SWMS No 032	SJD Electrical Job Safety Analysis / Safe Work Method Statement	Page 1 of 8

SJD ELECTRICAL PTY LTD - ABN 53 127 802 608 - ACN 127 802 608 - ELECTRICAL LICENCE 68608 - QBCC LICENCE 1270514 - ARC LICENCE AU19801 - MOLEX LICENCE CIAU3372

Safe Work Method Statement Title: SWMS: 032 ISOLATION AND TESTING OF ENERGY SOURCES			**Date Created: 00/00/16**
Project Name:	**Person responsible for ensuring compliance with this SWMS:**		**Review Date: 00/00/17**
Project/Client:	**Job No:**	**Authorised By:**	**Revision No. 0**

Licences, Permits, Competencies Required: (*tick items relevant to this task and site*)

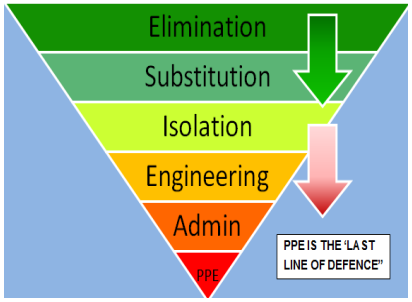
□ Confined Space	□ Work at Heights	□ Excavation	□ Hot Work	□ Radiation
□ White Card	□ EWP	□ Electrical License	□ Rescue and Resuscitation	□ Network Access

Common Hazards to Manage: (*tick items relevant to this task and site*)

□ Manual handling	□ Working at Heights	□ Risk of Electric Shock	□ Slips, Trips and Falls	□ Housekeeping

HAZARD CLASSIFICATION MATRIX
POSSIBLE RESULTS
Risk = Consequence x Likelihood

			Probability				
			RARE A	UNLIKELY B	POSSIBLE C	LIKELY D	ALMOST CERTAIN E
Consequences	Catastrophic	5	Medium (M)	High (H)	High (H)	Extreme (E)	Extreme (E)
	Major	4	Medium (M)	Medium (M)	High (H)	High (H)	Extreme (E)
	Moderate	3	Low (L)	Medium (M)	High (H)	High (H)	High (H)
	Minor	2	Low (L)	Low (L)	Medium (M)	Medium (M)	High (H)
	Insignificant	1	Low (L)	Low (L)	Low (L)	Medium (M)	Medium (M)



RISK RATING	ACTION REQUIRED (ALARP – As Low As Reasonably Practicable)
E = Extreme, UNACCCEPTABLE	Intolerable risk. Activity must not be undertaken prior to Management / CEO review of potential risk mitigation measures and a decision that risk is **ALARP**
H = High risk, Only acceptable if **ALARP**	Implement strict control measures to reduce risk to an acceptable level. Activity must not continue until the level of risk is reduced to **As Low As Reasonably Practicable (ALARP)** and preferably Medium rating. Operations Manager and/or Project Supervisor approval of the risk controls is required.
M = Medium risk Undesirable	Specify, document and implement existing risk controls and additional management actions to reduce the risk to **ALARP** and **preferably Low rating**. Activity must not continue without Operations Manager and/or Project Supervisor approval.
L = Low risk, Tolerable	Tolerable risk. Carry out activity

Basic PPE to be used

✓ app												
Other PPE:												

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Job Task #	Job Step	Potential Health, Safety and Environmental Hazards	PROBABILITY	CONSEQUENCE	RATING	Control Measures	PROBABILITY	CONSEQUENCE	RATING	PERSON(S) RESPONSIBLE
1	**Planning and preparation**	Non-compliance with current legislative requirements and company processes.	D	4	H	All personnel to complete site specific induction. All personnel to have completed company specific induction. Personnel are to hold the required licenses and certificates for the work, and be assessed as competent to use or operate equipment and plant. All personnel must read, understand and sign off on this SWMS. All personnel are given the opportunity to provide input into the content of this SWMS. Daily pre-starts will be held at the beginning of each shift. Any changes throughout the shift will be communicated prior to the commencement of the next task. A JSA is to be completed for any changes to the task. Ensure permit requirements are understood.	B	4	M	**Work crew** **Supervisor** **Permit Holder**
		Working outdoors with exposure to; - UV / high temperatures causing heat stress / dehydration / sunburn - Fauna and insects causing bites and stings	D	3	H	'Check ins' during extreme weather conditions. Comply with the Queensland Worksafe heat stress procedure. Ensure there is an area in the shade for rest (preferably Crib Facilities). Work Breaks are compulsory at nominated times (preferably during the hotter parts of the day) Drink adequate water amount of water. Use sun block for protection from sun. Use insect repellent (if applicable).	B	3	M	**Work crew**
		Interactions with other trades working in the vicinity; - Inadvertently cause hazardous situation including trips, slips, falls	D	3	H	Ensure other workers are informed and aware of all other trades working in the area Communicate potential interactions during prestart	B	3	M	**Supervisor** **Work Crew**

Job Task #	Job Step	Potential Health, Safety and Environmental Hazards	PROBABILITY	CONSEQUENCE	RATING	Control Measures	PROBABILITY	CONSEQUENCE	RATING	PERSON(S) RESPONSIBLE
		Unauthorized access to work area by other authorized personnel without correct PPE.	**D**	**3**	**H**	Follow all site rules and procedures. Wear all mandatory PPE and task specific PPE. If a hazard is identified in the work area – fix it immediately or if unable to do so, isolate the hazard and inform your supervisor immediately. Site wide barricading to be installed to restrict access to unauthorized personnel. Signage to be visible around all site and at all access points. All visitors must report to site office before entering site. All visitors to be escorted by a site inducted personnel member.	**B**	**3**	**M**	**Supervisor** **Work crew**
		Poor ground conditions Uneven, loose, wet or soft ground at the work site.	**C**	**2**	**H**	Inspect path of travel for any obstructions and remove them. Daily site inspections prior to commencement of work activities and at the conclusion of each work day. Regular housekeeping inspections including regular walk rounds to be conducted to ensure a clean and tidy work area.	**B**	**2**	**M**	**Work crew**
2	**Work area preparation**	Personal injury - - Cuts, strains, abrasions, burns - Possible eye injury - Dust inhalation (depends on surrounds – these tasks should not cause dust or fumes)	**C**	**3**	**H**	Authority and empowerment to Stop the Job. Follow all site rules and procedures. Ensure correct manual handling techniques are followed. Wear all mandatory PPE and task specific PPE. Communicate task clearly with all work crew members. Ensure a thorough understanding of expectations. If a hazard is identified in the work area – fix it immediately or if unable to do so, isolate the hazard and inform you supervisor. Work on flat surface where practicable Secure all tools and/or equipment by lanyard or store in a toolbox/basket when on the work platform.	**B**	**3**	**M**	**Work crew** **Supervisor**

Job Task #	Job Step	Potential Health, Safety and Environmental Hazards	PROBABILITY	CONSEQUENCE	RATING	Control Measures	PROBABILITY	CONSEQUENCE	RATING	PERSON(S) RESPONSIBLE
3	**Identify ALL energy sources to be isolated.**	Personal injury due to contact with live parts	**C**	**4**	**H**	Obtain work approval and confirm any client site/safety instruction. Check scope of works to confirm whether work be re-scheduled so it may be isolated. Confirm with client that works meet the requirements regarding work on energised equipment and apparatus and the risk of harm would be greater if the circuits were de-energised before work commenced. Confirm that person/s carrying out the work are appropriately qualified, competent, confident and trained for the task.	**B**	**4**	**M**	**Work crew** **Supervisor**
4	**Isolate ALL power sources followed by installation of DANGER Tags.**	Personal injury due to contact with live parts	**C**	**4**	**H**	Obtain work approval and confirm any client site/safety instruction. Check scope of works to confirm whether work be re-scheduled so it may be isolated. Confirm with client that works meet the requirements regarding work on energised equipment and apparatus and the risk of harm would be greater if the circuits were de-energised before work commenced. Confirm that person/s carrying out the work are appropriately qualified, competent, confident and trained for the task.	**B**	**4**	**M**	**Work crew** **Supervisor**
5	**Check testing equipment for integrity and ensure it is in good working order.** **Test that works area has been safely isolated.**	Defective installation causing electrocution.	**C**	**4**	**H**	Ensure appropriate test equipment is in test date before being used Appropriate tools for the job are available Ensure all appropriate barricading is in place to isolate the area Working kits are used and maintained, and first check operation of test apparatus. Visual inspection shall include; - Basic protection (protection against direct contact with live parts) - Fault protection (protection against indirect contact with exposed conductive parts) - Protection against hazardous parts (guarding/screening) - Protection against spread of fire (fire blanket / fire extinguisher) - General condition of equipment.	**B**	**4**	**M**	**Work crew** **Supervisor**

Job Task #	Job Step	Potential Health, Safety and Environmental Hazards	PROBABILITY	CONSEQUENCE	RATING	Control Measures	PROBABILITY	CONSEQUENCE	RATING	PERSON(S) RESPONSIBLE
6	**Install prohibited area signage or barricade isolation sources.**	Unauthorized access to work area by other authorized personnel without correct PPE.	D	3	H	Follow all site rules and procedures. Wear all mandatory PPE and task specific PPE. If a hazard is identified in the work area – fix it immediately or if unable to do so, isolate the hazard and inform your supervisor immediately. Site wide barricading to be installed to restrict access to unauthorized personnel. Signage to be visible around all site and at all access points. All visitors must report to site office before entering site. All visitors to be escorted by a site inducted personnel member.	B	3	M	**Supervisor** **Work crew**
7	**Confirm installation or repair.**	Defective installation causing electrocution.	C	4	H	Ensure appropriate test equipment is being used Appropriate tools for the job are available Ensure all appropriate barricading is in place to isolate the area Working kits are used and maintained, and first check operation of test apparatus. Visual inspection shall include; - Basic protection (protection against direct contact with live parts) - Fault protection (protection against indirect contact with exposed conductive parts) - Protection against hazardous parts (guarding/screening) - Protection against spread of fire (fire blanket / fire extinguisher) - General condition of equipment.	B	4	M	**Work crew** **Supervisor**
8	**Test and commission new installation or repairs following relevant procedures. Confirm phase rotation of all 3-phase equipment.**	Personal injury due to contact with live parts.	C	4	H	Obtain work approval and confirm any client site/safety instruction. Check scope of works to confirm isolations are in place prior to testing commencing. Confirm with client that works meet the requirements regarding work on energised equipment and apparatus and the risk of harm would be greater if the circuits were de-energised before work commenced. Confirm that person/s carrying out the work are appropriately qualified, competent, confident and trained for the task.	B	4	M	**Work crew** **Supervisor**

Job Task #	Job Step	Potential Health, Safety and Environmental Hazards	PROBABILITY	CONSEQUENCE	RATING	Control Measures	PROBABILITY	CONSEQUENCE	RATING	PERSON(S) RESPONSIBLE
9	**Remove DANGER Tags and Energise supply**	Personal injury due to contact with live parts	**C**	**4**	**H**	Obtain work approval and confirm any client site/safety instruction. Check scope of works to confirm whether work be re-scheduled so it may be isolated. Confirm with client that works meet the requirements regarding work on energised equipment and apparatus and the risk of harm would be greater if the circuits were de-energised before work commenced. Confirm that person/s carrying out the work are appropriately qualified, competent, confident and trained for the task.	**B**	**4**	**M**	**Work crew** **Supervisor**
10	**Completion of task**	Slips, trips, and falls	**C**	**4**	**H**	Leave work area tidy. Store equipment in authorised access area (e.g. locked storage facility) Report any damage/defect to supervision and tag out any faulty equipment.	**B**	**4**	**M**	**Work crew**

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Personnel Qualifications and Experience Required	Personnel Duties and Responsibilities		Training Required to Complete Work
	Supervisor	All Personnel	
Personnel will need to be trained and **confident**.	Empower all personnel to **STOP the JOB** if required to do so.	All personnel to maintain tidy work area on site at all times. Personal Protective Equipment (PPE) to be worn at all times on site.	Supervisor to be trained in risk identification, assessment and control e.g. Job Safety Analysis (JSA).
Appropriate industry and site specific induction.	Supervisor to carry out daily inspections of work site for hazards.	Ensure housekeeping is maintained throughout the task to avoid the risk of injury.	Electrician to be trained in hazard identification, Risk Level and control.
Must be a Licensed Electrician to carry out the works.	Ensure appropriate permits are in place for the task (if applicable).	Barricading to be used as appropriate to protect others from working below elevated work.	Safety observer who is competent to perform the task being observed and is also competent in electrical rescue and cardio-pulmonary resuscitation (CPR).

Engineering Details / Certificates / Australian Standards	Referenced – Codes of Practice / Regulations / Legislation
• AS/NZS 3000 Wiring Rules • AS/NZS 3012:2010 Electrical Installations – Construction and Demolition Sites. • AS/NZS 3017 - Electrical installations - verification guidelines • AS/NZS 4836 Safe working on or near low voltage electrical installations and equipment	• Work Health and Safety Act and Regulations 2011 • Electrical Safety Act 2002 and Electrical Safety Regulations 2013 • Electrical Safety Code of Practice 2013 - Managing Electrical Risks in the Workplace • Hazardous Manual Tasks Code of Practice 2011 • Managing risks of Plant in the workplace Code of Practice 2013
Plant / Equipment Required (Mobile or Static)	**Maintenance Checks / Calibration Intervals**
• Portable hand tools, electrical power tools / drills (insulated tools) • May require scissor lift, boom lift or cherry picker (refer to Scissor Lift / Boom Lift / Cherry Picker SWMS) • Appropriate testing equipment	• Hand tools and ladders to be checked daily. • All electrical equipment to be tested and tagged.

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This SWMS has been developed in consultation and cooperation with employee / workers and relevant employer / persons conducting business or undertaking PCBU. I have read the above SWMS and I understand its contents. I confirm that I have the skills and training, including relevant certification to conduct the task as described. I agree to comply with safety requirements within this SWMS including risk control measures, safe work instructions and Personal Protective Equipment.

OVERALL RISK RATING AFTER CONTROLS	□ 1 LOW	□ 2 MODERATE	□ 3 HIGH		□ 4 ACUTE
EMPLOYEE / WORKER NAME	JOB ROLE / POSITION	SIGNATURE	DATE	TIME	EMPLOYER / PCBU / SUPERVISOR