

## Navigating Uneven Terrain 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			<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 planning, Improper equipment selection	3H	<ul style="list-style-type: none"> <li>- Conduct a site inspection to identify potential hazards</li> <li>- Develop a detailed risk management plan</li> <li>- Ensure personnel have appropriate training for the terrain</li> <li>- Select equipment suited to the environmental conditions</li> <li>- Conduct briefings on the track and expected challenges</li> <li>- Prepare emergency response procedures</li> <li>- Secure all necessary permits</li> <li>- Schedule breaks to manage fatigue</li> <li>- Review weather forecast prior to commencing</li> <li>- Ensure mobile communication devices are operational</li> </ul>	2M
2. Preliminary Inspection	Hidden obstacles, Animal encounters	3H	<ul style="list-style-type: none"> <li>- Inspect the area visually for hidden hazards</li> <li>- Use GPS or geographical aids to anticipate difficult areas</li> <li>- Be vigilant for signs of wildlife activity</li> <li>- Maintain a safe distance from any wildlife</li> <li>- Equip team with whistles and radios for communication</li> <li>- Apply insect repellent and wear appropriate clothing</li> <li>- Have containment measures ready for hazardous fauna</li> <li>- Document findings and brief team</li> <li>- Ensure the availability of first aid kits</li> <li>- Continuously update information on terrain conditions</li> </ul>	2M
3. Gear Check	Faulty equipment, Improperly fitted gear	3H	<ul style="list-style-type: none"> <li>- Check all equipment for functionality</li> <li>- Ensure proper fitment of personal protective equipment</li> <li>- Verify tools are adequate for the tasks</li> <li>- Confirm load distribution is managed</li> <li>- Test communication equipment</li> <li>- Perform checks on footwear for grip and support</li> <li>- Check for and replace worn or damaged gear</li> <li>- Conduct a briefing on equipment handling</li> </ul>	2M

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			<ul style="list-style-type: none"> <li>- Record results of equipment checks</li> <li>- Allocate additional gear based on team members' needs</li> </ul>	
4. Weather Evaluation	Sudden weather changes, Extreme temperatures	3H	<ul style="list-style-type: none"> <li>- Check weather forecast before departure</li> <li>- Monitor weather conditions throughout the trip</li> <li>- Have a backup plan in case of bad weather</li> <li>- Inform family and friends of the trip plan</li> <li>- Carry appropriate clothing and gear for all weather conditions</li> <li>- Avoid exposure to extreme temperatures</li> <li>- Take breaks to rest and hydrate</li> <li>- Use sunscreen and protective clothing</li> <li>- Carry a first aid kit and necessary medications</li> <li>- Inform local authorities of the trip plan</li> <li>- Carry a communication device (e.g. satellite phone)</li> <li>- Have a plan for emergency evacuation</li> <li>- Carry a map and compass</li> <li>- Inform the local population of the trip plan</li> <li>- Carry a survival kit (e.g. food, water, shelter)</li> <li>- Have a plan for emergency medical assistance</li> <li>- Carry a fire starter and matches</li> <li>- Inform the local population of the trip plan</li> <li>- Carry a survival kit (e.g. food, water, shelter)</li> <li>- Have a plan for emergency medical assistance</li> <li>- Carry a fire starter and matches</li> </ul>	2M
5. Terrain Navigation	Slips and trips, Falling rocks	4A	<ul style="list-style-type: none"> <li>- Study the terrain map before departure</li> <li>- Inform family and friends of the trip plan</li> <li>- Carry appropriate clothing and gear for all weather conditions</li> <li>- Avoid exposure to extreme temperatures</li> <li>- Take breaks to rest and hydrate</li> <li>- Use sunscreen and protective clothing</li> <li>- Carry a first aid kit and necessary medications</li> <li>- Inform local authorities of the trip plan</li> <li>- Carry a communication device (e.g. satellite phone)</li> <li>- Have a plan for emergency evacuation</li> <li>- Carry a map and compass</li> <li>- Inform the local population of the trip plan</li> <li>- Carry a survival kit (e.g. food, water, shelter)</li> <li>- Have a plan for emergency medical assistance</li> <li>- Carry a fire starter and matches</li> <li>- Inform the local population of the trip plan</li> <li>- Carry a survival kit (e.g. food, water, shelter)</li> <li>- Have a plan for emergency medical assistance</li> <li>- Carry a fire starter and matches</li> </ul>	2M
6. Load Management	Overexertion, Back injuries	3H	<ul style="list-style-type: none"> <li>- Use proper lifting techniques</li> <li>- Avoid carrying heavy loads</li> <li>- Take breaks to rest and hydrate</li> <li>- Use sunscreen and protective clothing</li> <li>- Carry a first aid kit and necessary medications</li> <li>- Inform local authorities of the trip plan</li> <li>- Carry a communication device (e.g. satellite phone)</li> <li>- Have a plan for emergency evacuation</li> <li>- Carry a map and compass</li> <li>- Inform the local population of the trip plan</li> <li>- Carry a survival kit (e.g. food, water, shelter)</li> <li>- Have a plan for emergency medical assistance</li> <li>- Carry a fire starter and matches</li> <li>- Inform the local population of the trip plan</li> <li>- Carry a survival kit (e.g. food, water, shelter)</li> <li>- Have a plan for emergency medical assistance</li> <li>- Carry a fire starter and matches</li> </ul>	2M

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7. Crossing Waterways	Drowning, Strong currents	4A		2M
8. Night Navigation	Poor visibility, Disorientation	4A		1L
9. Emergency Response	Inadequate first aid, Delayed assistance	4A		2M

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10. Deactivation	Equipment mishandling, Incomplete debrief	3H		1L
11. Final Reporting	Data inaccuracy, Confidentiality breach	3H		1L
12. Team Debrief	Incomplete information sharing, Overlooked lessons	3H		2M

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13. Resource Recovery	Loss of assets, Environmental impact	3H		2M
14. Evaluation and Feedback	Bias in feedback, Improper evaluation	2M		1L
15. Rest and Recovery	Fatigue, Delayed rest periods	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.