

Installation Of Boreholes Risk Assessment

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

THIS RISK ASSESSMENT IS APPROVED BY THE PCBU ON 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 | 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 | | | | |
| | | | | | | | | <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, Lack of resources | 4A | <ul style="list-style-type: none"> - Ensure thorough site assessment before starting - Confirm all resources are available and suitable - Have a qualified supervisor review the job plan - Obtain necessary permits and approvals before commencement - Ensure the workgroup is briefed on site conditions and risks - Establish communication protocols for all team members - Conduct a risk assessment specific to the site - Schedule work to minimise environmental impact - Review historical site data for informed planning - Ensure all personnel have completed required training | 3H |
| 2. Transport to Site | Vehicular accidents, Load instability | 4M | <ul style="list-style-type: none"> - Use experienced drivers with relevant licences - Secure all loads on vehicles properly - Conduct vehicle inspections before departure - Plan routes to avoid high-risk areas or traffic congestion - Use appropriate signage on transport vehicles - Implement journey management plan with check-in procedures - Train staff in load restraint techniques - Ensure vehicles have first aid kits and fire extinguishers - Maintain communications with transport teams - Minimise trips by grouping equipment into single loads | 2M |
| 3. Site Access | Slips, trips and falls, Animal hazards | 3H | <ul style="list-style-type: none"> - Verify site conditions for safe access - Wear appropriate PPE including boots and gloves - Use insect repellent and sun protection - Clear access routes of debris and hazards - Install temporary barriers or warning signs where necessary - Conduct toolbox talks focusing on site-specific risks - Establish emergency procedures for wildlife encounters - Limit access to essential personnel only | 1L |

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|------------------------|---------------------------------------|--------------|---|---------------|
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| | | | <ul style="list-style-type: none"> - Provide first aid kit and trained first aider onsite - Install secure walkways wherever possible | |
| 4. Equipment Setup | Equipment failure, Electrical hazards | 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> <p>[REDACTED]</p> | 2M |
| 5. Initiate Drilling | Noise, Vibration | 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. Monitoring Progress | Complacency, Environmental impact | 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. Core Extraction | Unstable ground, Manual handling injuries | 4A | | 2M |
| 8. Sample Transportation | Sample degradation, Accidents | 3H | | 1L |
| 9. Equipment Maintenance | Mechanical failures, Chemical exposure | 3H | | 1L |

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| | | | | |
| 10. Waste Disposal | Environmental contamination, Exposure to hazardous materials | 4A | | 2M |
| 11. Communication | Miscommunication, Equipment interference | 3H | | 1L |
| 12. Emergency Procedures | Lack of emergency response, Delayed medical assistance | 4A | | 2M |

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| | | | | |
| 13. Site Security | Unauthorised access, Theft of materials | 3H | | 1L |
| 14. Decommission | Residual soil contamination, Structural instability | 3H | | 2M |
| 15. Project Review | Inadequate hazard reporting, Lack of improvement | 3H | | 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.