

## Rotary Percussion Drilling 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	Slippery surfaces, Equipment malfunction	3H	<ul style="list-style-type: none"> <li>- Conduct site inspection and clear debris</li> <li>- Ensure all personnel have appropriate PPE</li> <li>- Review equipment manuals and guidelines</li> <li>- Conduct pre-start equipment checks</li> <li>- Restrict access to working areas through proper signage</li> <li>- Provide proper induction and training to workers</li> <li>- Ensure availability of first aid equipment on-site</li> <li>- Establish communication channels for emergency situations</li> <li>- Regularly monitor the working surface conditions</li> <li>- Calibrate and test equipment before use</li> </ul>	2M
2. Mobilisation of Equipment	Traffic management, Manual handling injuries	4H	<ul style="list-style-type: none"> <li>- Implement traffic management plan</li> <li>- Use mechanical aids for heavy lifting</li> <li>- Assign trained personnel for equipment transport</li> <li>- Ensure clear access routes when moving equipment</li> <li>- Conduct manual handling training for all workers</li> <li>- Utilize spotters when transporting large equipment</li> <li>- Use appropriate lifting techniques</li> <li>- Coordinate with local authorities on traffic control if necessary</li> <li>- Maintain communication devices for coordination</li> <li>- Conduct pre-mobilisation safety briefing</li> </ul>	3H
3. Setting Up	Falling objects, Uneven terrain	3H	<ul style="list-style-type: none"> <li>- Inspect terrain and mark uneven areas</li> <li>- Use temporary fencing around setup area</li> <li>- Secure all tools and equipment to prevent falling</li> <li>- Set up equipment on level ground where possible</li> <li>- Ensure all personnel use hard hats</li> <li>- Conduct tool safety checks</li> <li>- Clearly demarcate the working area</li> <li>- Use scaffolding if working above ground level</li> </ul>	2M

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			<ul style="list-style-type: none"> <li>- Establish exclusion zones during setup</li> <li>- Regular review of setup against safety standards</li> </ul>	
4. Drilling Operations	Noise exposure, Vibration	3H	<p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p>	2M
5. Monitoring Drilling Progress	Equipment failure, Data misinterpretation	3H	<p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p>	2M
6. Core Retrieval	Sharp edges, Back strains	3H	<p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p>	2M

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7. Completion	Slip and trip, Environmental contamination	3H		2M
8. Demobilisation	Crushing injuries, Repetitive Strain Injuries	3H		2M
9. Transportation of Equipment	Load shifting, Accidents in transit	4A		3H

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10. Site Restoration	Erosion, Environmental degradation	3H		2M
11. Reporting	Data inaccuracies, Delayed submissions	3H		2M
12. Equipment Maintenance	Equipment wear and tear, Electrical hazards	3H		2M

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13. Emergency Response	Lack of preparedness, Injury during evacuation	4A		3H
14. Worker Training	Skill deficits, Understanding safety protocols	3H		2M
15. Communication	Miscommunication, Delayed responses	3H		2M

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			<div></div> <div></div> <div></div> <div></div> <div></div> <div></div>	

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.