

# Inspect/Test Low Voltage Electrical Equipment

Issue date: 04/10/07  
Review date: 04/10/10

<b>SWMS number:</b> SMS-06-SW-0748	<b>SWMS Name:</b> Inspect / Test Low Voltage Electrical Equipment			<b>SWMS Team:</b> Warwick Jackson Brendan Simpson Peter McLeay Trent Cardwell
<b>Custodian (Position):</b> Safety and Systems Manager, Buildings and Sidings, L Serrao	<b>Assumptions:</b> Visual Inspection, Minor housekeeping or taking of readings on low voltage assets Fine weather, daylight, power on Mandatory PPE is worn			
<b>Approving Authority (Position):</b> General Manager, Infrastructure	<b>Plant/Equipment/Tools:</b> <ul style="list-style-type: none"><li>Binoculars</li><li>Electrical meters</li><li>Test equipment</li><li>LV rescue kit</li></ul>	<b>Records/Reporting:</b> <ul style="list-style-type: none"><li>Teams 3 reports</li><li>Registers (SMS)</li><li>Log books</li></ul>	<b>Permits/licences required:</b> Licences as issued by the Office of Fair Trading	<b>Content reviewed by Technical expert (SME) and RailCorp safety professional</b> (position including Div/Group) Regional Electrical Maintenance Engineer South Safety and Systems Manager Buildings and Sidings
<b>Applicable Standards, Codes of Practice and guidance:</b> <ul style="list-style-type: none"><li>ESAA Guide to Electrical Safety Systems</li><li>Workcover CoP: Noise Management and Protection of hearing at work</li><li>AS/NZS 3018</li><li>EP 17000006 SP</li><li>AS/NZS 3760</li><li>Emergency Lighting</li></ul>				
	<b>Inspection requirements</b> <ul style="list-style-type: none"><li>Electrical test equipment calibration</li></ul>	<b>Service schedule:</b> Teams 3	<b>Training/Qualifications required:</b> Authorised Person LV Backsafe Instruction RISI Greencard	<b>PPE required:</b> <ul style="list-style-type: none"><li>185 gsm 100% cotton clothing in accordance with NENS09</li><li>Standard PPE as applicable</li><li>Hard Hat</li><li>Gloves</li><li>Eye / Face Protection</li><li>Hearing Protection</li></ul>
		<b>MIMS or METRE Ref:</b> N/A		

## LEGEND

**ESAA** : Electricity Supply Association of Australia  
**CoP** : Code of Practice  
**RISI** : Rail Industry Safety Induction  
**Green Card** : Construction Industry Induction Card

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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	Carry out Inspection	Contact with Electricity	B-	Maintain electrical clearances	C-	Team Member	SMS-06-SW0276 SMS-06-SW0271
		Muscular stress / manual handling	C+	Backsafe instruction	D	Team Manager Team Member	SMS-06-GD0001
		Contact with sharp objects	B-	Remove or blunt if possible. Use gloves	C+	Team Member	SMS-06-SW0405
		Crush injuries from enclosure doors	B-	Secure moving parts if possible. Remain clear of crush zone	D	Team Member	
		Slips and trips on same level	C-	Identify hazard. Remove or barricade potential hazards. Vigilance	D	Team Member	
		Contact with toxins for spiders, wasps etc	C+	Inspect area. Spray in accordance with MSDS. Use gloves .	C-	Team Member	MSDS for insect spray
		Noise from switchgear equipment	C-	Use hearing protection where signposted	D	Team Member	SMS-06-GD0323
		Hazardous materials	C-	Briefed on site hazardous materials register	D	Team Manager Team Member	SMS-06-GD0198 Dangerous Goods and hazardous substances risk assessment
		Working on platforms	C+	In accordance with SWI	C-	Team Manager Team Member	Appropriate SWMS
		Working in yards and sidings	B-	Work in accordance with SWMS	C+	Team Manager Team Member	Appropriate SWMS

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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							<u>Definition for Use - Regional &amp; Local level (Workplace)</u>  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-		