

## Digging Trenches For Rerouting Sewage Lines 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>	

### Risk Rating & Required Action:

<b>4A</b>	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.
<b>3H</b>	Review and approve additional controls before task starts. Senior supervisor sign-off needed.
<b>2M</b>	Ensure all nominated controls are in place and effective. Proceed with caution; monitor conditions.
<b>1L</b>	Proceed, following standard operating procedures. Monitor and keep records.

### Consequence Scale:

Consequence	People (injury/illness)	Project / Assets	Compliance / Reputation
<b>Catastrophic</b>	Fatality or permanent total disability	project shutdown	Significant regulator intervention; criminal prosecution
<b>Major</b>	Serious injury/illness (hospital > 5 days)	critical delay	Improvement notice; major media coverage
<b>Moderate</b>	Medical-treatment injury; lost-time > 1 day	moderate delay	Minor breach; adverse client comment
<b>Minor</b>	First-aid only, no lost time	negligible delay	Isolated non-conformance
<b>Insignificant</b>	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:

- Eliminate**
- Substitute
- Isolate
- Engineering
- Administrative
- 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 for Digging	Slips and trips, Incorrect tool usage	3H	<ul style="list-style-type: none"> <li>Conduct a site assessment to identify safe entry and exit points</li> <li>Ensure all workers are trained in manual handling techniques</li> <li>Provide proper footwear with non-slip soles</li> <li>Organise tools and equipment in a designated area to prevent trips</li> <li>Use protective gloves when handling tools to ensure a proper grip</li> <li>Keep the work area tidy to prevent slipping hazards</li> <li>Regularly inspect tools for damage before use</li> <li>Schedule work during daylight hours when visibility is optimal</li> <li>Develop a communication plan for inclement weather conditions for early cessation</li> <li>Ensure handheld tools are ergonomically designed for the task</li> </ul>	2M
2. Site Clearance	Unmarked underground utilities, Falling debris	4H	<ul style="list-style-type: none"> <li>Review utility maps and contact Dial Before You Dig for underground services information</li> <li>Designate a site officer to oversee clearance procedures</li> <li>Erect barriers around the worksite to prevent access</li> <li>Use spotters when moving materials to avoid hitting overhead structures</li> <li>Develop and implement a site-specific safety plan</li> <li>Schedule regular safety drills on potential utility strikes</li> <li>Secure loose materials with netting or appropriate barriers to prevent falls</li> <li>Implement communication protocols using two-way radios for clear commands</li> <li>Perform a Job Safety Analysis (JSA)</li> <li>Ensure daily toolbox talks highlight potential hazards</li> </ul>	2M
3. Excavation Marking	Impact with moving machinery, Manual handling injuries	3H	<ul style="list-style-type: none"> <li>Use brightly coloured and reflective materials to mark the excavation area</li> <li>Implement a system of hand signals or radios for communication between operators and ground workers</li> <li>Ensure proper lighting is available for clear visibility at twilight or at night</li> <li>Verify all machinery operators hold the appropriate licences</li> <li>Set up exclusion zones around the working machinery</li> <li>Train workers in correct manual handling techniques to prevent injuries</li> <li>Perform site-specific risk assessments prior to starting work</li> <li>Establish a 'no-go' zone around marked excavation areas</li> </ul>	1L

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			Rotate staff to manage fatigue during heavy manual tasks Use mechanical aids where possible to reduce manual labour demands	
4. Excavation Initiation	Soil collapse, Body strain from machinery operation	4A	[REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED]	2M
5. Utility Locating	Electrical shock, Gas leaks	4A	[REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED]	2M
6. Digging and Trenching	Machinery collisions, Falls into trench	3H	[REDACTED] [REDACTED] [REDACTED] [REDACTED]	2M

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7. Soil and Waste Management	Contamination, Dust inhalation	3H		1L
8. Piping Preparation and Installation	Cuts from sharp materials, Chemical exposure from sealants	3H		2M
9. Connection to Sewage System	Water ingress, Confined space risks	4A		2M

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10. Backfilling	Equipment overturn, Unexpected voids	3H		1L
11. Site Restoration	Inadequate drainage, Trip hazards	3H		2M
12. Final Inspection and Closeout	Unresolved defects, Incomplete documentation	2M		1L

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13. Transport of Machinery and Tools	Vehicle accidents, Tool loss or damage	3H		2M
14. Decommission of Temporary Facilities	Unsecured materials, Chemical spills	2M		1L
15. Post-Operation Maintenance	Structural collapse, Sewage leaks	4A		2M

[illegible]



## 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.