

Terminate Existing Pole Top Arrangement And Connect To Cable Arrangement

Issue date: 08/04/08

Review date: 22/02/11

SWMS number: SMS-06-SW-1096	SWMS Name: Terminate Existing Pole Top Arrangement And Connect To Cable Arrangement			SWMS Team: Electrical Distribution Review Team
Custodian (Position): Electrical Services Manager, Commercial Renewal	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">• Rigging gear• Aerial earth to earth connections• Dynamometer, Sag Sticks, Hauling Line, Block and Tackle• Phase Testing Equipment, Megger Tester• Hand Tools• EWP	Records/Reporting: <ul style="list-style-type: none">• Worksite Protection Plan• Pre-work Brief• Electrical Test Tags• W.H.V.I./ 1500 V Authority Forms• Rigging Equipment Test Certification	Permits/licences required: <ul style="list-style-type: none">• Electrical Permit Holder	Content reviewed by Technical expert (SME) and RailCorp safety professional (position including Div/Group) Electrical Services Manager & SEQ Coordinator Asset Management Group Commercial Renewals
Applicable Standards, Codes of Practice and guidance: <ul style="list-style-type: none">• OH&S Act 2000• OH&S Regulation 2001• Rail Safety Act 2002• RailCorp Safety Policy• SMS-01-PO-0126• MSDS for all chemicals and hazardous Substances used on site• Electrical Safety Instructions• SAA Wiring Rules• RailCorp Safety Management System• Guide to Electrical Workers' Safety Equipment• AS/NZS 1891.4 – 2000 “Industrial fall arrest systems and devices – Selection, use and maintenance”• National Code of Practice for Manual Handling [NOHSC:2005]				
		MIMS or METRE Ref: Nil		
				Personal Protective Equipment required: <ul style="list-style-type: none">• Safety Boots• High Visibility Vests• Hardhats• Protective Clothing• Safety Glasses And as specified below. <ul style="list-style-type: none">• Fall Arrest Devices• Gloves• During all Site Works a FIRST AIDER MUST be Present

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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	Obtain WHVI	Contact with Electricity	B+	Check WHVI has the correct Information-Location,Time,and Date	D	Authorise Officer Mains	Electrical Network Safety Rules (ENSR) SMS-06-EN-0561
2	Earthing	Contact with Electricity	B+	Test Phase Dead prior Earthing	D	Transmission Linesman or above	Electrical Network Safety Rules (ENSR) SMS-06-EN-0560
3	Receive Electrical Permit Secure New Termination poles by Back Anchor/Bomb anchor Tension Guy wires	Strike by wire while tensioning	B+	Don't work on "silly side" Check rigging equipment for date of inspection and damage or defects Maintain regular communications with team	D	Team Leader	Electrical Permit SMS-06-EN-0577 Manual Handling SMS-06-GD-0001 Plant & Equipment Safety SMS-11-GD-0243
4	Ascend poles	Fall from Heights	A	Use EWP where practicable Use Harness / restraint or Attached climbing	D	Team Member	Working at Heights SMS-11-GD-0240
5	Rig and Secure Phases to Pole	Strike by wire while tensioning	B+	Don't work on "silly side" Check rigging equipment for date of inspection and damage or defects Maintain regular communications with team	D	Team Member	
6	Disconnect and lower phases to ground	Losing control of the wire	B+	Using Hauling line, Block and Tackle or Tracktel	D	Team Member	

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7	Remove Redundant pole	Struck by falling objects	B+	Hard Hats Defined exclusion zones if practicable (eg bollards, tape) Use tool bags and haul lines	D		
		Struck by moving objects	B+	Keep clear obey dogman instructions	D	Team Member	
		Manual handling	B-	Back safe Instruction, job rotation	D	Team Member	
8	Install Termination Arrangement	Fall from Heights	A	Use EWP where practicable Use Harness / restraint or Attached climbing	D	Team Member	
		Cuts and Abrasions	C+	PPE , Gloves	D	Team Member	
		Crush injuries or Termination Cross Arm Movement	C+	Beware of Pinch points	D	Team Member	
9	Re establish phases termination	Struck by moving wire	B+	Have wire rigged until wire is connected	D	Team Member	Electrical Equipment SMS-06-GD-0268
10	Retention phases	Struck by moving wire	B+	Have wire rigged until wire is connected	D	Team Member	Electrical Equipment SMS-06-GD-0268
11	Re instate Ariel Earth if applicable	Fall from Heights	A	Use EWP where practicable Use Harness / restraint or Attached climbing	D	Team Leader	

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12	Phase's connect to cable head	Incorrect Phasing	B+	Perform phase check	D	Substation Technician	Electrical Network Safety Rules (ENSR) SMS-06-EN-0550
13	Remove Earths	Fall from Heights	A	Use EWP where practicable Use Harness / restraint or Attached climbing	D	Team Leader	Electrical Network Safety Rules (ENSR) SMS-06-EN-0560
14	Restore Supply	Switching	B+	Instructions from the WHVI	D	Authorise Officer Mains	Electrical Network Safety Rules (ENSR) SMS-06-EN-0561
<input type="checkbox"/>	Site Specific Hazard						

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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) 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 or 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-		