

## Gas Installation Checks Risk Assessment

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

### THIS RISK ASSESSMENT IS APPROVED BY THE PCBU ON THIS 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	4A ACUTE	DO NOT PROCEED	Elimination Remove the hazard.	
LIKELY	2 MODERATE	3 HIGH	3 HIGH	4 ACUTE	4 ACUTE			Substitution Replace the hazard.	
POSSIBLE	1 LOW	2 MODERATE	3 HIGH	4 ACUTE	4 ACUTE			Isolation Isolate People from the hazard	
UNLIKELY	1 LOW	1 LOW	2 MODERATE	3 HIGH	4 ACUTE			Engineering Isolate the hazard	
RARE	1 LOW	1 LOW	2 MODERATE	3 HIGH	3 HIGH			Administrative Change	
						1L LOW	Monitor and keep records.	PPE	
<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. 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	
<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		aligned with Safe Work Australia's Managing the risk of fatigue at work (2023) and ISO 45001:2018 clauses 6–8.	
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. Preparation	Incorrect tools selection, Inadequate safety gear	3H	<ul style="list-style-type: none"> <li>- Conduct a tool inspection prior to use</li> <li>- Ensure all personnel wear appropriate PPE</li> <li>- Verify that tools are suitable for the task</li> <li>- Provide training on tool usage</li> <li>- Maintain regular tool maintenance schedule</li> <li>- Supply appropriate storage for tools</li> <li>- Replace worn or damaged tools</li> <li>- Use tools as per manufacturer's instructions</li> <li>- Secure loose clothing and jewellery</li> <li>- Conduct pre-start safety briefing</li> </ul>	2M
2. Gas Cylinder Handling	Gas leaks, Cylinder fall	3H	<ul style="list-style-type: none"> <li>- Inspect cylinders for damage before use</li> <li>- Ensure cylinders are adequately secured or chained</li> <li>- Use appropriate equipment for moving heavy cylinders</li> <li>- Regular checks for gas leaks with detection devices</li> <li>- Store cylinders upright and away from heat sources</li> <li>- Train workers in correct handling techniques</li> <li>- Keep cylinder valves closed when not in use</li> <li>- Maintain a log of cylinder servicing dates</li> <li>- Provide first aid training for staff</li> <li>- Post clear signage in the storage area</li> </ul>	2M
3. Area Ventilation	Insufficient airflow, Build-up of flammable gases	3H	<ul style="list-style-type: none"> <li>- Install mechanical ventilation systems</li> <li>- Ensure all ventilation systems are regularly serviced</li> <li>- Conduct regular air quality monitoring</li> <li>- Train staff in emergency procedures</li> <li>- Keep exhaust fans clear of obstructions</li> <li>- Provide carbon monoxide detectors</li> <li>- Ventilate confined spaces before starting work</li> <li>- Implement a robust inspection schedule</li> </ul>	1L

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			<ul style="list-style-type: none"> <li>- Keep windows and vents open where possible</li> <li>- Display emergency contact information for maintenance</li> </ul>	
4. Installation Procedures	Improper fitting of gas components, Cross threading	3H	<ul style="list-style-type: none"> <li>- Verify correct fitting of gas components</li> <li>- Use appropriate tools and techniques for installation</li> <li>- Follow manufacturer's instructions for assembly</li> <li>- Inspect for leaks after installation</li> <li>- Test system operation after completion</li> <li>- Label all gas lines and components</li> <li>- Provide safety training for installers</li> <li>- Use gas leak detection equipment</li> <li>- Ensure proper ventilation during installation</li> <li>- Keep work area clear of flammable materials</li> <li>- Use proper grounding and bonding techniques</li> <li>- Verify gas pressure after installation</li> <li>- Document installation process</li> <li>- Provide clear instructions for future maintenance</li> <li>- Use quality components and materials</li> <li>- Perform final safety check before leaving site</li> <li>- Communicate any issues or concerns to supervisor</li> <li>- Follow all safety protocols throughout the process</li> <li>- Use proper PPE at all times</li> <li>- Ensure all gas lines are properly secured</li> <li>- Test for leaks using approved methods</li> <li>- Report any defects or problems immediately</li> <li>- Maintain accurate records of work performed</li> <li>- Follow all applicable codes and regulations</li> <li>- Use proper lifting techniques</li> <li>- Keep emergency exits clear</li> <li>- Use proper storage for tools and materials</li> <li>- Follow all safety signage and warnings</li> <li>- Use proper tie-off techniques</li> <li>- Ensure all equipment is in good working order</li> <li>- Perform regular maintenance on equipment</li> <li>- Use proper fall protection techniques</li> <li>- Follow all safety procedures for confined spaces</li> <li>- Use proper lockout/tagout procedures</li> <li>- Ensure all workers are properly trained</li> <li>- Follow all safety protocols for hot work</li> <li>- Use proper fire extinguishing techniques</li> <li>- Follow all safety procedures for electrical work</li> <li>- Use proper grounding and bonding techniques</li> <li>- Follow all safety protocols for excavation work</li> <li>- Use proper shoring and bracing techniques</li> <li>- Follow all safety procedures for trenching work</li> <li>- Use proper trench box and shoring techniques</li> <li>- Follow all safety protocols for lifting work</li> <li>- Use proper rigging and hoisting techniques</li> <li>- Follow all safety procedures for welding work</li> <li>- Use proper welding techniques and safety protocols</li> <li>- Follow all safety protocols for grinding work</li> <li>- Use proper grinding techniques and safety protocols</li> <li>- Follow all safety protocols for cutting work</li> <li>- Use proper cutting techniques and safety protocols</li> <li>- Follow all safety protocols for drilling work</li> <li>- Use proper drilling techniques and safety protocols</li> <li>- Follow all safety protocols for boring work</li> <li>- Use proper boring techniques and safety protocols</li> <li>- Follow all safety protocols for excavation work</li> <li>- Use proper excavation techniques and safety protocols</li> <li>- Follow all safety protocols for trenching work</li> <li>- Use proper trenching techniques and safety protocols</li> <li>- Follow all safety protocols for lifting work</li> <li>- Use proper lifting techniques and safety protocols</li> <li>- Follow all safety protocols for moving work</li> <li>- Use proper moving techniques and safety protocols</li> <li>- Follow all safety protocols for storage work</li> <li>- Use proper storage techniques and safety protocols</li> <li>- Follow all safety protocols for disposal work</li> <li>- Use proper disposal techniques and safety protocols</li> <li>- Follow all safety protocols for cleanup work</li> <li>- Use proper cleanup techniques and safety protocols</li> <li>- Follow all safety protocols for site preparation work</li> <li>- Use proper site preparation techniques and safety protocols</li> <li>- Follow all safety protocols for site restoration work</li> <li>- Use proper site restoration techniques and safety protocols</li> <li>- Follow all safety protocols for site closure work</li> <li>- Use proper site closure techniques and safety protocols</li> </ul>	2M
5. Leak Detection	Failure to identify leaks, False alarms	4A	<ul style="list-style-type: none"> <li>- Perform regular leak detection tests</li> <li>- Use approved leak detection equipment</li> <li>- Follow manufacturer's instructions for leak detection</li> <li>- Inspect for leaks after installation</li> <li>- Test system operation after completion</li> <li>- Label all gas lines and components</li> <li>- Provide safety training for installers</li> <li>- Use gas leak detection equipment</li> <li>- Ensure proper ventilation during installation</li> <li>- Keep work area clear of flammable materials</li> <li>- Use proper grounding and bonding techniques</li> <li>- Verify gas pressure after installation</li> <li>- Document installation process</li> <li>- Provide clear instructions for future maintenance</li> <li>- Use quality components and materials</li> <li>- Perform final safety check before leaving site</li> <li>- Communicate any issues or concerns to supervisor</li> <li>- Follow all safety protocols throughout the process</li> <li>- Use proper PPE at all times</li> <li>- Ensure all gas lines are properly secured</li> <li>- Test for leaks using approved methods</li> <li>- Report any defects or problems immediately</li> <li>- Maintain accurate records of work performed</li> <li>- Follow all applicable codes and regulations</li> <li>- Use proper lifting techniques</li> <li>- Keep emergency exits clear</li> <li>- Use proper storage for tools and materials</li> <li>- Follow all safety signage and warnings</li> <li>- Use proper tie-off techniques</li> <li>- Ensure all equipment is in good working order</li> <li>- Perform regular maintenance on equipment</li> <li>- Use proper fall protection techniques</li> <li>- Follow all safety procedures for confined spaces</li> <li>- Use proper lockout/tagout procedures</li> <li>- Ensure all workers are properly trained</li> <li>- Follow all safety protocols for hot work</li> <li>- Use proper fire extinguishing techniques</li> <li>- Follow all safety procedures for electrical work</li> <li>- Use proper grounding and bonding techniques</li> <li>- Follow all safety protocols for excavation work</li> <li>- Use proper shoring and bracing techniques</li> <li>- Follow all safety procedures for trenching work</li> <li>- Use proper trench box and shoring techniques</li> <li>- Follow all safety protocols for lifting work</li> <li>- Use proper rigging and hoisting techniques</li> <li>- Follow all safety procedures for welding work</li> <li>- Use proper welding techniques and safety protocols</li> <li>- Follow all safety protocols for grinding work</li> <li>- Use proper grinding techniques and safety protocols</li> <li>- Follow all safety protocols for cutting work</li> <li>- Use proper cutting techniques and safety protocols</li> <li>- Follow all safety protocols for drilling work</li> <li>- Use proper drilling techniques and safety protocols</li> <li>- Follow all safety protocols for boring work</li> <li>- Use proper boring techniques and safety protocols</li> <li>- Follow all safety protocols for excavation work</li> <li>- Use proper excavation techniques and safety protocols</li> <li>- Follow all safety protocols for trenching work</li> <li>- Use proper trenching techniques and safety protocols</li> <li>- Follow all safety protocols for lifting work</li> <li>- Use proper lifting techniques and safety protocols</li> <li>- Follow all safety protocols for moving work</li> <li>- Use proper moving techniques and safety protocols</li> <li>- Follow all safety protocols for storage work</li> <li>- Use proper storage techniques and safety protocols</li> <li>- Follow all safety protocols for disposal work</li> <li>- Use proper disposal techniques and safety protocols</li> <li>- Follow all safety protocols for cleanup work</li> <li>- Use proper cleanup techniques and safety protocols</li> <li>- Follow all safety protocols for site preparation work</li> <li>- Use proper site preparation techniques and safety protocols</li> <li>- Follow all safety protocols for site restoration work</li> <li>- Use proper site restoration techniques and safety protocols</li> <li>- Follow all safety protocols for site closure work</li> <li>- Use proper site closure techniques and safety protocols</li> </ul>	2M
6. Emergency Shutdown	Delayed response, Equipment failure	4A	<ul style="list-style-type: none"> <li>- Perform regular emergency shutdown tests</li> <li>- Use approved emergency shutdown equipment</li> <li>- Follow manufacturer's instructions for emergency shutdown</li> <li>- Inspect for leaks after installation</li> <li>- Test system operation after completion</li> <li>- Label all gas lines and components</li> <li>- Provide safety training for installers</li> <li>- Use gas leak detection equipment</li> <li>- Ensure proper ventilation during installation</li> <li>- Keep work area clear of flammable materials</li> <li>- Use proper grounding and bonding techniques</li> <li>- Verify gas pressure after installation</li> <li>- Document installation process</li> <li>- Provide clear instructions for future maintenance</li> <li>- Use quality components and materials</li> <li>- Perform final safety check before leaving site</li> <li>- Communicate any issues or concerns to supervisor</li> <li>- Follow all safety protocols throughout the process</li> <li>- Use proper PPE at all times</li> <li>- Ensure all gas lines are properly secured</li> <li>- Test for leaks using approved methods</li> <li>- Report any defects or problems immediately</li> <li>- Maintain accurate records of work performed</li> <li>- Follow all applicable codes and regulations</li> <li>- Use proper lifting techniques</li> <li>- Keep emergency exits clear</li> <li>- Use proper storage for tools and materials</li> <li>- Follow all safety signage and warnings</li> <li>- Use proper tie-off techniques</li> <li>- Ensure all equipment is in good working order</li> <li>- Perform regular maintenance on equipment</li> <li>- Use proper fall protection techniques</li> <li>- Follow all safety procedures for confined spaces</li> <li>- Use proper lockout/tagout procedures</li> <li>- Ensure all workers are properly trained</li> <li>- Follow all safety protocols for hot work</li> <li>- Use proper fire extinguishing techniques</li> <li>- Follow all safety procedures for electrical work</li> <li>- Use proper grounding and bonding techniques</li> <li>- Follow all safety protocols for excavation work</li> <li>- Use proper shoring and bracing techniques</li> <li>- Follow all safety procedures for trenching work</li> <li>- Use proper trench box and shoring techniques</li> <li>- Follow all safety protocols for lifting work</li> <li>- Use proper rigging and hoisting techniques</li> <li>- Follow all safety procedures for welding work</li> <li>- Use proper welding techniques and safety protocols</li> <li>- Follow all safety protocols for grinding work</li> <li>- Use proper grinding techniques and safety protocols</li> <li>- Follow all safety protocols for cutting work</li> <li>- Use proper cutting techniques and safety protocols</li> <li>- Follow all safety protocols for drilling work</li> <li>- Use proper drilling techniques and safety protocols</li> <li>- Follow all safety protocols for boring work</li> <li>- Use proper boring techniques and safety protocols</li> <li>- Follow all safety protocols for excavation work</li> <li>- Use proper excavation techniques and safety protocols</li> <li>- Follow all safety protocols for trenching work</li> <li>- Use proper trenching techniques and safety protocols</li> <li>- Follow all safety protocols for lifting work</li> <li>- Use proper lifting techniques and safety protocols</li> <li>- Follow all safety protocols for moving work</li> <li>- Use proper moving techniques and safety protocols</li> <li>- Follow all safety protocols for storage work</li> <li>- Use proper storage techniques and safety protocols</li> <li>- Follow all safety protocols for disposal work</li> <li>- Use proper disposal techniques and safety protocols</li> <li>- Follow all safety protocols for cleanup work</li> <li>- Use proper cleanup techniques and safety protocols</li> <li>- Follow all safety protocols for site preparation work</li> <li>- Use proper site preparation techniques and safety protocols</li> <li>- Follow all safety protocols for site restoration work</li> <li>- Use proper site restoration techniques and safety protocols</li> <li>- Follow all safety protocols for site closure work</li> <li>- Use proper site closure techniques and safety protocols</li> </ul>	2M

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7. Post-Installation Inspection	Missed defects, Inconsistent assessment	3H		2M
8. Documentation and Record Keeping	Incomplete records	3H		1L
9. Training and Competency	Inadequate skill levels, Miscommunication	3H		2M

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10. Regular Maintenance	Neglected maintenance schedules, Wear and tear	3H		1L
11. Equipment Storage	Improper storage leading to damage Restricted access	3H		2M
12. Waste Management	Improper disposal, Environmental contamination	4A		2M

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13. Communication Protocols	Communication breakdown, Unauthorised information release	3H		2M
14. Contractor Management	Non-compliance with safety standards, Incomplete contractual obligations	3H		2M
15. Customer Safety	Unaware of safety procedures, Exposure to hazards	4A		2M

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16. Post-Operation Review	Improper review procedures, Missed learning opportunities	3H		1L
17. Incident Reporting	Delayed reporting, Incomplete incident logs	4A		2M
18. Review of Safety Procedures	Outdated procedures, Ineffective measures	3H		1L

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19. Supplier Management	Delayed supply of critical parts, Non-compliant supply chain	3H		2M
20. Continuous Improvement	Stagnation in safety practices, Resistance to change	3H		1L

## 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