

Dismantling Heavy Machinery 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:

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.
3H	Review and approve additional controls before task starts. Senior supervisor sign-off needed.
2M	Ensure all nominated controls are in place and effective. Proceed with caution; monitor conditions.
1L	Proceed, following standard operating procedures. Monitor and keep records.

Consequence Scale:

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

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. Preparation	Slips and trips, Incorrect use of tools	3H	<ul style="list-style-type: none"> - Conduct a safety briefing before starting - Ensure floors are clean and clear of obstacles - Verify all tools are appropriate for the task - Use non-slip mats where necessary - Train staff on tool use and safety methodologies - Provide personal protective equipment (PPE) - Have designated areas for tool transportation - Implement regular inspection of tools - Ensure adequate lighting is available - Look for designated monitor team safety 	2M
2. Disconnect Power Supply	Electrocution, Unexpected machine start-up	4H	<ul style="list-style-type: none"> - Ensure machine is switched off and locked out - Wear insulated gloves while handling electrical equipment - Implement a tagout system - Verify power disconnection with a voltmeter - Clearly label power disconnection devices - Regularly train staff on electrical safety - Provide clear signage in the work area - Schedule maintenance during off-peak hours - Use circuit testers - Assign a trained electrician to oversee disconnection 	2M
3. Remove Protective Guards	Caught-in machinery, Falling objects	3H	<ul style="list-style-type: none"> - Ensure machinery is properly secured before guard removal - Use proper tools for removing guards - Implement buddy system for lifting tasks - Ensure overhead cranes or lifting equipment are in place - Establish a clean and organized workspace - Provide adequate training for removal process - Use hard hats to prevent head injuries - Implement spotters for guidance 	2M

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			<ul style="list-style-type: none"> - Conduct hazard assessment before starting work - Post clear warning signs around the work area 	
4. Dismantle Machinery	Manual handling injuries, Struck by moving parts	4A	<ul style="list-style-type: none"> - Use proper lifting techniques - Wear appropriate PPE (hard hat, safety glasses, gloves) - Ensure work area is clear of obstacles - Use correct dismantling procedures - Communicate with team members - Use proper tools and equipment - Establish safe zones - Lock out/tag out procedures - Maintain clear communication - Use proper storage for parts 	2M
5. Transport Parts for Disposal	Load shift, Traffic disposal area	3H	<ul style="list-style-type: none"> - Use proper tie-down techniques - Secure load properly - Use appropriate vehicle for transport - Follow traffic rules and regulations - Use proper disposal procedures - Communicate with disposal site - Use proper storage for parts - Maintain clear communication - Use proper storage for parts - Maintain clear communication 	2M
6. Clean-Up Site	Chemical exposure, Slips and trips	3H	<ul style="list-style-type: none"> - Wear appropriate PPE (gloves, goggles, respirator) - Use proper cleaning procedures - Dispose of chemicals properly - Clean up spills immediately - Use proper storage for chemicals - Maintain clear communication - Use proper storage for parts - Maintain clear communication - Use proper storage for parts - Maintain clear communication 	1L

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7. Conduct Post-Operation Review	Overlooked hazards, Inadequate analysis	2M		1L
8. Reassemble Components	Improper assembly, Use of parts	3H		1L
9. Inspect Reassembled Machinery	Malfunction, Faulty connections	4A		2M

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10. Test Run Reassembled Machinery	Unexpected start-up, Overheating components	4A		1L
11. Conduct Final Safety Audit	Overlooked risks, Incomplete documentation	3H		1L
12. Debrief Team	Miscommunication, Inadequate information sharing	2M		1L

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13. Update Risk Management Plan	Outdated procedures, Inaccurate risk ratings	2M		1L
14. Secure Area for Future Operations	Unauthorised access, Environmental hazards	3H		1L
15. Confirm Project Completion	Unresolved issues, Incomplete documentation	2M		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.