safeworking Certifications	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 siteTMC211 – Track Geometry and StabilityStandard DrawingsEC14 – Guide to Electrical Workers Safety EquipmentWorkCover NSW Plant GuideNational Code of Practice for Manual Handling [NOHSC:2005]				
	Inspection requirements: For Plant and Equipment inspections refer to Daily Plant Checklists accompanying the machine.	MIMS or METRE Ref: Nil	PPE required: <ul style="list-style-type: none">Steel Capped Lace-Up Safety BootsHigh Visibility Orange VestHard HatsHeavy Duty Safety GlassesProtective ClothingHearing Protection (as required)Gloves (as required)Dust Masks (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	Complete safety plans for works	Staff not qualified Not knowing risks Staff not briefed Hit by train Working in tunnels No PPE	A	Staff to be briefed Notification from Possession Officer of track possession Tunnel induction Correct PPE	C-	Supervisor Plant Operator All staff	Worksite Protection Plan Pre-Work Briefing SMS-06-FM-0163 Network Rules and Procedures CUG Induction
2	Tools and equipment	Insufficient lighting Electrical equipment not tested Tools not loaded Strained back loading gear on Hi-Rail	B+	Adequate lighting Certified person to test % tag equipment Tools check list Use mechanical lifting device	C-	Supervisor Plant Operator All staff	On site polymer block replacement CUG Guide lines
3	Jack Hammering Sleepers	Dust Noise Air hose disconnecting from jack hammer or air valve Slipping	B+ A B+ B+	Controlled water spraying Hearing protection Safety hose clip Adequate lighting	C- C- D C-	Supervisor Plant Operator All Staff	PPE SMS-06-GD-0323 Manual Handling Guide SMS-06-GD-0001 Workplace Risk Management SMS-06-PR-0104
4	Install polymer sleepers	Strained back Stubbed fingers Clips flying	A B+ B+	Trained in manual handling Gloves PPE Use clip applicators	C- C- D	All Staff	Pre-Work Briefing SMS-06-FM-0163

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5	Form up and grout	Splinters in eyes Cut fingers on circular saw Strained back Dust Electrocution Skin irritation Fire Clay	B+ B+ A B+ A B+ B+	Safety glasses/goggles Safety guards installed and maintained Job rotation on mixer Control watering of area, dust mask Tagged and tested equipment MSDS on site	C- C- C- C- C+ D C-	Supervisor All Staff	CUG Sleeper Installation guidelines
6	Clean and Strip form work	Slipping Sore back Splinters	B+	Adequate lighting Manual handling techniques Gloves and other appropriate PPE	C-	Supervisor All Staff	CUG Sleeper Installation guidelines

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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

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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>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-	