

## Implementing Energy Isolations. 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	
								4. Engineering	
								5. Administrative	
								6. PPE	
<b>Consequence Scale:</b>								Always document <b>why</b> 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				
								<i>aligned with Safe Work Australia's Managing the risk of fatigue at work (2023) and ISO 45001:2018 clauses 6–8.</i>	

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	Inadequate PPE, Unclear Procedures	3H	<ul style="list-style-type: none"> <li>- Conduct pre-job briefing and ensure all workers understand the plan</li> <li>- Verify all workers have and wear suitable PPE</li> <li>- Confirm procedures are documented and accessible</li> <li>- Provide training on energy isolation procedures</li> <li>- Check communication tools are functioning</li> <li>- Establish emergency procedures and ensure all are aware</li> <li>- Confirm all necessary permits are obtained</li> <li>- Review any previous incidents related to the task</li> <li>- Set up barriers or signs to warn of work in progress</li> <li>- Test emergency stop functions before beginning work</li> </ul>	2M
2. Identify Energy Sources	Misidentification of energy sources, Hidden energy	4H	<ul style="list-style-type: none"> <li>- Use up-to-date diagrams and documents to identify energy sources</li> <li>- Double check against physical equipment</li> <li>- Engage knowledgeable personnel during the identification process</li> <li>- Isolate one energy source at a time and revalidate</li> <li>- Tag all identified energy sources</li> <li>- Conduct visual inspections to identify hidden energy</li> <li>- Cross-reference with historical work orders</li> <li>- Use standard checklists designed for the task</li> <li>- Apply consistent labelling standards</li> <li>- Report any discrepancies immediately</li> </ul>	3H
3. Notify Affected Personnel	Lack of awareness, Non-cooperation	3H	<ul style="list-style-type: none"> <li>- Identify all personnel and departments affected by isolation</li> <li>- Use formal communication methods to inform affected parties</li> <li>- Provide written notices of the upcoming isolation</li> <li>- Organise meetings if necessary to discuss impacts</li> <li>- Assign a point of contact for further communications</li> <li>- Keep records of notifications and acknowledgments</li> <li>- Include isolation schedule details in communication</li> <li>- Address any concerns promptly</li> </ul>	2M

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			<ul style="list-style-type: none"> <li>- Reiterate the importance of compliance</li> <li>- Use signage to notify areas of specific actions</li> </ul>	
4. Shut Down Equipment	Unexpected activation, Incomplete shutdown	4A	<ul style="list-style-type: none"> <li>- Lock out the equipment</li> <li>- Verify the equipment is de-energized</li> <li>- Tag out the equipment</li> <li>- Verify the equipment is de-energized</li> <li>- Lock out the equipment</li> <li>- Verify the equipment is de-energized</li> <li>- Tag out the equipment</li> <li>- Verify the equipment is de-energized</li> <li>- Lock out the equipment</li> <li>- Verify the equipment is de-energized</li> </ul>	3H
5. Isolate Equipment	Faulty isolation devices, Incorrect application	4A	<ul style="list-style-type: none"> <li>- Verify the isolation device is functioning</li> <li>- Verify the isolation device is correctly applied</li> <li>- Verify the isolation device is locked out</li> <li>- Verify the isolation device is tagged out</li> <li>- Verify the isolation device is de-energized</li> <li>- Verify the isolation device is locked out</li> <li>- Verify the isolation device is tagged out</li> <li>- Verify the isolation device is de-energized</li> <li>- Verify the isolation device is locked out</li> <li>- Verify the isolation device is tagged out</li> </ul>	3H
6. Release Stored Energy	Unexpected energy release, Failure to acknowledge residual energy	4A	<ul style="list-style-type: none"> <li>- Verify the energy source is de-energized</li> <li>- Verify the energy source is locked out</li> <li>- Verify the energy source is tagged out</li> <li>- Verify the energy source is de-energized</li> <li>- Verify the energy source is locked out</li> <li>- Verify the energy source is tagged out</li> <li>- Verify the energy source is de-energized</li> <li>- Verify the energy source is locked out</li> <li>- Verify the energy source is tagged out</li> </ul>	3H

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7. Lockout/Tagout System Application	System non-compliance, Unauthorized removal of locks	4A		3H
8. Verify Isolation	Failure to verify, Improper device calibration	4A		3H
9. Perform Task	Human error, Tool malfunction	3H		2M

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10. Remove Locks and Tags	Premature removal, Forgetfulness leading to incomplete removal	3H		2M
11. Restore Equipment	Sudden start-up injuries, Residual energy hazards	4A		3H
12. Conduct Post-Job Review	Overlooking lessons learnt, Inadequate documentation	2M		1L

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13. Return to Normal Operations	Lack of coordination, Impact on ongoing operations	3H		2M
14. Conduct Training and Updates	Incomplete training, Updates not implemented in time	3H		2M
15. Evaluation and Continuous Improvement	Failure to improve processes, Ignoring feedback	2M		1L

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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>

### 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.