

Operating A Trench Digger 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	
Consequence Scale:								4. Engineering	
Consequence		People (injury/illness)		Project / Assets		Compliance / Reputation		5. Administrative	
Catastrophic		Fatality or permanent total disability		project shutdown		Significant regulator intervention; criminal prosecution		6. PPE	
Major		Serious injury/illness (hospital > 5 days)		critical delay		Improvement notice; major media coverage		Always document why a lower-order control is accepted if elimination or substitution is not reasonably practicable.	
Moderate		Medical-treatment injury; lost-time > 1 day		moderate delay		Minor breach; adverse client comment		<i>aligned with Safe Work Australia's Managing the risk of fatigue at work (2023) and ISO 45001:2018 clauses 6–8.</i>	
Minor		First-aid only, no lost time		negligible delay		Isolated non-conformance			
Insignificant		No injury		no schedule impact		Deviation caught and corrected on site			

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	slip hazards, incorrect PPE	3H	<ul style="list-style-type: none"> - Conduct a site inspection to identify slip hazards - Ensure all personnel are wearing appropriate PPE - Provide thorough training on PPE use and maintenance - Remove any obstacles that could cause tripping - Place warning signs in areas with slip risks - Ensure proper footwear with anti-slip soles is worn - Store PPE in a clean and accessible location - Inspect PPE and replace if damaged - Minimize entry on wet areas where possible - Brief workers on hazard awareness and emergency protocols 	2M
2. Equipment Selection	inadequate equipment, unknown limitations	3H	<ul style="list-style-type: none"> - Select trench digger suitable for the specific task - Verify equipment capabilities against task requirements - Conduct pre-use inspections of the trench digger - Ensure operators are trained and competent - Consult equipment manuals for guidance - Avoid using makeshift or unapproved attachments - Address and rectify identified faults before operation - Limit operation to certified personnel - Record and review equipment inspection outcomes - Ensure backup equipment is available for critical tasks 	2M
3. Site Marking	incorrect site markers, poor visibility	2M	<ul style="list-style-type: none"> - Use high-visibility materials for marking the site - Clearly outline dig zones with accurate measurements - Provide workers with site maps and plans - Use GPS equipment for precision if necessary - Confirm site boundaries with all workers - Inspect the site markings regularly for visibility - Place flagging tape to increase visibility - Use temporary barriers to demarcate dangerous areas 	1L

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			<ul style="list-style-type: none"> - Educate workers on the markings and meanings - Adjust markings promptly when conditions change 	
4. Ground Stability Check	ground collapse, unsuitable soil conditions	4A	<ul style="list-style-type: none"> - Conduct ground stability checks before starting work - Use appropriate equipment and techniques for ground stability checks - Avoid working on unstable ground - Use shoring or other stabilization methods if necessary - Monitor ground conditions throughout the work - Stop work if ground conditions deteriorate - Use appropriate safety equipment (e.g., hard hats, safety harness) - Establish exclusion zones around work areas - Communicate with other workers to avoid conflicts - Use clear markings to indicate work areas and hazards - Adjust markings promptly when conditions change 	3H
5. Equipment Operation	machine malfunction, operator error	4A	<ul style="list-style-type: none"> - Ensure all equipment is properly maintained and inspected before use - Only trained and authorized personnel should operate equipment - Follow manufacturer's instructions and safety procedures - Use appropriate PPE (e.g., hard hats, safety glasses, earplugs) - Establish clear communication protocols between operators and other workers - Use clear markings to indicate work areas and hazards - Adjust markings promptly when conditions change - Stop work if equipment malfunctions or if operator becomes fatigued - Use appropriate safety equipment (e.g., hard hats, safety harness) - Establish exclusion zones around work areas - Communicate with other workers to avoid conflicts - Use clear markings to indicate work areas and hazards - Adjust markings promptly when conditions change 	3H
6. Traffic Control	vehicle accidents, pedestrian conflicts	3H	<ul style="list-style-type: none"> - Use appropriate traffic control devices (e.g., cones, signs, barriers) - Establish clear traffic flow patterns and exclusion zones - Communicate with other workers to avoid conflicts - Use clear markings to indicate work areas and hazards - Adjust markings promptly when conditions change - Stop work if traffic conditions deteriorate or if pedestrian safety is compromised - Use appropriate safety equipment (e.g., high-visibility vests, hard hats) - Establish exclusion zones around work areas - Communicate with other workers to avoid conflicts - Use clear markings to indicate work areas and hazards - Adjust markings promptly when conditions change 	2M

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7. Environmental Awareness	wildlife interference, pollutant release	3H		2M
8. Site Supervision	unmonitored activities, lack of communication	2M		1L
9. Emergency Procedures	inadequate response plans, delayed medical attention	3H		2M

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10. Communication	miscommunication, lack of communication clarity	2M	<div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div>	1L
11. Finalisation	incomplete documentation, residual site hazards	2M	<div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div>	1L
12. Maintenance Scheduling	equipment failure, overlooked maintenance	3H	<div></div> <div></div> <div></div>	2M

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13. Handover Process	incomplete handover, knowledge gaps	2M		1L
14. Auditing and Review	overlooked risks, non-compliance	2M		1L
15. Continuous Training	skills degradation, training gaps	2M		1L

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

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>

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>

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