

Water Pump 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	Electrical shock, Slips and trips	3H	<ul style="list-style-type: none"> - Conduct a pre-start checklist to ensure all equipment is safe to use. - Wear appropriate footwear with non-slip soles. - Ensure work area is well-lit and free of clutter. - Verify electrical cords and outlets are in good condition. - Ensure spill containment materials are available. - Brief all personnel on safety protocols relevant to the work environment. - Ensure that warning signs are in position. - Familiarise team with emergency procedures. - Confirm the availability of first aid resources. - Keep work area clean and tidy. 	2M
2. Energy isolation	Stored energy release, Equipment starts up	4H	<ul style="list-style-type: none"> - Use lockout/tagout systems to isolate the pump's energy sources. - Verify isolation by attempting to start the equipment only after it has been locked out. - Display clear lockout signs on all energy sources. - Use only approved lockout devices. - Educate employees about the lockout/tagout policy. - Regularly audit the lockout/tagout process. - Ensure all personnel involved are trained and competent. - Keep communication clear and consistent among team members. - Instruct team to not remove lockout devices unless authorised. - Update lockout/tagout procedures as necessary. 	2M
3. Pump inspection	Crush injury, Pinch points	3H	<ul style="list-style-type: none"> - Maintain a safe distance from the pump during inspection. - Use provided tools designed for pump inspection. - Wear appropriate personal protective equipment (PPE), such as gloves. - Secure loose clothing and hair away from moving parts. - Ensure hands and tools are not in the line of operation. - Inspect all components visually before manually interacting with them. - Engage safety locks on moving parts before commencing inspection. - Work in pairs to ensure safety amid inspecting difficult-to-see areas. 	2M

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			<ul style="list-style-type: none"> - Use mechanical aids to support heavy parts during inspection. - Establish clear communication about movement around the pump. 	
4. Line Inspection	Chemical exposure, Pressurised fluid release	4A	<ul style="list-style-type: none"> - Wear appropriate PPE (goggles, gloves, protective clothing). - Ensure the area is well-ventilated. - Use mechanical aids to support heavy parts during inspection. - Establish clear communication about movement around the pump. - Follow the manufacturer's instructions for the equipment. - Ensure the equipment is properly maintained. - Use the correct tools and techniques for the task. - Avoid contact with the fluid or components. - If contact occurs, follow the appropriate first aid procedures. - Report any incidents or near misses to the supervisor. 	2M
5. Disassembly	Sharp edges, Musculoskeletal injuries	3H	<ul style="list-style-type: none"> - Wear appropriate PPE (gloves, safety glasses, steel toe boots). - Use the correct tools and techniques for disassembly. - Avoid using excessive force or leverage. - Keep the work area clear of obstacles. - Use mechanical aids to support heavy parts during disassembly. - Establish clear communication about movement around the pump. - Follow the manufacturer's instructions for the equipment. - Ensure the equipment is properly maintained. - Use the correct tools and techniques for the task. - Avoid contact with the fluid or components. - If contact occurs, follow the appropriate first aid procedures. - Report any incidents or near misses to the supervisor. 	2M
6. Cleaning components	Chemical burns, Inhalation of fumes	3H	<ul style="list-style-type: none"> - Wear appropriate PPE (goggles, gloves, protective clothing). - Ensure the area is well-ventilated. - Use mechanical aids to support heavy parts during inspection. - Establish clear communication about movement around the pump. - Follow the manufacturer's instructions for the equipment. - Ensure the equipment is properly maintained. - Use the correct tools and techniques for the task. - Avoid contact with the fluid or components. - If contact occurs, follow the appropriate first aid procedures. - Report any incidents or near misses to the supervisor. 	1L

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7. Inspection and repair	Unexpected movement, Tool misuse	3H		2M
8. Reassembly	Tool slip, Incorrect	3H		2M
9. Conduct test run	Startup malfunction, Excessive vibration	4A		2M

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10. Final checks and documentation	Data inaccuracy, Missed compliance	3H		1L
11. Safety briefing	Communication breakdown, Inadequate response in emergencies	3H		1L
12. Fueling process	Fire hazard, Fuel spillage	4A		2M

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13. Eventual decommissioning	Toxic leaks, Structural collapses	3H		1L
14. Equipment storage	Improper stacking, Moisture damage	3H		2M
15. Monitoring and maintenance	Component wear and fatigue, Unexpected shutdowns	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.