

Bend Pipes 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	
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		aligned with Safe Work Australia's Managing the risk of fatigue at work (2023) and ISO 45001:2018 clauses 6–8.		
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	Incorrect setup, Inadequate lighting	3H	<ul style="list-style-type: none"> - Double-check setup against manufacturer guidelines - Ensure adequate lighting at the worksite - Conduct a pre-task briefing with all workers - Verify tools and equipment are in working condition - Establish a clean and organized workspace - Confirm all workers are wearing appropriate PPE - Implement a pre-work competency check for all involved personnel - Use signage to indicate ongoing tasks - Secure any loose materials or tools - Maintain clear and unobstructed access paths 	2M
2. Machine Inspection	Faulty equipment, Unreported damage	3H	<ul style="list-style-type: none"> - Perform a visual inspection of all machinery - Implement a checklist for routine inspections - Immediately report and address any damages or faults - Ensure all safety guards are in place - Verify that emergency stop buttons are functional - Conduct machine tests without materials - Update maintenance log after every inspection - Assign trained personnel for detailed inspections - Use lockout/tagout procedures when necessary - Ensure inspection tools are calibrated and functional 	1L
3. Pipe Selection	Incorrect size, Material defect	3H	<ul style="list-style-type: none"> - Verify pipe dimensions against job specifications - Inspect pipes for visible defects - Utilise non-destructive testing methods for internal flaws - Ensure correct material type is selected - Label and segregate conforming and non-conforming pipes - Train personnel on material specifications - Use calibrated measurement tools - Cross-reference with material order list 	1L

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
			<ul style="list-style-type: none"> - Conduct supplier quality checks - Secure pipes to prevent movement before transport 	
4. Lifting Pipes	Manual handling injuries, Crushing	4A	<ul style="list-style-type: none"> - Use correct lifting technique - Use manual handling equipment - Use correct lifting technique - Use manual handling equipment - Use correct lifting technique - Use manual handling equipment - Use correct lifting technique - Use manual handling equipment - Use correct lifting technique - Use manual handling equipment 	2M
5. Positioning Pipes	Pinch points, Incorrect alignment	3H	<ul style="list-style-type: none"> - Use correct positioning technique - Use manual handling equipment - Use correct positioning technique - Use manual handling equipment - Use correct positioning technique - Use manual handling equipment - Use correct positioning technique - Use manual handling equipment - Use correct positioning technique - Use manual handling equipment 	1L
6. Heating Pipes	Burns, Fire risk	4A	<ul style="list-style-type: none"> - Use correct heating technique - Use manual handling equipment - Use correct heating technique - Use manual handling equipment - Use correct heating technique - Use manual handling equipment - Use correct heating technique - Use manual handling equipment - Use correct heating technique - Use manual handling equipment 	2M

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7. Bending Pipes	Over-bending, Equipment malfunction	4A		2M
8. Cooling Pipes	Thermal shock, Cold burn, Slip tripping	3H		1L
9. Quality Inspection	Missed defects, Equipment failure during testing	3H		1L

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10. Documentation	Data entry errors, Incomplete records	2M		1L
11. Clean-Up	Trip hazards, Inaccurate disposal of waste	2M		1L
12. Follow-Up Review	Missed improvements, Inadequate feedback collection	2M		1L

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13. Maintenance Planning	Overlooked maintenance, Spares unavailability	3H		1L
14. Training Programmes	Outdated training materials, Inadequate skill development	2M		1L
15. Emergency Preparedness	Lack of preparedness, Ineffective emergency response	4A		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.