

Perform Preventative Machine Maintenance 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	Unfamiliarity with equipment, Incorrect use of Personal Protective Equipment (PPE)	3H	<ul style="list-style-type: none"> - Conduct a toolbox talk to ensure all operators are familiar with the equipment - Verify all team members are trained and competent in machine procedures - Ensure all necessary PPE is available and in good working condition - Confirm workers are wearing correct and fitted PPE for the task - Review maintenance procedures and manufacturer's instructions - Ensure the area is well-lit and dry to prevent slips, trips and falls - Confirm that all emergency stop and safety features are operational - Create a work permit system for maintenance activities - Use lockout/tagout procedures to ensure the machine is safe before starting maintenance - Schedule maintenance during low-activity periods to minimize disruption 	2M
2. Shut Down Machine	Electrical shock, Residual energy	3H	<ul style="list-style-type: none"> - Ensure the machine is properly shut down following standard operating procedures - Verify that all moving parts have come to a complete stop - Lockout/tagout all power sources to the machine - Release any stored energy safely, such as hydraulic or pneumatic energy - Use voltage testers and check isolations on electrical connections - Confirm area supervisors are aware of the maintenance activities - Communicate with relevant personnel to ensure shutdown does not impact other operations - Include safety signs to alert workers of shutdown status - Use appropriate insulated tools for any electrical work - Conduct a pre-maintenance checklist review with the team 	1L
3. Secure the Area	Unauthorized personnel entering the work area, Slip, trip and fall hazards	3H	<ul style="list-style-type: none"> - Set up physical barriers or caution tape around the work area - Post warning signs indicating maintenance work is in progress - Ensure floor is clear of any tools, debris, or spills - Designate a safety officer to oversee compliance with area security - Use barriers and cones to delineate the secure zone - Communicate the maintenance time schedule to all relevant staff - Conduct a quick inspection of the area periodically during maintenance - Review protocols for who is authorised to enter the area 	2M

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			<ul style="list-style-type: none"> - Implement a sign-in/out log for personnel entering the area - Ensure clear access paths are maintained around the worksite 	
4. Inspect Tools and Equipment	Defective tools, Improper tool usage	3H	<p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p>	2M
5. Disassemble Machine Parts	Pinching or crushing, Exposure to hazardous substances	4A	<p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p>	2M
6. Clean Components	Inhalation of cleaning fumes, Skin irritation from cleaning agents	3H	<p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p>	2M

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7. Inspect for Wear and Damage	Failure to identify worn parts, Parts becoming dislodged during inspection	3H		1L
8. Lubricate Components	Oil spills causing slips, Contact with skin causing irritation	3H		2M
9. Reassemble Machine Parts	Strain from lifting heavy components, Improper assembly leading to malfunction	4A		2M

[illegible]

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12. Document Maintenance	Inaccurate record-keeping, Loss of documentation	2M	<ul style="list-style-type: none"> Use standardized forms and templates for all documentation. Implement a digital document management system to prevent loss. Assign specific personnel responsible for document accuracy and maintenance. Conduct regular audits of documentation to ensure completeness. Establish a clear process for document review and approval. Use color coding or labeling to distinguish between different types of documents. Implement a backup system for digital documents. Train personnel on proper document handling and storage procedures. Establish a retention schedule for documents. Use secure storage for physical documents. 	1L
13. Report Completion	Failure to communicate completion, Lack of authorization for sign-off	2M	<ul style="list-style-type: none"> Implement a clear communication protocol for reporting completion. Require supervisor authorization for all report sign-offs. Use a standardized report format to ensure consistency. Conduct regular check-ins with personnel to monitor progress. Establish a deadline for report completion. Implement a peer review process for reports. Use a digital reporting system to track completion. Train personnel on proper reporting procedures. Establish a clear chain of command for report approval. Implement a system for tracking report status. 	1L
14. Housekeeping	Leftover debris causing slip hazards, Residual substances creating contamination risk	2M	<ul style="list-style-type: none"> Implement a strict housekeeping schedule. Use appropriate cleaning agents and methods for different types of debris. Assign specific personnel responsible for housekeeping tasks. Conduct regular inspections to identify and address hazards. Establish a clear protocol for handling and disposal of residual substances. Use warning signs to alert personnel of potential hazards. Implement a system for tracking housekeeping tasks. Train personnel on proper housekeeping procedures. Establish a clear area for debris storage and disposal. Implement a system for monitoring and reporting housekeeping issues. 	1L

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15. Return Machine to Service	Operational malfunction, Operator unawareness of maintenance completion	3H		1L

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.