

Cave-In Rescue Plan 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			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. Preparation	Lack of training, Inadequate communication	3H	<ul style="list-style-type: none"> - Conduct training sessions for all personnel on cave rescue procedures. - Provide clear and concise communication channels. - Develop an emergency response plan and ensure all personnel are familiar with it. - Use signage to emphasize safety protocols. - Conduct a pre-briefing session before operation. - Verify that all team members possess necessary qualifications. - Establish a procedure for regular drills. - Ensure all communication devices are functional. - Update procedures based on past incident reports. - Designate a communication officer for the operation. 	2M
2. Site Assessment	Unstable ground, Hidden obstacles	3H	<ul style="list-style-type: none"> - Conduct a thorough visual assessment of the site. - Mark and secure unstable areas. - Use ground-penetrating radar to detect subsurface hazards. - Establish exclusion zones around unstable areas. - Provide personnel with hazard maps. - Regularly monitor ground conditions for changes. - Implement safety barriers and signage around the site. - Ensure all assessment equipment is in working order. - Document and report all identified risks. - Provide continuous updates to all team members. 	2M
3. Equipment Check	Faulty equipment, Improper maintenance	3H	<ul style="list-style-type: none"> - Inspect all rescue equipment before use. - Tag and remove defective equipment from service. - Ensure maintenance logs are up-to-date. - Verify that all equipment meets safety standards. - Schedule regular maintenance checks for all equipment. - Provide training on equipment use and handling. - Include spare parts for critical equipment on-site. - Test personal protective equipment for compliance. 	2M

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
			<ul style="list-style-type: none"> - Establish a checklist for equipment verification. - Assign a qualified officer to oversee equipment checks. 	
4. Establish Safety Perimeter	Unauthorized access, Poor visibility	2M	<ul style="list-style-type: none"> - Establish a safety perimeter using caution tape and barriers. - Assign a dedicated person to monitor and control access to the work area. - Use high-visibility vests and flashing lights to increase visibility. - Communicate the safety perimeter to all personnel involved. - Restrict access to authorized personnel only. - Use spotters to monitor blind spots and provide early warnings. - Implement a clear communication system (e.g., hand signals, radios). - Ensure all personnel are trained in safety protocols. - Conduct a pre-work safety briefing. - Use reflective markers or cones to delineate the work area. 	1L
5. Initiate Communication Plan	Communication breakdown, Misdirection	2M	<ul style="list-style-type: none"> - Establish a clear communication protocol and chain of command. - Assign a dedicated communication officer. - Use standardized terminology and signals. - Implement regular check-ins and status reports. - Utilize radios or other communication devices effectively. - Conduct a pre-work communication drill. - Ensure all personnel understand their roles and responsibilities. - Establish a backup communication method in case of primary system failure. - Document all communication for accountability. - Assign a spotter to monitor for misdirection. 	1L
6. Personnel Allocation	Understaffing, Skill mismatch	3H	<ul style="list-style-type: none"> - Conduct a thorough risk assessment to identify personnel requirements. - Assign personnel based on their specific skills and experience. - Ensure adequate staffing levels for all tasks. - Provide necessary training for all personnel. - Implement a buddy system for less experienced personnel. - Assign a supervisor to oversee personnel allocation. - Cross-train personnel to handle multiple roles. - Establish a contingency plan for personnel shortages. - Monitor personnel performance throughout the task. - Reallocate personnel as needed based on changing requirements. 	2M

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7. Access Control	Uncontrolled entry, Confusion	2M		1L
8. Air Quality Monitoring	Toxic gases, Oxygen deficiency	3H		2M
9. Ground Stabilisation	Cave-in threats, Loose materials	4A		3H

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10. Rescue Team Deployment	Fatigue, Coordination challenges	3H	<div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div>	2M
11. Medical Support Preparation	Delayed response, Inadequate resources	3H	<div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div>	2M
12. Rope and Rigging Safety	Equipment failure, Improper use	3H	<div></div> <div></div> <div></div> <div></div>	2M

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13. Confined Space Entry Management	Entrapment, Poor ventilation	4A		3H
14. Debrief and Documentation	Miscommunication, Incomplete records	2M		1L
15. Post-Operation Review	Overlooking improvements, Failure to adhere to lessons learned	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.