

## Isolate Energy Sources 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			<b>Elimination</b> Remove the hazard.	
LIKELY	2 MODERATE	3 HIGH	3 HIGH	4 ACUTE	4 ACUTE	4A ACUTE	DO NOT PROCEED	<b>Substitution</b> 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.	<b>Engineering</b> Isolate the hazard	
RARE	1 LOW	1 LOW	2 MODERATE	3 HIGH	3 HIGH	1L LOW	Monitor and keep records.	<b>Administrative</b> Change	
								<b>PPE</b>	
<b>Risk Rating &amp; Required Action:</b>								<b>Notes on Hierarchy of Controls:</b>	
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. <b>Eliminate</b>	
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	
<b>Consequence Scale:</b>								4. Engineering	
Consequence	People (injury/illness)		Project / Assets		Compliance / Reputation		5. Administrative		
Catastrophic	Fatality or permanent total disability		project shutdown		Significant regulator intervention; criminal prosecution		6. PPE		
Major	Serious injury/illness (hospital > 5 days)		critical delay		Improvement notice; major media coverage		Always document <b>why</b> a lower-order control is accepted if elimination or substitution is not reasonably practicable.		
Moderate	Medical-treatment injury; lost-time > 1 day		moderate delay		Minor breach; adverse client comment		<i>aligned with Safe Work Australia's Managing the risk of fatigue at work (2023) and ISO 45001:2018 clauses 6–8.</i>		
Minor	First-aid only, no lost time		negligible delay		Isolated non-conformance				
Insignificant	No injury		no schedule impact		Deviation caught and corrected on site				

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. Identify Energy Sources	Unidentified energy sources, Incorrect identification of isolation points	3H	<ul style="list-style-type: none"> <li>Conduct site inspection to identify all energy sources</li> <li>Review equipment manuals for isolation points</li> <li>Consult with equipment manufacturers for detailed information</li> <li>Develop energy source checklist</li> <li>Update procedures with identified energy sources</li> <li>Ensure staff are trained in identifying energy sources</li> <li>Involve experienced workers in identification process</li> <li>Use lockout/tagout data sources</li> <li>Verify identification with a second person</li> <li>Implement ongoing review process</li> </ul>	2M
2. Notify Affected Personnel	Miscommunication, Failure to notify all affected personnel	2L	<ul style="list-style-type: none"> <li>Develop clear communication protocols</li> <li>Use multiple notification methods (e.g., emails, signage)</li> <li>Confirm receipt of notifications</li> <li>Ensure language and terminology is understood by all</li> <li>Establish a notification register</li> <li>Update notification list regularly</li> <li>Train staff in communication procedures</li> <li>Use visual aids to reinforce notifications</li> <li>Review communication effectiveness after isolation</li> <li>Incorporate feedback into notification process</li> </ul>	1L
3. Prepare Lockout/Tagout (LOTO) Equipment	Damaged lockout devices, Incorrect tagging	3H	<ul style="list-style-type: none"> <li>Inspect lockout/tagout devices regularly</li> <li>Maintain a stock of spare devices</li> <li>Train staff in correct tagging procedures</li> <li>Develop a tagging checklist</li> <li>Ensure devices are suitable for the energy source</li> <li>Label devices clearly</li> <li>Establish a process to report damaged devices</li> <li>Use colour-coded tags for different energy sources</li> </ul>	2M

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			Conduct regular audit of LOTO equipment Update procedures with latest best practices	
4. Shut Down Equipment	Incorrect shutdown procedure, Residual energy	4A	[REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED]	3H
5. Isolate Energy Source	Incorrect isolation point, Failed isolation operation	4A	[REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED]	2M
6. Apply Lockout Devices	Failure to apply lock, Inadequate lock strength	3H	[REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED]	2M

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7. Apply Tagout Devices	Tags not visible, Tag information unclear	2M		1L
8. Release Stored Energy	Residual energy not fully released Uncontrolled energy release	4A		3H
9. Verify Isolation	Mistakenly believing equipment is isolated, Faulty testing equipment	4A		2M

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10. Perform Maintenance/Test	Re-energising equipment during maintenance, Accidental operation	4A		3H
11. Remove Lockout Devices	Accidental re-energisation, Incomplete lock removal	3H		2M
12. Remove Tagout Devices	Tags left in place, Incorrect tag removal order	2M		1L

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13. Restore Energy Source	Sudden equipment start-up, Electrical surge	4A		3H
14. Notify Affected Personnel (Post-Restoration)	Non-communication of restoration Personnel unaware of restoration energy	2M		1L
15. Review and Assess LOTO Procedure	Outdated procedures, Inefficient risk mitigation	3H		2M

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16. Record Keeping	Loss of records, Inaccurate record maintenance	2M		1L
17. Conduct Personnel Training	Inadequate training, Outdated information	3H		2M
18. Continuous Improvement	Complacency in safety practices, Resistance to change	3H		2M



agency response,  
agency communication

4A

Bar Index	Approximate Length (Relative)
1	100%
2	100%
3	100%
4	100%
5	100%
6	100%
7	100%
8	100%
9	100%
10	100%
11	100%
12	100%

## 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>

### 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>

### 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>

### 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>

### 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>

### 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

### 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.