



ABN 31989961526; ACN 639092498

Safe Work Method Statement Form

General Electrical Work

Company Name /ABN:	J Eacher Electrical PTY LTD	SWMS Title / No:	001	Version No:	2
Project Name:		Job Location:			
Job Details / Start Date / Completion Date: (include details of High-Risk Work - refer below)	General Electrical Work	Date to Be Reviewed	Quarterly		
Plant / Equipment to be Used:	Power tools	Plant Risk Assessment:	To be carried out visually by tradesperson prior to use		
List the Emergency Equipment Required:	First aid kit, Emergency Management plan				
Details of Maintenance Checks Required for this Activity:	Check Tools are Tested and calibrated where necessary				
Relevant Competencies / Qualifications / Licences Required:	Competent in the use of power tools, White card				
Legislation / Standards / Codes Applicable (as documented in the Work Instructions):	AS3000, WHS ACT + REG, Managing Electrical Risk in The Workplace Code Of Practise				
Chemicals and Substances Used:	Cutting Compound	Material Safety Data Sheet Name:	Trefoled Cutting Compound		
Manager Responsible / Name / Position / Company:					
Persons Responsible for Developing: (Must include name of at least one manager and one worker involved in this SWMS development).	Name:	Signature:	Title:	Site Supervisor	
	Name:	Signature:	Title:	Site Safety Officer	
Manager Approval / Date:	Name:	Signature:	Title:	Construction Manager	

Definitions of High Risk Work:



<ul style="list-style-type: none"> A person could fall more than 2 metres; Work on telecommunications towers; Demolition work; The removal or likely disturbance of asbestos; Structural alterations requiring temporary support to prevent collapse; Confined space entry; Trench or shaft excavations > 1.5 metres deep; 	<ul style="list-style-type: none"> Tunnel construction; Use of explosives; On or near pressurised gas distribution mains or piping; Work on or near chemical, fuel or refrigerant lines; Work on or near energised electrical installations or services; Work in an area that may have a contaminated or flammable atmosphere; 	<ul style="list-style-type: none"> Using tilt-up or precast concrete; Work on or adjacent to roadways or railways used by road or rail traffic; Where there is any movement of powered mobile plant; Where there are artificial extremes of temperature; Work in, over or adjacent to water or other liquids where there is a risk of drowning; Any work involving diving.
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HAZARD IDENTIFICATION RISK MANAGEMENT CALCULATOR

Consequence Score	1	2	3	4	5
	Insignificant	Minor	Moderate	Major	Catastrophic
People	Slight Injuries- First Aid Treatments (cuts/bruises)	Significant Injuries - Medical Treatment, non-permanent injury	Major Injuries - Incapacitations or requiring time off work	Single Fatality or Permanent Disability	Multiple Fatalities
Environment	Short term damage / Low financial loss, negligible environmental impact	Limited but medium term damage / On-site release immediately contained	Major but recoverable ecological damage / On-site release contained with outside assistance	Heavy ecological damage with costly restoration / Off-site release contained with outside assistance and little detrimental impact	Permanent widespread ecological damage / Toxic release off-site with detrimental effect / Likely EPA prosecution

Consequence Score			1	2	3	4	5
			Insignificant	Minor	Moderate	Major	Catastrophic
Likelihood	A	Almost Certain The event is expected to occur in most circumstances / Has occurred frequently at the location	Low (5)	Moderate (10)	Very High (18)	Extreme (23)	Extreme (25)
	B	Likely The event will probably occur in most circumstance / Has occurred frequently in the company	Low (4)	Moderate (9)	Very High (17)	Very High (20)	Extreme (24)
	C	Possible The event should occur at some time. Likely to occur sometime / Has occurred many time in the industry, but not in the company	Low (3)	Moderate (8)	High (13)	Very High (19)	Very High (22)
	D	Unlikely The event could occur at some time. Unlikely but possible / Has occurred once or twice in the industry	Low (2)	Low (7)	High (12)	High (15)	Very High (21)
	E	Rare The event may occur only in exceptional circumstances. Assumed it may not be experienced / Unheard of in the industry	Low (1)	Low (6)	Moderate (11)	High (14)	High (16)

Risk Control Hierarchy

BEST 	1	Elimination: e.g. remove risk of electrocution by using compressed air driven tools.
	2	Substitution: e.g. Use a safer Chemical.
	3	Isolation / Separation: e.g., energy isolation
 WORST	4	Engineering Controls: e.g. Guards on power tools, effective barriers & edge protection, enclose noisy machinery, use machines to lift heavy loads.
	5	Administrative Controls: e.g. Training in lifting techniques
	6	Personal Protective Equipment: PPE

Step Number	Step 1 Process/ Work Sequence Job Steps	Step 2 Potential Hazard Aspects / Risk Impacts	Step 3 Risk/Hazard Score			Step 4	Step 5 Control Treatment Measure(s)	Step 6 Residual Risk Score			Step 7 Action By
	Break the activity into individual steps. Each step should be in a logical sequence starting from the commencement to the conclusion of the activity.	Identify the risks / hazards associated with each step. Consider energy sources such as pressure, biological, vibration, noise, radiation, biomechanical, thermal, gravity chemical/substances, plant and equipment.	Consequence	Likelihood	Level of Risk	Hierarchy of Controls No:	Use the Hierarchy of Controls 1. Eliminate, 2. Substitute, 3. Isolate, 4. Engineering, 5. Administration, 6. PPE	Consequence	Likelihood	Level of Risk	Person(s) Responsible
1	Tool selection	Improper tool selection	3	C	H	1, 5	<ul style="list-style-type: none"> Ensure understanding of task to be undertaken Ask for help if necessary (contact Safety Regulator or industry body for advice) Do not use tools you are uncomfortable or inexperienced with (e.g. Quick cut) 	1	C	L	Operator
		Condition of tool	3	C	H	1, 5	<ul style="list-style-type: none"> Any tool to be used must be visually inspected before being taken to the field for use Tool test tag must be in date and in accordance with AS3760 Any out of date or damaged tool must be removed from service and tagged out until problem is rectified 	1	C	L	Operator
2	Setting up Power tools	Slipping and Tripping, Personal injury	3	C	H	1,4, 5	<ul style="list-style-type: none"> Ensure work zone is clear of obstructions Make sure work is done on a clean, level surface 	2	D	L	Operator
		Cuts and Abrasions, Personal Injury	3	C	H	3,6	<ul style="list-style-type: none"> Inspect to ensure that keys and adjusting wrenches are removed from tool before turning it on. Secure work, by using a vice or clamping, so that hands are free to operate machine properly Wear appropriate PPE for the task (Gloves, safety glasses) 	2	D	L	Operator

3	Operating power tool	Slipping and Tripping, Personal injury	3	C	H	1,4,5	<ul style="list-style-type: none"> Ensure work zone is clear of obstructions Make sure work is done on a clean, level surface 	2	D	L	Operator
		Cuts and Abrasions, Personal Injury	3	C	H	3,6	<ul style="list-style-type: none"> Refer to manufacturer's instructions Inspect to ensure that keys and adjusting wrenches are removed from tool before turning it on. Secure work, by using a vice or clamping, so that hands are free to operate machine properly Wear appropriate PPE for the task (Gloves, safety glasses) 	2	D	L	Operator
		Electrocution	4	C	VH	1,4,5	<ul style="list-style-type: none"> All power tools to be tested and tagged with current dates in accordance with AS3760 RCD's to be used on all power tools Extension leads not to exceed 30m Joining of power leads is prohibited Switch off and disconnect leads before rolling them up. Power leads to be protected against potential damage All damaged power tools and equipment to be taken to site supervisor Do not operate power tools in wet conditions 	4	E	H	Operator
		Foreign bodies in eye, Personal Injury	3	C	H	6	<ul style="list-style-type: none"> Safety glasses and gloves to be worn at all times Ensure all personal in work zone are wearing safety glasses Double eye protection may be required depending on type of power tool used 	3	E	M	Operator

		Pinching and Jamming, Personal Injury	2	C	M	4,5,6	<ul style="list-style-type: none"> Where practical wear safety gloves (recommended not to be worn when using rotating equipment) Make sure tool bits are sharp and in good working order Select correct speed for the operating of cutting and drilling of the material being worked on. Maintain a firm grip on power tool Ensure a stable footing and stance during operating 	2	D	L	Operator
		Entanglement, Personal Injury	4	C	VH	6	<ul style="list-style-type: none"> Dress properly; don't wear loose baggy clothing or jewellery, as they can be caught in moving parts. Ensure long hair is secured so as not to present a possibility of entanglement 	4	D	H	Operator
		Noise and vibration	2	C	M	4, 5, 6	<ul style="list-style-type: none"> Hearing protection must be worn Gloves can dampen vibration Take regular breaks Share task 	1	C	L	Operator
4	Housekeeping	Splinters, cuts, slips and trips	2	C	M	1, 5, 6	<ul style="list-style-type: none"> Work area must be returned to pre work condition after task is completed Appropriate PPE to be worn when cleaning up to protect from cuts and splinters (e.g. gloves) Any job related material to be stored in such a way so as not to create a hazard 	1	D	L	Everyone involved and/or affected
5	Using hand drills	Entanglement in attachment, drill bit coming out of chuck during use, De-gloving injury, strike injury	3	D	H	3, 4	<ul style="list-style-type: none"> Ensure drill bit is tightened appropriately in the chuck. Do not leave the chuck key in the chuck. Keep hands, clothing, gloves etc free of moving drill bit during use. Ensure drill bit is sharp and in good condition prior to use. 	3	E	M	

6	Using sanders/ grinders	Noise, dust, moving discs, Hearing loss, eye/respiratory injuries, cuts/lacerations	3	C	H	4,5	<ul style="list-style-type: none"> Use hearing and eye protection. Use a dust mask as necessary. Don't be tempted to touch moving parts on the machine. To be issued with a hot work permit if required. 	3	E	M	
7	Using drop saw	Moving blade, struck by materials being cut, Cuts/lacerations, strike injuries to face and body	3	B	V H	3, 4, 5	<ul style="list-style-type: none"> Check the machine by turning it on and off before cutting any materials. The blade should move freely. Use the correct blade for the material to be cut. Slowly lower the blade towards the material to be cut. Keep your hands free of the spinning blade. When the cut is finished, release the downward pressure on the saw and it will return to its original position. Turn the power off. Wait for the blade to stop spinning before removing the materials you cut from the saw. To be issued with a hot work permit if required. 	2	D	L	
	Tool selection	Improper tool selection	2	C	M 8	5	<ul style="list-style-type: none"> Ensure understanding of task to be undertaken Ask for help if necessary (contact Safety Regulator or industry body for advice) Do not use tools you are uncomfortable or inexperienced with (e.g. Quick cut) 	2	D	L 7	Employee
		Condition of tool	2	C	M 8	5	<ul style="list-style-type: none"> Any tool to be used must be visually inspected before being taken to the field for use Tool test tag must be in date and in accordance with AS3760 Any out of date or damaged tool must be removed from service and tagged out until problem is rectified 	2	D	L 7	Employee

	Use of tool	Pinching, stabbing, cutting, puncturing	2	C	M 8	5, 6	<ul style="list-style-type: none"> Tools used according to manufacturers intended purposes Wear appropriate PPE e.g. gloves Always cut away from your body when using a safety knife No horseplay involving tools Tools to handed not thrown to other personnel 	2	D	L 7	Employee
	Delineate work area/exclusion zone	Manual Handling (moving and installing of bollards, star droppers etc).	1	D	L	1, 4, 5, 6	<ul style="list-style-type: none"> Use mechanical aid wherever possible (e.g. Cranes, Telehandler). Correct manual handling techniques used at all times. Incorporate team lifting techniques Wear correct PPE eg gloves Do not use tools in a way for which they are not designed. 	1	E	L	Operator
		Impede site movement , block emergency site access and/or egress	5	D	V H	2, 5	<ul style="list-style-type: none"> Liaise with all site personnel prior to set up by way of a toolbox meeting or pre start meeting Make temporary alternate evacuation plan and alert all affected site personnel 	1	E	L	Operator
	Operating EWP's	Site hazards (physical obstacles, uneven ground, people)	3	C	H	1,2, 5	<ul style="list-style-type: none"> Plant MUST have induction consisting of "Plant Site Induction Checklist" and "Plant Risk Assessment" "Daily Plant Log Book Checklist" to be completed. Operators license to be on file in office Plan route to be travelled Avoid/relocate obstacles where possible Avoid uneven/uncompacted ground Only to be operated by a licensed, competent person Ensure all visual and audible alarms are in working order Adhere to site speed limit Spotter to be used if necessary Survey route for obstacles before driving Stick to roadways and level ground Position machine in a way to not come in contact with equipment 	1	C	L	Operator

		Improper use	4	C	V H	1,5	<ul style="list-style-type: none"> Do not use EWP's to wheel roll backfill Do not use EWP's for anything other than a personnel lift Do not attach anything to the outside of the handrails Do not stand on the handrails Do not exceed manufacturers SWL No maintenance to be carried out on plant by Tenix staff 	1	C	L	Operator
		Live equipment, electrocution	4	C	V H	1, 4, 5	<ul style="list-style-type: none"> Know full operational envelope of equipment Take note of overhead power lines if present. Clearances: <ul style="list-style-type: none"> 11kv - 0.3m 33kv - 0.45m 66kv - 0.7m 132kv - 1.2m 275kv - 2.0m 	2	C	M	Operator
		Falls	4	C	E	1, 3, 5, 6	<ul style="list-style-type: none"> Fall protection must be worn whilst operating a boom lift Fall protection to be inspected for damage before use Do not operate while fully extended Do not operate on slope where gradient exceeds manufacturers specifications Only to be used on solid ground Try to avoid operating on freshly backfilled excavations A rescue procedure will be in place for fallen workers. All workers involved in work at height will be trained in rescue procedures. The rescue procedure will sufficiently minimise the risk of suspension trauma to fallen workers 	1	C	L	Operator
		Environmental impact (spills, leaks, noise, fumes)	2	C	M	1, 2, 5, 6	<ul style="list-style-type: none"> Know location of and make accessible site spill kit (contact the EPA and/or the Department of the environment in the event of contamination the land or water) Hearing protection to be worn whilst around excessive noise levels Vehicle to be turned off when practicable to limit excessive noise and fumes Use in a well ventilated area 	2	D	L	Everyone involved and/or affected

		Contact with people	4	D	H	5,6	<ul style="list-style-type: none"> High vis clothing to be worn at all times Safe distances to be kept from moving plant at all times 	3	E	M	Everyone
Working on equipment at heights		Falls	4	C	V H	4,5, 6	<ul style="list-style-type: none"> Safety harness and lanyard to be worn and attached to a fixed anchor point. Inspect fall arrest equipment prior to each use. Only licensed operators to operate EWP 	3	D	H	Team Leader
		Electrocution	4	C	V H	1,3, 5	<ul style="list-style-type: none"> Minimum approach limits to be maintained at all times Use spotter/safety observer if necessary If work area is set up, all work must be carried out in the confines of the yellow rope. Machine positioned so that minimum approach limits can't be breached. 	3	D	H	Team Leader
Cable drum set up		Manual handling	3	D	H	1, 5, 6	<ul style="list-style-type: none"> Use mechanical means if possible Position drum so it has to be moved minimal times Clear route of tripping hazards where possible or if unable ;- Make tripping hazards known to members of lifting team Do not put your hands in places where they can be crushed whilst moving or standing cable drum Wear appropriate PPE e.g. Gloves 	1	D	L	Everyone involved and/or affected
Installing field cables		Manual handling	3	C	H	1, 2, 4, 5, 6	<ul style="list-style-type: none"> Use mechanical means if possible Do not over exert yourself Stretch and warm up before physical work Pull cables in teams Plan every pull to minimise strain put on individuals Rotate personnel Plan cable pulls for early in the morning to limit heat exposure Wear appropriate PPE e.g. Gloves 	2	D	L	Everyone involved and/or affected

		Use of hand tools	2	C	M	4, 5, 6	<ul style="list-style-type: none"> Use correct tool/s for the job Keep fingers free when using cutting tools Wear appropriate PPE e.g. Gloves 	2	D	L	Everyone involved and/or affected
		Slips and trips	3	C	H	1, 5	<ul style="list-style-type: none"> Use mechanical means if possible Inspect surface prior to commencing cable pull to ensure solid footings Pull cables from a broad fixed stance instead of walking cables so as to minimise slipping hazards If you choose to walk the cables, check route for slipping and tripping hazards 	2	D	L	Everyone involved and/or affected
	Stripping cable	Hand injuries, cuts	2	C	M	5, 6	<ul style="list-style-type: none"> Use correct stripping tool Strip cable away from body Brass tape to be put in a bin immediately after stripping to minimise handling Wear appropriate PPE e.g. gloves 	2	D	L	Operator
	Terminating cable	Hand injuries	2	C	M	5, 6	<ul style="list-style-type: none"> Care to be taken to minimise potential for hand injuries Wear appropriate PPE e.g. gloves 	2	D	L	Operator
		Electrocution	4	C	VH	1, 3, 5	<ul style="list-style-type: none"> Live work is not permitted Test before touch Keep communication lines open between all workers on site and in the work group Personal danger tags to be applied to all isolation points when the potential for livening of cables exists. 	2	C	M	Everyone involved and/or affected
	Housekeeping	Splinters, cuts, slips and trips	2	C	M	1, 5, 6	<ul style="list-style-type: none"> Work area must be returned to pre work condition after task is completed Appropriate PPE to be worn when cleaning up to protect from cuts and splinters (e.g. gloves) Any job related material to be stored in such a way so as not to create a hazard 	1	D	L	Everyone involved and/or affected

	Assign Roles	Under qualified/experienced person assigned to role	2	C	M	5,6	<ul style="list-style-type: none"> If working under permit system the permit issuer recommended to hold "UEPOPS301B - Conduct single energy source isolation procedures for permit to work" or equivalent Permit issuer to have minimum 5 years in field experience 	1	D	L	Permit Issuer
		Insufficient experience in work group	2	C	M	5,6	<ul style="list-style-type: none"> Work group members must have trade or engineering background In the case of electrical isolations, work must be performed by a licensed electrician Work group members recommended to hold "UEPOPS301B - Conduct single energy source isolation procedures for permit to work" or equivalent 	1	D	L	Isolation Officer
		Insufficient number of personnel	2	C	M	5	<ul style="list-style-type: none"> Project manager must identify and consult with work group at project planning level to ensure there is adequate personnel for the task If it is found there is insufficient personnel then project managers must liaise with HR to arrange additional members for the work group 	1	D	L	Project Manager
2	Plan Isolation Procedure	Insufficient experience in work group	2	C	M	5,6	<ul style="list-style-type: none"> Planning process should take into account Hazard Identification and Risk Management Work group members must have trade or engineering background In the case of electrical isolations, work must be performed by a licensed electrician Work group members recommended to hold "UEPOPS301B - Conduct single energy source isolation procedures for permit to work" or equivalent Have junior members of the work group involved in all levels of the Isolation procedure for 1 year prior to being used for hands on work 	1	D	L	Isolation Officer

		Steps missed	4	D	H	5	<ul style="list-style-type: none"> Ensure that the most senior members of the work group are used as the Isolation Officer and Permit Issuer 	1	E	L	Project Manager
		Working off wrong drawing revision	3	C	H	5	<ul style="list-style-type: none"> Check with document controller/senior draftsmen prior to creating isolations from drawings Visit site and clarify/confirm drawings are correct prior to use 	1	E	L	Isolation Officer
		Time allocated for work not long enough	1	C	L	5	<ul style="list-style-type: none"> Allocate extra time Planner to liaise with workgroup to set a realistic timeframe for works or secure additional personnel resources Plan the required time for isolation and work to be performed off statistics from previous similar work 	1	E	L	Project Manager
3	Ensure Correctly Resourced	Not enough locks/tags for the task	2	C	M	5,6	<ul style="list-style-type: none"> During planning stage count the number of required locks and tags Order additional locks as spares Locks and tag system and styles must comply with Australian Standards 1319 	1	D	L	Isolation Officer
		Isolations cannot be performed causing project delays and damage to reputation	2	C	M	5,6	<ul style="list-style-type: none"> Ensure work group have necessary resources to complete task During planning stage identify key points at which the task may need to be cancelled and or rescheduled 	1	D	L	Project Manager

4	Ensure Correctly trained	Inadvertent trips or release of energy	3	C	H	5,6	<ul style="list-style-type: none"> • Work group members recommended to hold "UEPOPS301B - Conduct single energy source isolation procedures for permit to work" or equivalent • Work group members should hold Certificate III trade qualifications or greater • Follow every step of the isolation procedure • Do not skip steps, follow the procedure sequentially • Ensure tools are tested, tagged, calibrated and in good working order. • Correct PPE must be worn during isolation to protect against any release of energy whether intentional or unintentional. Correct PPE may include but not be limited to: hard hat, steel cap boots, full length fire retardant clothing, overalls, safety glasses/goggles, face shield, leather rigging gloves, LV Rescue kit including LV gloves 	2	D	L	Project Manager
		Isolations cannot be performed causing project delays and damage to reputation	2	C	M	5,6	<ul style="list-style-type: none"> • Ensure planning and task specific isolation has been undertaken correctly by having it checked over by the entire work group • Contracts shall be written to account for the difficulties with isolations and account for the possibilities of not being able to complete planned work 	1	D	L	Project Manager
6	Perform Prestart Meeting	Communication break down	3	C	H	5	<ul style="list-style-type: none"> • Ensure all members are present and have signed attendance sheet • Involve work group members in prestart by engaging with them to answer questions or host the prestart themselves • Ask work group members questions • Prestart meetings are a time of the day where supervisors should assess the work group for any signs of fatigue and manage that workers fatigue • Ensure members are given an opportunity to raise issues in an open and receptive environment • Verbal and hand communication methods should be established prior to commencing work and communication lines should be kept open at all time 	2	D	L	All persons

7	Perform Isolations	Steps in isolation skipped	4	C	V H	5	<ul style="list-style-type: none"> • Use an isolation check list to ensure isolations are performed in sequence. • Isolation checklist should include prompts to remind isolation team to stop work if a step in the isolation cannot be performed 	2	C	M	Isolation Officer
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		Electrocution	4	C	V H	5,6	<ul style="list-style-type: none"> • Team leader to brief team on all potential hazards and scope of work. • Instruction on areas that have been proven dead and earthed remembering that all equipment should be treated as live. • Emergency procedures explained • All switchboards and associated equipment to be treated as live unless proven dead and earthed. • Do not deviate from scope of works • All necessary permits to be filled in • Seek advice from team leader if issues arise during works. • All personnel to be fully briefed prior to any work commencing, site specific SWMS to be completed • Wear LV insulated gloves, Have LV rescue kit in vicinity and trained personnel in LV rescue. • All work group members participating in works in or around live electrical boards/plant must have HLTAID001 Provide cardiopulmonary resuscitation, UETDRRF06B Perform rescue from a live LV panel • Wear fire retardant clothing • Fire retardant clothing must be worn correctly – no synthetic clothing under fire retardant clothing, clothing fully zipped or buttoned. • Correct PPE must be worn during isolation to protect against any release of energy whether intentional or unintentional. Correct PPE may include but not be limited to: hard hat, steel cap boots, full length fire retardant clothing, overalls, safety glasses/goggles, face shield, leather rigging gloves, LV Rescue kit including LV gloves • PPE Requirements as per PPE Policy • Minimum two people in control room for work to proceed. • Confirm all works in live control room with asset owner • Liaise with others i.e. Commissioners working in control room 	3	E	M	Isolation Team
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		Inadvertent tripping or release of energy	4	C	V H	5,6	<ul style="list-style-type: none"> • Work group members recommended to hold "UEPOPS301B - Conduct single energy source isolation procedures for permit to work" or equivalent • Work group members should hold Certificate III trade qualifications or greater • Follow every step of the isolation procedure • Do not skip steps, follow the procedure sequentially • Ensure tools are tested, tagged, calibrated and in good working order. • Correct PPE must be worn during isolation to protect against any release of energy whether intentional or unintentional. Correct PPE may include but not be limited to: hard hat, steel cap boots, full length fire retardant clothing, overalls, safety glasses/goggles, face shield, leather rigging gloves, LV Rescue kit including LV gloves 	3	E	M	Isolation Team
		Isolate wrong plant	4	C	V H	5,6	<ul style="list-style-type: none"> • Use an isolation check list to ensure isolations are performed in sequence. • Isolation checklist should include prompts to remind isolation team to stop work if a step in the isolation cannot be performed • Each isolation shall be identified by the isolator, read out loud and indicated to by pointing at using the index finger, the checker shall verbally agree that the isolator has identified the correct isolation point, the isolator shall then perform the isolation. • Ensure the isolation is task specific and not a generic isolation for a similar task. 	3	E	M	Isolation Team

		Plant insufficiently isolated	4	C	V H	5,6	<ul style="list-style-type: none"> At the conclusion of isolations the isolation check list shall be checked to ensure all items have been signed off. The Permit issuer must make an inspection of site to ensure plant has been sufficiently isolated prior to issuing the Permit to Work The Isolation Team shall attempt to operate the isolated plant remotely to ensure that isolations were effective. Failing the ability to operate remotely the isolation team shall inspect the work area and while wearing the appropriate PPE e.g. Arc Flash Suit attempt to operate the isolated plant in the field to ensure all energy sources have been contained 	3	E	M	Isolation Team
		Incorrect drawings/revisions/not up to date/construction changes not made	3	C	H	5	<ul style="list-style-type: none"> Check with document controller/senior draftsmen prior to creating isolations from drawings Visit site and clarify/confirm drawings are correct prior to use 	1	E	L	Isolation Officer
		Isolation point is inaccessible or physically cannot be opened/closed or locked out	3	C	H	5	<ul style="list-style-type: none"> Stop Isolations immediately, report findings to project manager, isolation officer, permit issuer and asset owner Review drawings and isolation procedure Review if isolations can be expanded in order to isolate inaccessible/damaged isolation point in order to continue with the scheduled work, if not possible cancel the isolation/work and investigate if a site outage can occur. 	1	E	L	Isolation Officer


		Damage to plant/buildings	3	C	H	5	<ul style="list-style-type: none"> • Use an isolation check list (to be developed) to ensure isolations are performed in sequence. • Isolation checklist should include prompts to remind isolation team to stop work if a step in the isolation cannot be performed • Stop work and assess damage • Ensure damage to plant/building does not present an immediate danger to the isolation work group or others • Ensure isolations are at a safe step to pause • Notify line manager and asset owner of damage to plant and buildings • Resume isolations if deemed safe to do so, if not begin isolation restoration 	1	E	L	Isolation Officer
		Cuts and abrasions	2	C	M	5,6	<ul style="list-style-type: none"> • Correct PPE must be worn during isolation to protect against any release of energy whether intentional or unintentional. Correct PPE may include but not be limited to: hard hat, steel cap boots, full length fire retardant clothing, overalls, safety glasses/goggles, face shield, leather rigging gloves, LV Rescue kit including LV gloves • PPE Requirements as per PPE Policy • Avoid distraction and concentrate on task 	1	E	L	Isolation Team

		Slips and trips	2	C	M	5,6	<ul style="list-style-type: none"> • Site must be free of obstructions, obstructions shall be moved to allocated lay down areas • Site shall be level and free of undulating ground, if not stop work and remedy via laying of rubble, backfilling pot holes either manually or by mobile plant • Housekeeping in work area to be completed prior to start of works and maintain during works. • Electrical cords and cables to be controlled so as to be not dangerous to workers • Work area must be returned to pre work condition after task is completed • Appropriate PPE to be worn when cleaning up to protect from cuts and splinters (e.g. gloves) • Any job related material to be stored in such a way so as not to create a hazard 	1	E	L	Isolation Team
		Sprains and Strains	2	C	M	5,6	<ul style="list-style-type: none"> • Use mechanical aid wherever possible (e.g. Cranes, Telehandler). • Ankle high lace up boots shall be worn to prevent ankle roll injuries • Where mechanical aids are not available use team lifting techniques ensuring that the lift is planned and verbally communicated throughout the process • Correct manual handling techniques as illustrated by pictures below 	1	E	L	Isolation Team


8	Issue permit to work	Permit issued without sufficient isolation taking place	4	C	V H	5	<ul style="list-style-type: none"> Follow all steps in isolation procedure Isolations should not take place solo, isolations should be read out from the isolation sheet, agreed to by the second member of the isolation team (the checker) and then performed If isolations are taking place on a site which is under the control of a Network Operations Centre (or similar) the isolations should be checked and approved by the Operations Centre or by a senior engineer or operations manager 	2	C	M	Permit Issuer
		Incorrectly filled out	4	C	V H	5	<ul style="list-style-type: none"> Permit issuer must be familiar with the isolation taking place Permit issuer must be familiar with the plant being isolated Permit issuer must check off the permit to work against the isolation check list and site drawings and list the isolation points and outcomes 	2	C	M	Permit Issuer
		Time allocated for work not long enough	1	C	L	5	<ul style="list-style-type: none"> Allocate extra time Planner to liaise with workgroup to set a realistic timeframe for works or secure additional personnel resources Plan the required time for isolation and work to be performed off statistics from previous similar work 	1	E	L	Project Manager
8	Reinstate Isolations	Steps in isolation skipped	4	C	V H	5	<ul style="list-style-type: none"> Use an isolation check list (to be developed) to ensure isolations are performed in sequence. Isolation checklist should include prompts to remind isolation team to stop work if a step in the isolation cannot be performed 	2	C	M	Isolation Officer

		Electrocution	4	C	V H	5,6	<ul style="list-style-type: none"> • Team leader to brief team on all potential hazards and scope of work. • Instruction on areas that have been proven dead and earthed remembering that all equipment should be treated as live. • Emergency procedures explained • All switchboards and associated equipment to be treated as live unless proven dead and earthed. • Do not deviate from scope of works • All necessary permits to be filled in • Seek advice from team leader if issues arise during works. • All personnel to be fully briefed prior to any work commencing, site specific SWMS to be completed • Wear LV insulated gloves, Have LV rescue kit in vicinity and trained personnel in LV rescue. • All work group members participating in works in or around live electrical boards/plant must have HLTAID001 Provide cardiopulmonary resuscitation, UETDRRF06B Perform rescue from a live LV panel • Wear fire retardant clothing • Fire retardant clothing must be worn correctly – no synthetic clothing under fire retardant clothing, clothing fully zipped or buttoned. • Correct PPE must be worn during isolation to protect against any release of energy whether intentional or unintentional. Correct PPE may include but not be limited to: hard hat, steel cap boots, full length fire retardant clothing, overalls, safety glasses/goggles, face shield, leather rigging gloves, LV Rescue kit including LV gloves • PPE Requirements as per PPE Policy • Minimum two people in control room for work to proceed. • Confirm all works in live control room with asset owner • Liaise with others i.e. Commissioners working in control room 	3	E	M	Isolation Team
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		Inadvertent tripping or release of energy	4	C	V H	5,6	<ul style="list-style-type: none"> • Work group members recommended to hold "UEPOPS301B - Conduct single energy source isolation procedures for permit to work" or equivalent • Work group members should hold Certificate III trade qualifications or greater • Follow every step of the isolation procedure • Do not skip steps, follow the procedure sequentially • Ensure tools are tested, tagged, calibrated and in good working order. • Correct PPE must be worn during isolation to protect against any release of energy whether intentional or unintentional. Correct PPE may include but not be limited to: hard hat, steel cap boots, full length fire retardant clothing, overalls, safety glasses/goggles, face shield, leather rigging gloves, LV Rescue kit including LV gloves 	3	E	M	Isolation Team
		Plant insufficiently isolated	4	C	V H	5,6	<ul style="list-style-type: none"> • At the conclusion of isolations the isolation check list shall be checked to ensure all items have been signed off. • The Permit issuer must make an inspection of site to ensure plant has been sufficiently isolated prior to issuing the Permit to Work • The Isolation Team shall attempt to operate the isolated plant remotely to ensure that isolations were effective. Failing the ability to operate remotely the isolation team shall inspect the work area and while wearing the appropriate PPE e.g. Arc Flash Suit attempt to operate the isolated plant in the field to ensure all energy sources have been contained 	3	E	M	Isolation Team

		Cuts and abrasions	2	C	M	5,6	<ul style="list-style-type: none"> • Correct PPE must be worn during isolation to protect against any release of energy whether intentional or unintentional. Correct PPE may include but not be limited to: hard hat, steel cap boots, full length fire retardant clothing, overalls, safety glasses/goggles, face shield, leather rigging gloves, LV Rescue kit including LV gloves • PPE Requirements as per PPE Policy • Avoid distraction and concentrate on task 	1	E	L	Isolation Team
		Slips and trips	2	C	M	5,6	<ul style="list-style-type: none"> • House keeping in work area to be completed prior to start of works and maintain during works. • Electrical cords and cables to be controlled so as to be not dangerous to workers 	1	E	L	Isolation Team
		Sprains and strains	2	C	M	5,6	<ul style="list-style-type: none"> • Use mechanical aid wherever possible (e.g. Cranes, Telehandler). • Ankle high lace up boots shall be worn to prevent ankle roll injuries • Where mechanical aids are not available use team lifting techniques ensuring that the lift is planned and verbally communicated throughout the process • Correct manual handling techniques as illustrated by pictures below 	1	E	L	Isolation Team

9	Working with or adjacent to live plant/terminals	Electrocution	4	C	V H	5,6	<ul style="list-style-type: none"> • Team leader to brief team on all potential hazards and scope of work. • Instruction on areas that have been proven dead and earthed remembering that all equipment should be treated as live. • Emergency procedures explained • All switchboards and associated equipment to be treated as live unless proven dead and earthed. • Do not deviate from scope of works • All necessary permits to be filled in • Seek advice from team leader if issues arise during works. • All personnel to be fully briefed prior to any work commencing, site specific SWMS to be completed • Wear LV insulated gloves, Have LV rescue kit in vicinity and trained personnel in LV rescue. • All work group members participating in works in or around live electrical boards/plant must have HLTAID001 Provide cardiopulmonary resuscitation, UETDRRF06B Perform rescue from a live LV panel • Wear fire retardant clothing • Fire retardant clothing must be worn correctly – no synthetic clothing under fire retardant clothing, clothing fully zipped or buttoned. • Correct PPE must be worn during isolation to protect against any release of energy whether intentional or unintentional. Correct PPE may include but not be limited to: hard hat, steel cap boots, full length fire retardant clothing, overalls, safety glasses/goggles, face shield, leather rigging gloves, LV Rescue kit including LV gloves • PPE Requirements as per PPE Policy • Minimum two people in control room for work to proceed. • Confirm all works in live control room with asset owner • Liaise with others i.e. Commissioners working in control room 	3	E	M	Isolation Team
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		Crushing	2	C	M	5,6	<ul style="list-style-type: none"> Identify pinch/crushing points prior to commencing work Guard the pinch/crushing points prior to beginning work by means of meshing, barriers, caging, or by any other means which limits access to these points Release all stored energies which could result in movement which could cause crushing prior to commencing work 	1	E	L	Isolation Team
		Burns	3	C	H	5,6	<ul style="list-style-type: none"> Wear fire retardant clothing, Fire retardant clothing must be worn correctly – no synthetic clothing under fire retardant clothing, clothing fully zipped or buttoned. Employees recommended to be trained in PUAWER008B Confine Small Workplace Emergencies (Fire Extinguisher Training or equivalent Employees performing work on live boards shall wear appropriate Arc Flash Suits 	2	D	L	Isolation Team

		Fires	3	D	H	5	<ul style="list-style-type: none"> If hot work is required on a Fire Ban Day Contact local or state fire services for directions or a Fire Ban Hot work Permit to continue work: <p>Country Fire Services CFA VIC: 03 8746 1400 CFS SA: 08 8463 4200 NSW RFS: 02 8741 5555 Emergency and Fire Services WA: 13 3337</p> <p>Metropolitan Fire Services DFES WA: 08 9395 9300 TFS TAS: 03 6230 8600 QFES QLD: 13 74 68 Fire and Rescue NSW: 02 9265 2999 MFB VIC: 03 9662 2311 MFS SA: 08 8204 3600 Fire and Emergency Services NT: 08 8999 3473 Emergency Services ACT: 13 22 81</p>	2	D	L	Project Manager
10	Working with or adjacent to stored energy sources (not electrical) and the risks associated with unintentional releases	Crushing	2	C	M	5,6	<ul style="list-style-type: none"> Identify crushing points prior to commencing any isolations or work The release and energy supply with a crushing potential the Isolation Team shall attempt to operate the isolated plant remotely to ensure that isolations were effective. Failing the ability to operate remotely the isolation team shall inspect the work area and while wearing the appropriate PPE e.g. Arc Flash Suit attempt to operate the isolated plant in the field to ensure all energy sources have been contained Wear leather riggers gloves as a minimum Operate any sources of stored energy remotely or by means of mechanical aid where possible e.g. a long screw driver or pipe bar 	1	E	L	Isolation Team

		Burns	3	C	H	5,6	<ul style="list-style-type: none"> Wear fire retardant clothing, Fire retardant clothing must be worn correctly – no synthetic clothing under fire retardant clothing, clothing fully zipped or buttoned. Employees recommended to be trained in PUAWER008B Confine Small Workplace Emergencies (Fire Extinguisher Training or equivalent) Employees performing work on live boards shall wear appropriate Arc Flash Suits 	2	D	L	Isolation Team
		Asphyxiation	4	C	V H	4,5, 6	<ul style="list-style-type: none"> Where the potential for asphyxiation is present due to isolation procedures the following precautions shall be considered: Gas monitoring devices must be carried at all times Ventilation must be continuous with an appropriate number of air changes per hour. The ventilation system should be interlocked with the process power supply. Exhaust lines containing inert gases to be clearly identified and piped to safe, well-ventilated areas. - Use of indicating devices such as: - Warning lights - Streamers in the fan outlet - Flow switches. 	2	D	L	Project Manager

		Explosions/fires	3	D	H	5	<ul style="list-style-type: none"> Where the potential for explosions/fires is present due to isolation procedures the following precautions shall be considered: Gas monitoring devices must be carried at all times Remove combustible materials from the isolation and work area Wet areas down prior to performing works to stifle combustion Employees recommended to be trained and competent in the use of fire extinguisher - PUAWER008B Confine Small Workplace Emergencies (Fire Extinguisher Training) or alternatively their competency level may be verified via VOC internally by HSE or Competency Training 9kg Dry Chemical Powder Fire extinguisher to be present in the work area. 	2	D	L	Project Manager
		Environmental impact (spills, leaks, noise, fumes)	2	C	M	1, 2, 5, 6	<ul style="list-style-type: none"> Be familiar with location of and make accessible site spill kit (contact the EPA and/or the Department of the environment in the event of contamination the land or water) EPA Contact Details: EPA SA: 08 8204 2004 EPA VIC: 1300 372 842 EPA WA: 08 6145 0800 EPA NSW: 02 9995 5555 EPA TAS: 03 6165 4599 EPA NT: 08 8924 4218 EPA QLD: 1300 130 372 EPA ACT: 13 22 81 Class 5 Hearing protection to be worn whilst around excessive noise levels Vehicle to be turned off when practicable to limit excessive noise and fumes Use in a well ventilated area 	2	D	L	Everyone involved and/or affected

11	Other Work group in the area	Lack of communication	5	D	V H	3,4, 5,6	<ul style="list-style-type: none"> • Consultation and coordination by means of verbal tool boxes, pre start meetings and visual notice boards should be used to communicate the scope of works to all stakeholders • Any changes to the work arrangements must be communicated to stakeholders to by the afore mentioned methods • Exclusion zones by means of barriers, flagging, bunting, mesh and signage shall be erected to prevent mobile plant interaction with scaffolding • Stakeholders shall also make every effort to use hand signals for communication should noise levels hinder verbal communication attempts 	3	E	M	Leading Hands, Construction Manager
12	Isolations in a confined space	Entering and working in a confined space	4	D	H	5	<ul style="list-style-type: none"> • All members of the work group entering the confined space must be trained and verified for their competency in RIIWHS202D – Enter and Work In A Confined Space • At least two persons not involved in the isolation process itself must be trained and verified in their competency in PUASAR025A – Undertake Confined Space Rescue 	3	E	M	Project Manager
		Lack of Training	4	D	H	5	<ul style="list-style-type: none"> • All members of the work group entering the confined space must be trained and verified for their competency in RIIWHS202D – Enter and Work In A Confined Space • At least two persons not involved in the isolation process itself must be trained and verified in their competency in PUASAR025A – Undertake Confined Space Rescue 	3	E	M	Project Manager
		Limited Access and Egress	2	C	M	5	<ul style="list-style-type: none"> • Delineate access and egress points of the confined space • Keep access and egress areas free and clear of obstructions • Use signage to identify access and egress points 	1	D	L	Isolation Officer

		Asphyxiation	4	C	V H	4,5, 6	<ul style="list-style-type: none"> • Where the potential for asphyxiation is present due to isolation procedures the following precautions shall be considered: • Gas monitoring devices must be carried at all times • Ventilation must be continuous with an appropriate number of air changes per hour. • The ventilation system should be interlocked with the process power supply. • Exhaust lines containing inert gases to be clearly identified and piped to safe, well-ventilated areas. • - Use of indicating devices such as: <ul style="list-style-type: none"> • - Warning lights • - Streamers in the fan outlet • - Flow switches. 	2	D	L	Project Manager
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		<p>Necessity to perform rescue</p>	<p>3</p>	<p>D</p>	<p>H</p>	<p>4,5, 6</p>	<ul style="list-style-type: none"> • PUASAR025A – Undertake Confined Space Rescue • Rescue kit should include items for example such as: <ul style="list-style-type: none"> ○ Each Sked-Evac CSR Kit includes: ○ SK-700 Sked-Evac Tripod ○ SK-701 Sked-Evac Tripod Bag ○ SK-200-OR Sked Rescue Stretcher System ○ SK-300-OR Oregon Spine Splint II ○ OP-2029 Ambu Collar Kit (4 C-collars, carrying case, video) ○ SK-720 Skedco 4:1 Rescue Kit ○ OP-2107D Full Body Adjustable Rescue Harnesses (2 Each) ○ SK-740 1/2" NFPA Tag Line ○ SK-740 1/2" NFPA Belay Line ○ SK-911-12 Skedco 12' x 3" Anchor Sling ○ SK-731 Continuous Loop Sling ○ B17 Petzl Handled Ascender ○ A16 Y Petzl Vertex Best Helmet, Yellow (2 Each) ○ SK-730 Skedco Ascending Stirrup ○ SK-732 Rope Pad ○ SK-993 24" Rope Guard ○ SK-206 Large NFPA Locking 'D' Steel Carabiners 	<p>2</p>	<p>E</p>	<p>L</p>	<p>Project Manager</p>
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ABN 31989961526; ACN 639092498

Safe Work Method Statement Form

SWMS Number/Project:		Name of Work Activity/Task:	
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Name/Position of Person Conducting Training /...../...../ **Date**

By signing this record, I the undersigned and confirm that this SWMS has been explained to me, that I understand its contents and will work to the requirements as applicable to my role and responsibilities. I have also been given the opportunity to be involved in the development of, or to make recommendations, to improve the contents of the SWMS.

No	Attendees Name	Company	Signature	Date
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