

Interactions With Electric, Gas And Water Utilities During Installation 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:

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.
3H	Review and approve additional controls before task starts. Senior supervisor sign-off needed.
2M	Ensure all nominated controls are in place and effective. Proceed with caution; monitor conditions.
1L	Proceed, following standard operating procedures. Monitor and keep records.

Consequence Scale:

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

Notes on Hierarchy of Controls:

Remember to apply controls in the preferred order shown by the coloured pyramid:

1. **Eliminate**
2. Substitute
3. Isolate
4. Engineering
5. Administrative
6. PPE

Always document **why** a lower-order control is accepted if elimination or substitution is not reasonably practicable.

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. Site Preparation	slip and trip hazards, unsecured tools	3H	<ul style="list-style-type: none"> - Conduct a site walk-through to identify and mitigate potential slip hazards - Ensure tools and equipment are securely stored and identified for the job - Implement site lighting to improve visibility - Enforce no obstruction zones around work areas - Use non-slip mats in wet areas - Train staff for site navigation - Emphasise clear communication protocols - Designate walkways away from work zones - Inspect and clear clutter from key work areas - Use signage to caution about potential hazards 	2M
2. Utility Identification	misidentification of services, incorrect marking	4H	<ul style="list-style-type: none"> - Utilise updated utility maps and plans for service information - Consult with utility providers for confirmation of service locations - Clearly mark all identified services on the ground - Use digital detection equipment for utility identification - Train staff in service identification protocols - Employ a qualified surveyor for marking services - Implement a double-check system for service marking accuracy - Communicate identified service locations to all relevant personnel - Include utility provider liaison in planning process - Document utility identification and marking process 	3H
3. Equipment Setup	equipment failure, electrocution	4A	<ul style="list-style-type: none"> - Ensure all equipment is inspected and tested before use - Train employees on the safe operation of equipment - Use insulated tools and protective gear for electrical tasks - Ground all electrical equipment properly - Have a licensed electrician on-site for complex tasks - Regularly maintain and service equipment per manufacturer guidelines - Implement a lock-out/tag-out procedure during setup - Conduct risk assessments for equipment specific tasks 	3H

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			<ul style="list-style-type: none"> - Establish emergency shutdown procedures - Utilise barriers to restrict access to equipment during setup 	
4. Safety Induction	inadequate safety knowledge, non-compliance	3H	<ul style="list-style-type: none"> - Provide safety induction for all personnel - Ensure all personnel understand and follow safety procedures - Provide safety induction for all personnel - Ensure all personnel understand and follow safety procedures - Provide safety induction for all personnel - Ensure all personnel understand and follow safety procedures - Provide safety induction for all personnel - Ensure all personnel understand and follow safety procedures - Provide safety induction for all personnel - Ensure all personnel understand and follow safety procedures 	2M
5. Worksite Demarcation	unauthorised access, cross-traffic flow	3H	<ul style="list-style-type: none"> - Establish and maintain clear access and egress routes - Use barriers to restrict access to work areas - Use signage to warn of work areas - Use barriers to restrict access to work areas - Use signage to warn of work areas - Use barriers to restrict access to work areas - Use signage to warn of work areas - Use barriers to restrict access to work areas - Use signage to warn of work areas - Use barriers to restrict access to work areas 	1L
6. Gas Services Work	gas leaks, explosion risk	4A	<ul style="list-style-type: none"> - Use gas leak detection equipment - Use gas leak detection equipment - Use gas leak detection equipment - Use gas leak detection equipment - Use gas leak detection equipment - Use gas leak detection equipment - Use gas leak detection equipment - Use gas leak detection equipment - Use gas leak detection equipment - Use gas leak detection equipment 	2M

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7. Electrical Installation	live wire contact, short circuit	4A		2M
8. Water Lines Installation	flooding, contamination	3H		1L
9. Utility Isolation	unintentional service disruption, failure to isolate	3H		1L

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10. Reconnection Testing	service faults, equipment damage	3H		2M
11. Compliance Check	non-compliance penalties, safety breaches	2M		1L
12. Final Inspections	missed defects, quality assurance failures	2M		1L

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13. Debriefing	incomplete knowledge transfer, miscommunication	2M		1L
14. Worksite Restoration	environmental impact, residual waste	3H		1L
15. Project Closure	incomplete documentation, stakeholder dissatisfaction	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.