

Installation of Cologne Eggs and Alternate 1 on Polymer Blocks. City Underground

Issue date: 10/04/08
Review date: 17/02/11

SWMS number: SMS-06-SW-1054	SWMS Name: Installation of Cologne Eggs and Alternate 1 on Polymer Blocks. 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	Content reviewed by Technical expert (SME) and RailCorp safety professional (position including Div/Group) Track Works Manager & SEQ Coordinator Asset Management Group Commercial / Renewals		
Approving Authority (Position): Safety and Quality Manager, Commercial / Renewals	Plant/Equipment/Tools: <ul style="list-style-type: none"> • Flags • Lights • Detonators • Electrical Tester • 4 x Hilti Concrete coring drills • Rail Brace Template • Pneumatic Glue Applicator • Hi-Rail truck and lights • Cologne Eggs • Blocks and plates • Clips and Bars • Megapoxy mixers • Expansion foam applicator • Metal frames • Scrapers • Pneumatic Impact Gun 	Records/Reporting: <ul style="list-style-type: none"> • Worksite Protection Plan • Pre-Work Brief • CUG Tunnel Register • Possession Notes • Electrical Tester log book • Site Induction • Production Report • Construction Shift log • Daily Plant Checklist • Material Safety Data Sheets 	Permits/licences required: <ul style="list-style-type: none"> • Relevant Safeworking Certifications 	
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 		Service schedule: Team Leader	Training/Certifications required: <ul style="list-style-type: none"> • Construction Industry Induction • Track Safety Awareness and Electrical Awareness 	Personal Protective Equipment required: <ul style="list-style-type: none"> • Steel Capped Lace-Up Safety Boots • High Visibility Orange Vest • Hard Hats • Heavy Duty Safety

Installation of Cologne Eggs and Alternate 1 on Polymer Blocks. City Underground

Issue date: 10/04/08
Review date: 17/02/11

--	--	--	--	--

Installation of Cologne Eggs and Alternate 1 on Polymer Blocks. City Underground

Issue date: 10/04/08
Review date: 17/02/11

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	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	Coring holes	Electrocution Noise Foreign object in eyes Sore back	A A A B+	Circuit breakers Wear hearing protection Safety glasses Lighting	C+ C- C- C-	Supervisor Staff	Work Around Elect. Equip. SMS-06-GD-0268 PPE SMS-06-GD-0323 Manual Handling Guide SMS-06-GD-0001
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 PPE SMS-06-GD-0323 Manual Handling Guide SMS-06-GD-0001

Installation of Cologne Eggs and Alternate 1 on Polymer Blocks. City Underground

Issue date: 10/04/08
Review date: 17/02/11

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)
5	Form up, seal and Megapoxy	Strained back Dust Skin irritation Expansion foam on skin or face Electrocution	A B+ B+ B+ A	Use correct lifting and bending techniques Eye wear Surgical gloves PPE Electrical equipment tagged and tested	C- C- D D C+	All Staff	Pre-Work Briefing SMS-06-FM-0163 PPE SMS-06-GD-0323 Manual Handling Guide SMS-06-GD-0001 Work Around Elect. Equip. SMS-06-GD-0268
6	Remove frames	Slip and fall Cut hands	B+	Adequate lighting Gloves, use correct technique	C-	All Staff	Workplace Risk Management SMS-06-PR-0104 PPE SMS-06-GD-0323
7	Tighten bolts	Sore back Slip while tensioning nuts	B+	Job rotate repetitious bending Plant feet stable use correct technique	C-	All Staff	Manual Handling Guide SMS-06-GD-0001

Installation of Cologne Eggs and Alternate 1 on Polymer Blocks. City Underground

Issue date: 10/04/08
Review date: 17/02/11

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

Installation of Cologne Eggs and Alternate 1 on Polymer Blocks. City Underground

Issue date: 10/04/08
Review date: 17/02/11

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	
Consequence	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	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.	
	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	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.	
		F1	F2	F3	F4	F5	F6	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.	
>10 Fatalities	C6	Disastrous	B-	B+	A	A	A	To score the risk, follow the steps:	
2-10 Fatalities	C5	Catastrophic	C+	B-	B+	A	A	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).	
1 Fatality (2-10 Major Injuries)	C4	Critical	C-	C+	B-	B+	A	2. Identify the likelihood of this level of consequence occurring. (This is done after considering the effectiveness of the current controls in place)	
1 Major Injury	C3	Major	D	C-	C+	B-	B+	3. Score the risk using the combination of likelihood and consequence ranking.	
1 or more Minor Injuries	C2	Minor	D	D	C-	C+	B-	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.	
First aid treatment, or illness/injury not requiring treatment	C1	Negligible	D	D	D	C-	C+	B-	