Drilling Through Steel Risk Assessment

Business Name:	ABN:	
Business Address:		
Contact Person:	Phone:	Email:

THIS RISK ASSESSMENT IS APPROVED BY THE PCBU OF 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:

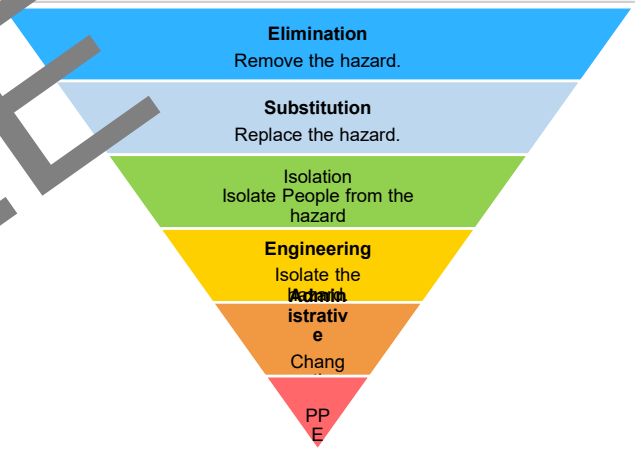
CLIENT OR PRINCIPAL CONTRACTOR DETAILS

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
ALMOST CERTAIN	3 HIGH	3 HIGH	4 ACUTE	4 ACUTE	4 ACUTE		
LIKELY	2 MODERATE	3 HIGH	3 HIGH	4 ACUTE	4 ACUTE	4A ACUTE	DO NOT PROCEED
POSSIBLE	1 LOW	2 MODERATE	3 HIGH	4 ACUTE	4 ACUTE	3H HIGH	Rev before work
UNLIKELY	1 LOW	1 LOW	2 MODERATE	3 HIGH	4 ACU	2M MO RATE	Ensure control measures in place.
RARE	1 LOW	1 LOW	2 MODERATE	3 HIGH	3 H	1L LOW	Monitor and keep records.

HIERARCHY OF CONTROLS



Risk Rating & Required Action:

4A	Stop work. The risk is intolerable. E inate the hazar redesign the activity before proceeding. A Safe Work Method Statement (SWMS) or hi er-level authorisati is required.
3H	Review and approve additional c rols b ask arts. Senior supervisor sign-off needed.
2M	Ensure all nominated controls are in place and effe ive. 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	improper equipment selection, lack of safety briefing	3H	- Conduct a safety briefing before operations begin - Ensure correct PPE is available and worn - Select appropriate drilling equipment for s[illegible] work - Check that all equipment is in good working [illegible]der - Verify that all workers are competent and traine[illegible]or the task i[illegible]olved - Inspect the work area for any [illegible]zards - Review the Safe W[illegible]thod S[illegible]ements - Verify first a[illegible]it is on site [illegible]nd stoc[illegible]d - Ensur[illegible] emerg[illegible]cy cont[illegible] numbers a[illegible]posted - Desi[illegible]n a safe[illegible]nicer for the task	2M
2. Tool Inspection	faulty drill, damaged pow[illegible]rd	3H	- Visual[illegible]insp[illegible]t all to[illegible] for any damage or wear [illegible]st dr[illegible]oper[illegible]n before use - Chec[illegible]ctrical cords for any damage - [illegible]nsure all safety devices and features are functioning - Tag out and repair any faulty equipment immediately - Conduct a pre-start checklist for all tools - Ensure all tools are suitable for the task - Verify that all guards are in place and secure - Regular maintenance records should be up-to-date - Ensure spare tools and parts are available	1L
3. Securing the Material	material movement, instability of the work piece	3H	- Secure steel workpiece with clamps or a stable fixture - Use appropriate supports to avoid material shifting - Ensure table or surface is level and stable - Verify that securing devices are in good condition - Use appropriate lifting techniques for positioning materials - Limit personnel in close proximity during positioning - Conduct checks post-securing to ensure stability - Ensure no loose objects are on work surface	2M

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			- Monitor for any changes throughout the operation - Regularly communicate with team members	
4. Marking the Drill Spot	incorrect measurements, slips and falls from height	2M	[redacted]	1L
5. Drilling Process Set-up	incorrect drill settings, bit breakage	3H	[redacted]	2M
6. Operating Drill	noise pollution, vibration	4A	[redacted]	2M

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			[redacted]	
7. Managing Cuttings and Debris	sharp metal shards, slips and trips from debris	3H	[redacted]	1L
8. Monitoring Temperature	overheating of dril[illegible]ts, burn material	3H	[redacted]	1L
9. De-energising Equipment	electrical shock, unexpected machine activation	3H	[redacted]	1L

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			[redacted]	
10. Final Inspection and Cleanup	missed safety defects, residual debris	2M	[redacted]	1L
11. Post-Operation Review	incomplete reporting, unnoticed incidents	2M	[redacted]	1L
12. Storage of Equipment	damage from improper storage, trip hazards	2M	[redacted]	1L

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			[redacted]	
13. Updating Risk Assessment	outdated safety procedures, changes in operation methods	2M	[redacted]	1L
14. Continuous Training	knowledge gaps, skill degradati	2M	[redacted]	1L
15. Emergency Preparedness	inaction during emergencies, inadequate emergency response	4A	[redacted]	2M

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			[redacted]	
16. Reviewing Safety Performance	inaccurate reporting, overlooked issues	2M	[redacted]	1L
17. Hazardous Chemical Management	chemical spills, fume exposure	4A	[redacted]	2M
18. Fault Reporting Mechanism	undetected faults, poor communication	2M	[redacted]	1L

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			[redacted]	

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 FOR 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

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-of-codes-of-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/forms-and-resources/codes-of-practice

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.

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

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

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