1500v DC OHW Maintenance LIVE

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

SWMS number:
SMS-06-SW-0751

SWMS Name:
1500v DC OHW Maintenance LIVE

SWMS Team:
Steve Goodwin
Anne McDougal
Shane Brown
Craig Atchison
Colin Marshall
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Alan Merritt
Eric Cheek
Mark Holmes
Kol Navidi
Michael Holt

Custodian (Position):
Business Systems Officer
Metro North Region

Michael Swadling

Assumptions:
Fine weather, daylight hours, covers working live on OHW at heights

Content reviewed by Technical expert (SME) and RailCorp safety professional (position including Div/Group)

Electrical Maintenance Engineer, Illawarra

SEQ Systems Administrator

Approving Authority (Position):
General Manager, Infrastructure Division

Applicable Standards, Codes of Practice and guidance:

- ESAA Guide to Electrical Safety Systems
- WorkCover Guide; Safe Working at Heights
- WorkCover CoP: Moving Plant on Construction Sites

Plant/Equipment/Tools:

- Linesman's tools
- Hand & battery powered tools as required
- Rigging tools as required (eg chain block, strops, "come along")
- Ladder
- Approved measuring equipment

Records/Reporting:
Applicable maintenance records
TEAMS 3

Permits/licences required:
Special 1500v instruction if applicable

Inspection requirements

- daily plant & equipment check as required
- electrical equipment testing

Service schedule:
E08005, E08009

MIMS or METRE Ref:

Training/Qualifications required:

Authorised Traction Live Line Worker

Manual Handling techniques

PPE required:

- Standard PPE
- Fall arrest equipment, or
- Fall restraint equipment as required
- Hard Hats
- 185gsm 100% cotton clothing in accordance with SMS-06-SW-0538
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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	Maintain OHW & equipment	Struck by mobile plant	B-	Sound horn when moving Use spotter where necessary	B-	Team Member	
		Contact with electricity	A	Maintain clearances and use insulated tools	B-	Supervisor	ENSR
		Fall from heights	B+	Use Harness / restraint Work in accordance with SWI for Attached climbing	C+	Supervisor	SWI: Fall Arrest Systems (all)
		Struck by falling object	C+	Hard Hats Defined exclusion zones if practicable	C-	Team Member	
		Struck by moving object	B-	Don't work on "silly side" Use correct rigging techniques Maintain regular communications with team	C+	Team Member	SWI: Lifting Gear – Slings and Ropes
		Crush injury from hand tools	C+	Be aware of pinch points	C+	Team Member	
		Manual Handling / Muscular Stress	B+	Manual Handling Training Use mechanical aids where available Position so as not to over stretch	B-	Team Manager Supervisor	SWI: Lifting Gear - Devices

RailCorp Level 2 Risk Matrix - Regional & Local (Workplace)

		Likelihood/Frequency						
		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-

Extreme
High
Medium
Low

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 liklihood 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 matricies).

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.

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