

Sewage Pump 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	
								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	Slip hazard, Chemical exposure risk, Electrical hazard, Ergonomics issues, Confined space entry risk, Noise exposure, Manual handling injury potential, Communication errors, Weather conditions, Distraction due to environmental factors, PPE inadequacy possibility, Emergency procedure confusion, Eye injuries due to splashes, Infection from pathogens, Psychological stress due to critical nature of task, Dynamic environmental factors, Inadequate lighting, Power tool misuse, Leaks or spills, Biological contamination, Mislabelling or misinformation hazard, Incorrect tool usage, Insufficient briefing or planning, Material transport issues, Fire or explosion risk, Overexertion or fatigue,	4A	<ul style="list-style-type: none"> - Conduct a pre-start meeting to discuss the procedure and safety measures - Ensure all tools and equipment are checked for functionality prior to use - Wear appropriate PPE including gloves, safety goggles and waterproof boots - Use lockout/tagout procedures to ensure electrical safety - Implement confined space procedures according to relevant guidelines - Set up barriers and signage to prevent unauthorized access to the work area - Ensure adequate lighting for clear visibility - Prepare and educate team on emergency evacuation procedures - Communicate roles and responsibilities clearly to all team members - Use drip pits for managing leaks promptly - Maintain clean and dry working surfaces to prevent slips - Ensure respiratory protection is worn if necessary - Double-check all chemicals used have correct labelling and safety data sheets on hand - Rotate tasks among team members to avoid fatigue 	3H
2. Site Establishment	Struck-by object, Tripping hazard, Poor ventilation, Electrical short circuits, Dust inhalation, Hazardous gasses, Contact with infected surfaces, Vibration affecting stability, Insufficient site signage, Pesticide contamination, Reaction due to latex exposure, Heat stress, Incorrect waste disposal, Fast-paced workflow leading to mistakes, Communication interference, Shared access paths, Equipment interference,	4A	<ul style="list-style-type: none"> - Erect barriers to separate work zone from public passages - Use dust suppression methods like water sprays if needed - Have fire extinguishers readily accessible and staff trained in their use - Conduct air monitoring for hazardous gasses - Post clear signage for all potential hazards and emergency exits - Ensure all pathways are unobstructed and well-lit - Use two-way radios for clear communication - Provide shaded areas and regular breaks to reduce heat stress - Implement pedestrian and vehicle management protocols - Ensure all workers are briefed on the site emergency and incident response procedures - Place waste and recycling bins at appropriate and accessible locations - Use vibration-reducing tools and equipment to minimize exposure - Schedule regular housekeeping checks to maintain cleanliness - Instruct workers on proper disposal methods for hazardous materials 	2M

<p>not leading to injuries, fires, Inadvertent life deactivation, Sharp deactivation, Biofilm formation, Moving parts, Communication regarding equipment,</p>	<p>3H</p>	<ul style="list-style-type: none"> - Verify all equipment calibration is correct - Ensure all safety guards are in place and functional - Follow manufacturer's inspection procedures rigorously - Maintain an equipment maintenance logbook for record keeping - Tag out and report any faulty equipment immediately to prevent use - Ensure appropriate training for performing the inspection processes - Double-check emergency stop functions are operational - Use insulated tools while dealing with electrical components - Regularly check for corrosion or biofilm build-up on parts - Implement lockout/tagout procedures for equipment under maintenance - Provide training on recognising and managing equipment faults - Perform regular testing of sensors and alarms for accuracy 	
<p>damaged PPE, Safety Labels, Psychological wear PPE, Cross-contamination risks, Visual impairment, PPE incompatibility with</p>	<p>3H</p>	<p>[REDACTED]</p>	

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6. Pump Disconnection	Mechanical injury while detaching, Slip or trip hazards, Chemical exposure from remaining sewage, Confusion over pump connections, Muscle strain, Overexertion, Noise irritation, Disconnecting wrong connections, Pressure build-up, Hazardous substance discharge,	4A		2M
7. Pump Removal	Dropping the pump, Manual handling injury, Unforeseen movement hazards, Equipment tipping, Biochemical exposure, Incorrect removal process, Miscommunication during team lifts, Limited accessibility to the pump, Incorrect storage of removed items,	4A		2M

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8. Transport of Pump	Transport route obstructions, Vehicle conflicts, Load instability, Inadequate securing of the pump, Traffic exposure, Struck-by hazards, Vibration during transit, Breakage due to mechanical stress,	3H		1L
9. New Pump Installation	Incorrect alignment, Slips during fitment, Power connection errors, Improper reactivation, Incomplete installation leading to shutdown, Miscommunication, Fasteners loosening, Ergonomic strains, Line obstructions, Re-connection of the system,	4A		2M
10. System Reactivation	Overpressure incidents, Valve failures, Noise pollution, Potential system leaks, Rapid pressure changes, Equipment malfunction, Electrical faults, Component incompatibility issues,	4A		2M

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11. Post-Installation Inspection	Operational errors, Leak risk post installation, Wrongful configuration, Tool left in system, Visibility issues due to poor lighting, Ventilation making working environment intolerable, Unanticipated pressure changes,	3H		1L
12. Training and Documentation	Knowledge gaps, Incorrect procedure adoption, Misinformation hazards, Unreported incidents, Wrong use of reference materials, Communication errors, Training plan inadequacy,	3H		1L
13. Housekeeping	Tools or materials causing trips, Work clutter, Slip from spills, Mishandling of biological waste, Sharp object injuries,	4A		1L

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14. Confined Space Monitoring	Asphyxiation from gas leaks, Psychological stress from enclosed environment, Loss of communication, Poor visibility leading to error, Heat stress, Difficulty in emergency evacuation,	4A		2M
15. Shutdown and Lockout	Inadvertent startup, Residual mechanical energy, Returning pressure build-up,	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.