

**Pool Maintenance**

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.	Administrative Change	
								PPE	

  

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:

1. **Eliminate**
2. **Substitute**
3. **Isolate**
4. **Engineering**
5. **Administrative**
6. **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. WHS Governance, Roles and Consultation	<ul style="list-style-type: none"> <li>Lack of clear WHS responsibilities for pool maintenance activities and facilities management</li> <li>Inadequate consultation with workers, contractors and health and safety representatives regarding pool-related risks</li> <li>Failure to integrate pool-specific WHS risks into the organisation's overall WHS management system</li> <li>No formal process for reviewing incidents, near misses or complaints relating to pools, spas, slides or associated plant</li> <li>Insufficient consideration of contractor interfaces where pool maintenance is outsourced or shared with facility owners</li> <li>Poor communication of WHS expectations to sub-contractors performing pool or spa work</li> </ul>	4A	<ul style="list-style-type: none"> <li>Establish and document a WHS governance framework that explicitly covers pool, spa and water-slide operations and maintenance in line with WHS Act 2011 roles of PCBUs, officers and workers</li> <li>Define and document WHS roles, accountability and authority for pool maintenance, chemical management, plant operation, and contractor oversight</li> <li>Implement formal consultation mechanisms (e.g. WHS committee, toolbox forums, contractor pre-start meetings) that include discussion of pool and spa hazards and proposed changes to systems of work</li> <li>Integrate pool maintenance specific risks into the organisation's WHS policy, risk register and annual WHS planning processes</li> <li>Establish a documented process for reporting, recording and investigating all pool-related incidents, near misses and non-conformances, with corrective actions tracked to closure</li> <li>Include WHS performance and compliance of pool maintenance operations in management review meetings and WHS reports</li> <li>Ensure officers exercise due diligence by periodically reviewing pool safety reports, compliance audits and risk assessments</li> </ul>	3H
2. Competency, Licensing and Training for Pool and Spa Maintenance	<ul style="list-style-type: none"> <li>Workers performing chlorination, chemical dosing or gas work without relevant qualifications or competency</li> <li>Inadequate training in operation of pool pumps, filters, chlorinators, heaters and associated lockout/tagout systems</li> <li>Lack of understanding of legal duties when maintaining public pools, strata pools or hotel facilities</li> <li>Insufficient training in recognising signs of chemical exposure, heat stress, electrical hazards or structural failure of slides and pools</li> <li>Failure to provide refresher training for changes in equipment, chemicals, pool covers, or new automated dosing systems</li> </ul>	4A	<ul style="list-style-type: none"> <li>Develop and maintain a competency matrix for all roles involved in pool, spa and water-slide maintenance, including chemical handling, confined space entry (if applicable), electrical work (licensed electricians) and plant maintenance</li> <li>Require evidence of qualifications and licences (e.g. restricted electrical licence, gasfitter licence, pool plant operator training) before workers perform specialised tasks such as pool gas heater installation or repair</li> <li>Provide induction training covering pool-specific hazards: chlorinators, chlorine gas or liquid storage, chemical dosing systems, suction entrapment risks, water quality management and emergency procedures</li> <li>Implement scheduled refresher training on pool chemical management, emergency spill response, safe use of pool covers and rollers, and manual handling of heavy equipment such as pumps and filters</li> <li>Ensure contractors providing chlorinator installation, pool heating, pump maintenance or water-slide repair demonstrate competency and are inducted into site-specific WHS requirements</li> <li>Maintain training records, competency assessments and authorisations, and review them annually or after incidents or equipment changes</li> </ul>	2M
3. Chemical Management and Chlorination Systems	<ul style="list-style-type: none"> <li>Improper selection or incompatibility of pool chemicals leading to violent reactions or gas release</li> </ul>	4A		2M

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	<ul style="list-style-type: none"> <li>Inadequate system for safe storage, segregation and labelling of chlorine, acids, alkalis and other pool treatment chemicals</li> <li>Lack of documented procedures for chlorinator maintenance, calibration and fault reporting</li> <li>Inadequate design of automated chemical dosing or chlorinator systems leading to overdosing, underdosing or uncontrolled release</li> <li>Failure to manage contractor access to chemical storage areas, including keys, codes and supervision</li> <li>No system for checking Safety Data Sheets (SDS) currency and availability at point of use</li> </ul>		<ul style="list-style-type: none"> <li>Develop a chemical management plan specific to pool and spa operations, addressing procurement, storage, handling, dosing, disposal and emergency response in line with WHS Regulations and relevant Codes of Practice</li> <li>Specify engineering controls for chlorination systems (e.g. interlocks, local exhaust ventilation, automatic shut-off valves, bunding, leak detection) during design and procurement</li> <li>Implement standard operating procedures for chemical receiving, decanting, mixing and loading into feeders or chlorinators, including prohibitions on mixing incompatible substances</li> <li>Ensure all chemical containers are labelled in accordance with the Globally Harmonised System (GHS) and that decanted containers are controlled and traceable</li> <li>Maintain an up-to-date register of hazardous chemicals used for pool maintenance, including SDS accessible in physical and electronic form</li> <li>Schedule regular inspections and preventive maintenance of chlorinators and chemical dosing systems, with documented checks and escalation for defects</li> <li>Limit unauthorised access to chemical stores using restricted key or access card systems and maintain an authorised users list</li> </ul>	
4. Chemical Storage Facilities and Handling Infrastructure	<ul style="list-style-type: none"> <li>Poorly designed chemical storage rooms with inadequate ventilation, drainage or bunding</li> <li>Storage of pool chemicals in areas exposed to heat, direct sunlight or water ingress increasing risk of degradation or reaction</li> <li>Insufficient separation of oxidising acids, flammables and other liquids used in pool treatment or heating systems</li> <li>Inadequate racking or containment leading to drum or cylinder falls and spills</li> <li>No structured inspection regime for chemical storage integrity, ventilation systems and emergency equipment</li> <li>Inadequate handling aids for moving chemical drums or cylinders, leading to reliance on manual handling</li> </ul>	4A	[REDACTED]	2M
5. Plant and Equipment Management (Pumps, Filters, Heaters, Chlorinators)	<ul style="list-style-type: none"> <li>Inadequate preventive maintenance for pool pumps, filters, heaters, chlorinators and associated pipework leading to mechanical failure or leaks</li> </ul>	4A	[REDACTED]	2M

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	<ul style="list-style-type: none"> <li>Lack of guarding or interlocks on moving or rotating components of pumps and associated plant</li> <li>Failure of pressure vessels, filters or pipework due to over-pressurisation or corrosion</li> <li>Unsafe design or siting of pool gas heaters or heat pumps causing carbon monoxide exposure or fire risk</li> <li>Poorly documented process for plant commissioning, decommissioning and modification</li> <li>Reliance on informal verbal instructions rather than written procedures for operating complex plant</li> </ul>		[REDACTED]	
6. Electrical Safety for Pool Plant, Lighting and Equipment	<ul style="list-style-type: none"> <li>Inadequate electrical design or protection for pool pumps, chlorinator heaters, lighting and covers installed in wet or outdoor environments</li> <li>Lack of residual current device (RCD) protection on electrical circuits serving pool plant and maintenance equipment</li> <li>Uncontrolled access to live electrical components during maintenance due to absence of lockout/tagout systems</li> <li>Poorly maintained electrical wiring to outdoor pools, pumps and heaters leading to shock or fire risk</li> <li>Use of non-rated portable electrical equipment in pool and wet areas</li> </ul>	3H	[REDACTED]	1L
7. Design and Structural Integrity of Pools, Slides and Associated Structures	<ul style="list-style-type: none"> <li>Inadequate structural design or inspection regime for water slides, pool shells, coping and retaining structures, leading to collapse or failure</li> <li>Failure to assess load limits on slides, platforms and pool covers, resulting in overloading</li> </ul>	4A	[REDACTED]	2M

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	<ul style="list-style-type: none"> <li>• Poorly managed repairs or modifications to pools, slides or basins without engineering assessment</li> <li>• Lack of monitoring for deterioration of plaster, paint, tiles and surfaces that could lead to leaks, delamination or falling objects</li> <li>• No clear criteria or procedures for taking structures out of service when defects are identified</li> </ul>		[REDACTED]	
8. Surface Integrity, Slips, Trips and Falls Around Pools	<ul style="list-style-type: none"> <li>• Inadequate surface selection or maintenance around pools leading to slippery coping, stairs and surrounding walkways</li> <li>• Poor housekeeping and cleaning systems causing algae, biofilm, debris or chemical residue on surfaces</li> <li>• Lack of engineered handrails, grab rails or steps to provide safe entry and exit to pools and spas</li> <li>• Insufficient lighting around pool perimeters, plant rooms and access paths affecting safe movement</li> <li>• Inconsistent control of wet work during maintenance, painting, plastering and cleaning activities</li> </ul>	4H	[REDACTED]	1L
9. Pool Water Quality, Public Health and Hygiene Management	<ul style="list-style-type: none"> <li>• Inadequate systems for monitoring and controlling pool and spa water chemistry, resulting in infection risk or chemical burns</li> <li>• Over-reliance on manual testing without verification, leading to data inaccuracies and poor treatment decisions</li> <li>• No documented criteria for closing pools, spas or slides in the event of contamination or plant failure</li> </ul>	4A	[REDACTED]	2M

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	<ul style="list-style-type: none"> <li>Poor recordkeeping of water testing, dosing and incidents impacting public health</li> <li>Inadequate control of spa or sauna temperatures and ventilation, increasing heat stress or legionella risk</li> </ul>		[REDACTED]	
10. Access Control, Signage and Public Interaction with Facilities	<ul style="list-style-type: none"> <li>Uncontrolled public or unauthorised access to pools, plant rooms, chemical stores and slides during maintenance activities</li> <li>Inadequate signage about restricted areas, hazards and emergency procedures around pools and spas</li> <li>Failure to segregate work zones during maintenance tasks such as painting, plastering, coping placement or water-slide repair</li> <li>Lack of procedures for after-hours access by workers or contractors to pool areas</li> <li>Inadequate communication to facility users about temporary changes (e.g. pool cover installation, pool areas, deep water hazard)</li> </ul>	3H	[REDACTED]	1L
11. Manual Handling, Ergonomics and Use of Mechanical Aids	<ul style="list-style-type: none"> <li>Repetitive or heavy manual handling of chemicals, pool covers, pumps, filters and cleaning equipment without mechanical assistance</li> <li>Poorly designed storage heights for drums, tools and spares increasing risk of musculoskeletal injury</li> <li>Manual operation of large pool covers or rollers leading to strain or crush hazards</li> <li>Inadequate selection and maintenance of trolleys, hoists and handling aids for moving heavy items around outdoor or uneven pool areas</li> </ul>	3H	[REDACTED]	2M

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12. Work at Height, Confined and Restricted Spaces	<ul style="list-style-type: none"> <li>• Maintenance of elevated slides, lighting, or structures without a formal work at height system</li> <li>• Accessing pits, plant rooms, balance tanks or crawl spaces associated with pool infrastructure that may present confined or restricted space hazards</li> <li>• Lack of documented rescue and emergency response arrangements for work in or around deep excavations, basins under repair or enclosed plant rooms</li> <li>• Inadequate assessment of atmospheric hazards when entering enclosed areas where chemicals or gases may accumulate</li> </ul>	4A	[REDACTED]	2M
13. Outdoor and Environmental Conditions (Heat, UV, Weather)	<ul style="list-style-type: none"> <li>• Exposure of outdoor pool maintenance workers to extreme heat, UV radiation and humidity leading to stress and long-term health effects</li> <li>• Weather-related risks such as storms, lightning or high winds affecting outdoor maintenance, cleaning or cover installation</li> <li>• Insufficient planning for seasonal variations in pool use and maintenance demands affecting workload and fatigue</li> <li>• Inadequate storage and protection of outdoor equipment and chemicals from environmental degradation</li> </ul>	3H	[REDACTED]	2M
14. Emergency Preparedness and Response for Pool Facilities	<ul style="list-style-type: none"> <li>• Inadequate emergency planning for chemical spills, chlorine leaks, gas heater failures, drownings or entrapment incidents</li> <li>• Lack of integration between site emergency procedures and pool-specific</li> </ul>	4A	[REDACTED]	2M

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	<p>risks, including evacuation from pool basins and slides</p> <ul style="list-style-type: none"> <li>• Emergency equipment (e.g. spill kits, eyewash, rescue poles, lifesaving devices) not maintained or easily accessible</li> <li>• Insufficient training and drills for workers and contractors on pool-related emergency scenarios</li> <li>• Unclear communication pathways with local emergency services regarding chemical inventories and access routes</li> </ul>		[REDACTED]	
15. Contractor and Supplier Management for Pool Works	<ul style="list-style-type: none"> <li>• Engagement of contractors for specialised tasks (e.g. water-slide repair, coping placement, pool painting, plastering, gas heater installation) without adequate WHS vetting</li> <li>• Poor coordination between multiple contractors and in-house staff leading to conflicting activities and unsafe interfaces</li> <li>• Inconsistent application of WHS standards by suppliers delivering chemicals or installing covers, pumps and filters</li> <li>• Lack of clarity on responsibilities for ongoing maintenance and inspections following contractor works</li> </ul>	3H	[REDACTED]	2M
16. Documentation, Recordkeeping and Continuous Improvement	<ul style="list-style-type: none"> <li>• Incomplete or outdated documentation for pool plant, chemicals, maintenance schedules and emergency plans</li> <li>• Failure to retain testing, inspection and maintenance records needed to demonstrate compliance with WHS and public health requirements</li> </ul>	3H	[REDACTED]	1L

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	<ul style="list-style-type: none"> <li>Lack of systematic review of incidents, inspection findings and audit outcomes relating to pool operations</li> <li>Poor version control of procedures and risk assessments, leading to inconsistent practices across sites</li> </ul>		<div style="background-color: black; height: 15px; width: 100%;"></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 FOR 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 2025  
 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) Regulation 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>

**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>

**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

**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.