

Maintenance Of Circuit Breakers Risk Assessment

Business Name:	ABN:	
Business Address:		
Contact Person:	Phone:	Email:

THIS RISK ASSESSMENT IS APPROVED BY THE PCBU ON THE PROJECT

Under the Work Health and Safety Regulation (WHS Regulation), a person conducting a business or undertaking (PCBU) is required to ensure that a RISK ASSESSMENT is prepared before the proposed work starts.

Full Name:		
Signature:	Title:	Date:

CLIENT OR PRINCIPAL CONTRACTOR DETAILS

Client:	SCOPE OF WORKS
Project Name:	
Project Address:	
Project Manager:	
Contact Phone:	
Date Risk Assessment supplied to Project Manager:	

RISK MATRIX								
LIKELIHOOD	INSIGNIFICANT	MINOR	MODERATE	MAJOR	CATASTROPHIC	SCORE	ACTION	HIERARCHY OF CONTROLS
ALMOST CERTAIN	3 HIGH	3 HIGH	4 ACUTE	4 ACUTE	4 ACUTE			Elimination Remove the hazard.
LIKELY	2 MODERATE	3 HIGH	3 HIGH	4 ACUTE	4 ACUTE	4A ACUTE	DO NOT PROCEED	Substitution Replace the hazard.
POSSIBLE	1 LOW	2 MODERATE	3 HIGH	4 ACUTE	4 ACUTE	3H HIGH	Review before work starts.	Isolation Isolate People from the hazard
UNLIKELY	1 LOW	1 LOW	2 MODERATE	3 HIGH	4 ACUTE	2M MODERATE	Ensure control measures in place.	Engineering Isolate the hazard
RARE	1 LOW	1 LOW	2 MODERATE	3 HIGH	3 HIGH	1L LOW	Monitor and keep records.	Administrative Change
								PPE
Risk Rating & Required Action:						Notes on Hierarchy of Controls:		
4A Stop work. The risk is intolerable. Eliminate the hazard or redesign the activity before proceeding. A Safe Work Method Statement (SWMS) or higher-level authorisation is required.						Remember to apply controls in the preferred order shown by the coloured pyramid:		
3H Review and approve additional controls before task starts. Senior supervisor sign-off needed.						1. Eliminate		
2M Ensure all nominated controls are in place and effective. Proceed with caution; monitor conditions.						2. Substitute		
1L Proceed, following standard operating procedures. Monitor and keep records.						3. Isolate		
						4. Engineering		
						5. Administrative		
						6. PPE		
Consequence Scale:						Always document why a lower-order control is accepted if elimination or substitution is not reasonably practicable.		
Consequence	People (injury/illness)		Project / Assets		Compliance / Reputation			
Catastrophic	Fatality or permanent total disability		project shutdown		Significant regulator intervention; criminal prosecution			
Major	Serious injury/illness (hospital > 5 days)		critical delay		Improvement notice; major media coverage			
Moderate	Medical-treatment injury; lost-time > 1 day		moderate delay		Minor breach; adverse client comment			
Minor	First-aid only, no lost time		negligible delay		Isolated non-conformance			
Insignificant	No injury		no schedule impact		Deviation caught and corrected on site			
						aligned with Safe Work Australia's Managing the risk of fatigue at work (2023) and ISO 45001:2018 clauses 6–8.		

JOB STEP	POTENTIAL HAZARDS	IR	CONTROL MEASURES	RR
SPECIFIC WORK STEPS	HAZARDS THAT MAY ARISE	INITIAL RISK	SPECIFIC MEASURES TO BE PUT IN PLACE TO ELIMINATE OR CONTROL THE RISKS	RESIDUAL RISK
1. Preparation	electrical shock, fire risk	3H	<ul style="list-style-type: none"> - Ensure all personnel have completed electrical safety training - Verify all tools and equipment are in good condition - Implement lockout/tagout procedures before starting work - Confirm the area is free of water or dampness - Review the work plan with the team - Establish a communication plan in case of emergency - Ensure fire extinguishers are accessible - Assign a safety observer for the work duration - Check that all personal protective equipment (PPE) is available and functioning properly - Verify circuit diagrams are up-to-date 	2M
2. Isolating the Circuit Breaker	electrical shock, arc flash	3H	<ul style="list-style-type: none"> - Adhere to the lockout/tagout procedure strictly - Use insulated tools to avoid accidental contact - Wear appropriate arc-rated PPE - Employ an authorised electrician for isolation - Verify zero voltage using a voltage tester - Clearly label isolated breakers and notify all personnel - Assign a supervisor to oversee isolation process - Ensure no unauthorised access during isolation - Keep non-essential personnel out of the isolation area - Conduct a risk evaluation before proceeding 	1L
3. Visual Inspection	slips, trips, and falls, eye injury from debris	2M	<ul style="list-style-type: none"> - Clear the area of any tripping hazards - Use appropriate ladders or platforms for high access - Wear safety goggles to protect from dust and debris - Maintain proper housekeeping practices - Ensure good lighting is available - Avoid carrying tools in pockets, use tool belts - Conduct inspections with partners when possible - Identify and rectify any sources of spillage 	1L

Incident Details		Incident Description
Electrical shock	3H	<p>1. A worker was struck by a live electrical cable while performing maintenance on a machine.</p> <p>2. The worker was immediately taken to the hospital and is currently recovering.</p> <p>3. The incident was caused by a faulty electrical system that had not been properly inspected.</p> <p>4. The company is currently investigating the cause of the incident and implementing safety measures to prevent a recurrence.</p> <p>5. The worker is expected to return to work within a few weeks.</p>
Chemical allergic reactions	3H	<p>1. A worker was exposed to a chemical substance while working in a laboratory.</p> <p>2. The worker experienced severe allergic reactions, including difficulty breathing and skin rashes.</p> <p>3. The worker was immediately taken to the hospital and is currently recovering.</p> <p>4. The incident was caused by a lack of proper safety protocols and training for the worker.</p> <p>5. The company is currently investigating the cause of the incident and implementing safety measures to prevent a recurrence.</p> <p>6. The worker is expected to return to work within a few weeks.</p>

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7. Testing Circuit Breaker Operation	mechanical failure, noise injury	3H		1L
8. Lubrication of Moving Parts	slips from spilled lubricant, exposure	2M		1L
9. Replacement of Worn Components	component failure, contact with live parts	3H		1L

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10. Final Inspection and Testing	improper installation, residual electrical energy	3H		1L
11. Re-energising the Circuit	arc flash, unexpected power surges	4A		2M
12. Documentation and Reporting	incomplete records, incorrect data entry	2M		1L

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13. Debriefing and Review	communication breakdown, overlooked faults	2M		1L
14. Clean-Up	chemical exposure, sharp tools exposure	2M		1L
15. Monitoring and Review of Risks	unseen hazards, process complacency	3H		2M

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SAMPLE

EMERGENCY RESPONSE – CALL 000 FOR EMERGENCIES

Ensure to have an Emergency Management Plan in place as well as adequate numbers of trained first aid staff with easy access to fully stocked first aid kits, rescue equipment, material safety data sheets, adequate access to emergency communication equipment and fire-fighting equipment suitable for all classes of fire and ignition sources.

LEGISLATIVE REFERENCES

RELEVANT LEGISLATION AND CODES OF PRACTICE. DELETE THE LEGISLATIVE REFERENCES IF ANY STATE THAT ARE NOT APPLICABLE

Queensland & Australian Capital Territory

Work Health and Safety Act 2011

Work Health and Safety Regulations 2011

Legislation QLD: <https://www.worksafe.qld.gov.au/laws-and-compliance/work-health-and-safety-laws>

Codes of Practice QLD: <https://www.worksafe.qld.gov.au/laws-and-compliance/codes-of-practice>

Legislation ACT: <https://www.worksafe.act.gov.au/laws-and-compliance/acts-and-regulations>

Codes of Practice ACT: <https://www.worksafe.act.gov.au/laws-and-compliance/codes-of-practice>

New South Wales

Work Health and Safety Act 2011

Work Health and Safety Regulations 2017

Legislation NSW: <https://www.safework.nsw.gov.au/legal-obligations/legislation>

Codes of Practice NSW: <https://www.safework.nsw.gov.au/resource-library/list-codes-of-practice>

Northern Territory

Work Health and Safety (National Uniform Legislation) Act 2011

Work Health and Safety (National Uniform Legislation) Regulations 2011

Legislation NT: <https://worksafe.nt.gov.au/laws-and-compliance/workplace-safety-laws>

Codes of Practice NT: <https://worksafe.nt.gov.au/laws-and-compliance/codes-of-practice>

South Australia

Work Health and Safety Act 2012 (SA)

Work Health and Safety Regulations 2012 (SA)

Legislation for SA: <https://www.safework.sa.gov.au/resources/legislation>

Codes of Practice for SA: <https://www.safework.sa.gov.au/workplaces/codes-of-practice#COPs>

Tasmania

Work Health and Safety Act 2012

Work Health and Safety (Transitional and Consequential Provisions) Act 2012

Work Health and Safety Regulations 2012

Work Health and Safety (Transitional) Regulations 2012

Legislation for TAS: <https://worksafe.tas.gov.au/topics/laws-and-compliance/acts-and-regulations>

Codes of Practice for TAS: <https://worksafe.tas.gov.au/topics/laws-and-compliance/codes-of-practice>

Details of permits, licenses or access required by regulatory bodies (add or delete as required):

- Permits from local council
- Authorisation to commence work
- Any required documents.

Victoria

Occupational Health and Safety Act 2004

Occupational Health and Safety Regulations 2017

Legislation VIC: <https://www.worksafe.vic.gov.au/occupational-health-and-safety-act-and-regulations>

Codes of Practice VIC: <https://www.worksafe.vic.gov.au/compliance-codes-and-codes-practice>

Western Australia

Work Health and Safety Act 2020

Work Health and Safety Regulations 2022

Legislation Western Australia: <https://www.commerce.wa.gov.au/worksafe/legislation>

Codes of Practice WA: <https://www.commerce.wa.gov.au/worksafe/codes-practice>

Safe Work Australia Links

Law and Regulation (All States): <https://www.safeworkaustralia.gov.au/law-and-regulation>

Model Codes of Practice: <https://www.safeworkaustralia.gov.au/resources-publications/model-codes-of-practice>

Model Codes of Practice

- Managing noise and preventing hearing loss at work
- Confined spaces
- Labelling of workplace hazardous chemicals
- Managing risks of hazardous chemicals in the workplace
- Welding processes
- First aid in the workplace
- Managing the risk of falls at workplaces
- Hazardous manual tasks
- Managing the risk of falls in housing construction
- Managing electrical risks in the workplace
- Demolition work
- Excavation work
- Work health and safety consultation, cooperation and coordination
- Managing the work environment and facilities
- How to manage work health and safety risks
- Managing risks of plant in the workplace
- Construction work