

Working Near High-Powered Machinery 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	Poor planning, Inadequate signage	3H	<ul style="list-style-type: none"> - Conduct a pre-start meeting to discuss tasks and potential hazards. - Ensure all personnel are trained in preparation procedures. - Display clear and visible signage near machinery work areas. - Verify communication equipment is available and functioning. - Plan work to avoid high-traffic times. - Check all permits and documentation are approved. - Ensure workers have access to appropriate PPE. - Identify safe zones for workers to stand during operation. - Conduct a site inspection to identify potential controls. - Install barriers to segregate machine areas from workers. 	2M
2. Arrival on Site	Traffic congestion, Uncontrolled entry	3H	<ul style="list-style-type: none"> - Designate a specific entry and exit point for workers. - Hire a spotter to manage vehicle movements. - Ensure all personnel are inducted upon arrival at the site. - Have workers sign in and out to track site attendance. - Clearly mark pedestrian walkways and machine routes. - Equip entry points with security checks for unauthorised personnel. - Use high-visibility clothing for all personnel on site. - Set up temporary traffic management signs and barriers. - Ensure all vehicles have functioning reverse alarms. - Conduct random checks to verify site entry points are secured. 	2M
3. Tool Inspection	Faulty equipment, Improper tool usage	4A	<ul style="list-style-type: none"> - Provide training on correct tool usage and inspection protocols. - Check all tools against the pre-start checklist before use. - Ensure only certified personnel conduct tool inspections. - Remove any defective tools immediately from service. - Maintain a log of inspections and repairs. - Use visual indicators, such as tags, for inspected tools. - Perform regular maintenance on all machinery as per schedule. - Promote reporting of tool defects by workers. 	2M

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			<ul style="list-style-type: none"> - Instruct on storing tools safely to prevent damage. - Supply substitute equipment if tools are found unusable during inspection. 	
4. Setup	Improper setup, Equipment overturn	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> <p>[REDACTED]</p>	2M
5. Start-Up	Unexpected movements, Wrong start sequences	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>	1L
6. Operation	Operator error, Mechanical failure	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>	2M

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7. Maintenance	Electrical hazard, Improper interventions	4A		2M
8. Shutdown	Inadequate power down, Residual energy	3H		2M
9. Emergency Response	Fire outbreak, Entanglement	4A		2M

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			<div></div> <div></div> <div></div> <div></div> <div></div> <div></div>	
10. Demobilisation	Improper equipment storage, Site hazards remaining post-work	3H	<div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div>	1L
11. Training and Induction	Skill gaps, Complacency	4A	<div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div>	1L

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12. Personal Protective Equipment (PPE)	Inadequate PPE, Improper use	3H	<ul style="list-style-type: none"> 1. Conduct a PPE assessment for the task. 2. Provide training on proper PPE use. 3. Ensure PPE is in good condition and available. 4. Enforce PPE use through supervision. 5. Establish a PPE inspection schedule. 6. Provide PPE for all workers. 7. Use PPE as a last line of defense. 8. Report and investigate PPE incidents. 9. Regularly inspect and maintain PPE. 10. Encourage a safety culture where PPE is valued. 	1L
13. Communication	Miscommunication, Information delay	3H	<ul style="list-style-type: none"> 1. Establish clear communication protocols. 2. Use standardized terminology and signals. 3. Implement a system for reporting and responding to communication issues. 4. Conduct regular communication training. 5. Use multiple communication channels (e.g., radio, hand signals). 6. Assign a dedicated communication officer. 7. Establish a system for verifying information received. 8. Conduct regular communication audits. 9. Encourage open communication and reporting of issues. 10. Establish a system for escalating communication issues. 	2M
14. Monitoring and Review	Non-compliance, Undetected hazards	4A	<ul style="list-style-type: none"> 1. Implement a system for monitoring compliance with safety procedures. 2. Conduct regular safety audits and inspections. 3. Establish a system for reporting and responding to non-compliance. 4. Conduct regular safety training and education. 5. Use a variety of monitoring methods (e.g., direct observation, video surveillance). 6. Assign a dedicated monitoring officer. 7. Establish a system for verifying compliance. 8. Conduct regular safety reviews and evaluations. 9. Encourage a safety culture where non-compliance is reported. 10. Establish a system for escalating non-compliance issues. 	1L

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15. Documentation	Incomplete records, Outdated information	3H	<ul style="list-style-type: none"> Establish a system for regular updates and reviews of records. Implement a process for identifying and removing outdated information. Ensure all records are complete and accurate. Use digital storage and backup systems to prevent loss. Conduct periodic audits of record-keeping practices. Provide training on the importance of accurate and up-to-date records. Establish clear responsibilities for record maintenance. Use standardized forms and templates to ensure consistency. Implement a process for verifying the accuracy of data entered into records. Consider using external services for record storage and management. 	1L

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.