

Diamond Core 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			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:						Notes on Hierarchy of Controls:		
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		
						4. Engineering		
						5. Administrative		
						6. PPE		
Consequence Scale:						Always document why 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			
						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	Inadequate training, Lack of equipment inspection	3H	<ul style="list-style-type: none"> - Ensure operator is trained and competent - Conduct pre-operation checklist - Inspect all equipment for defects - Ensure communication devices are operational - Establish emergency procedures - Verify workspace is clear of obstructions - Obtain necessary permits - Ensure weather conditions are safe - Conduct a team briefing - Identify and review MSDS for all chemicals 	2M
2. Transportation of Equipment	Manual handling injury, Equipment damage	3H	<ul style="list-style-type: none"> - Use proper lifting techniques - Use trolleys or lifting aids - Conduct route assessment - Secure equipment during transport - Train staff in manual handling - Inspect transport vehicle - Use appropriate personal protective equipment - Delegate tasks to multiple team members - Conduct safety briefing before transport - Establish communication protocols during transit 	2M
3. Site Setup	Falls from height, Unstable ground	3H	<ul style="list-style-type: none"> - Set up warning signs and barriers - Use appropriate fall protection - Conduct site stability assessment - Mark out exclusion zones - Assign a safety spotter - Ensure access routes are stable and clear - Secure drilling rig properly - Provide safety induction for all staff 	2M

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			<ul style="list-style-type: none"> - Use appropriate lighting in low visibility areas - Have emergency services contact details readily available 	
4. Equipment Assembly	Entanglement in moving parts, Incorrect assembly	4A	<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>	3H
5. Positioning Drilling Rig	Crush injuries, Overhead powerline contact	4A	<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>	3H
6. Drill Bit Installation	Cut injuries, Incorrect bit attachment	4A	<p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p>	3H

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7. Drilling Commencement	Noise exposure, Vibration injuries	4A		3H
8. Core Extraction	Pinch points, Hot s	4A		3H
9. Sample Handling	Chemical exposure, Sample contamination	3H		2M

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			<div></div> <div></div> <div></div> <div></div>	
10. Equipment Disassembly	Back injuries, Incorrect disassembly	3H	<div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div>	2M
11. Cleaning	Slippery surfaces, Exposure to cleaning chemicals	3H	<div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div>	2M
12. Equipment Inspection	Missed defects, Inadequate record-keeping	3H	<div></div> <div></div> <div></div> <div></div> <div></div>	2M

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13. Reporting and Documentation	Confidentiality breach, Data entry errors	2M		1L
14. Debriefing	Lack of feedback, Communication breakdown	3H		2M
15. Site Clean-up	Environmental contamination, Injury from debris	3H		2M

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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.