

Demolition Plant Safe 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				
								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	Equipment failure, Operating environment hazards	3H	<ul style="list-style-type: none"> - Conduct pre-operation safety briefing - Verify employee qualifications and licenses - Inspect equipment for faults or damages - Mark hazardous areas with visible barriers - Conduct environmental assessment - Ensure availability of emergency equipment - Review demolition plan/procedure - Implement weather monitoring - Restrict unauthorised access - Confirm communication protocols 	2M
2. Site Assessment	Structural instability, Debris presence	3H	<ul style="list-style-type: none"> - Conduct structural integrity analysis - Identify term of weak structures - Remove loose debris before work - Use appropriate signage for hazardous zones - Establish an exclusion zone to prevent entry - Map potential debris fall zones - Communicate assessment results with all workers - Utilise drones for difficult areas - Conduct periodic re-assessments - Have emergency personnel on standby 	2M
3. Equipment Setup	Improper setup, Unintentional activation	3H	<ul style="list-style-type: none"> - Follow manufacturer's setup instructions - Double-check locking mechanisms - Use checklists for setup verification - Conduct safety functions tests - Place safety locks on controls - Employ physical barriers around equipment - Ensure operator knows emergency shutdown - Secure power sources 	1L

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			<ul style="list-style-type: none"> - Verify communication equipment functionality - Supervise setup process with qualified personnel 	
4. Establish Safe Zones	Proximity to hazardous operations, Noise exposure	3H	<ul style="list-style-type: none"> - Establish safe zones around hazardous operations - Use barriers and signage to restrict access - Monitor noise levels and provide hearing protection - Ensure all personnel are aware of safe zones - Post safety signs and warnings - Use spotters to monitor blind spots - Establish clear communication protocols - Conduct safety briefings before operations - Use designated walkways - Implement a permit-to-work system - Ensure all equipment is properly maintained - Use fall protection where applicable - Keep work areas clean and free of clutter - Use proper lifting techniques - Implement a lockout/tagout procedure - Use appropriate PPE (hard hats, safety glasses, etc.) - Establish a no-go zone for unauthorized personnel - Use remote operation where possible - Implement a safety watch system - Ensure all personnel are trained and competent - Use designated personnel for hazardous tasks - Implement a safety audit process - Use safety harnesses and fall arrest systems - Establish a clear line of sight for all operations - Use safety cones and traffic lights - Implement a safety meeting schedule - Use safety vests and reflective gear - Establish a safety culture of zero tolerance for violations - Use safety data sheets (SDS) for all materials - Implement a safety inspection checklist - Use safety barriers and guardrails - Establish a safety protocol for emergency situations - Use safety harnesses and fall arrest systems - Establish a clear line of sight for all operations - Use safety cones and traffic lights - Implement a safety meeting schedule - Use safety vests and reflective gear - Establish a safety culture of zero tolerance for violations - Use safety data sheets (SDS) for all materials - Implement a safety inspection checklist - Use safety barriers and guardrails - Establish a safety protocol for emergency situations 	1L
5. Demolition Execution	Unexpected structural collapse, Dust inhalation	4A	<ul style="list-style-type: none"> - Conduct structural assessment before demolition - Use controlled demolition techniques - Monitor dust levels and provide respiratory protection - Establish exclusion zones around demolition site - Use barriers and signage to restrict access - Monitor structural integrity during demolition - Use spotters to monitor blind spots - Establish clear communication protocols - Conduct safety briefings before operations - Use designated walkways - Implement a permit-to-work system - Ensure all equipment is properly maintained - Use fall protection where applicable - Keep work areas clean and free of clutter - Use proper lifting techniques - Implement a lockout/tagout procedure - Use appropriate PPE (hard hats, safety glasses, etc.) - Establish a no-go zone for unauthorized personnel - Use remote operation where possible - Implement a safety watch system - Ensure all personnel are trained and competent - Use designated personnel for hazardous tasks - Implement a safety audit process - Use safety harnesses and fall arrest systems - Establish a clear line of sight for all operations - Use safety cones and traffic lights - Implement a safety meeting schedule - Use safety vests and reflective gear - Establish a safety culture of zero tolerance for violations - Use safety data sheets (SDS) for all materials - Implement a safety inspection checklist - Use safety barriers and guardrails - Establish a safety protocol for emergency situations - Use safety harnesses and fall arrest systems - Establish a clear line of sight for all operations - Use safety cones and traffic lights - Implement a safety meeting schedule - Use safety vests and reflective gear - Establish a safety culture of zero tolerance for violations - Use safety data sheets (SDS) for all materials - Implement a safety inspection checklist - Use safety barriers and guardrails - Establish a safety protocol for emergency situations 	2M
6. Debris Removal	Trips and falls, Sharp object handling	3H	<ul style="list-style-type: none"> - Establish clear walkways for debris removal - Use barriers and signage to restrict access - Monitor debris levels and provide fall protection - Ensure all personnel are aware of debris removal areas - Post safety signs and warnings - Use spotters to monitor blind spots - Establish clear communication protocols - Conduct safety briefings before operations - Use designated walkways - Implement a permit-to-work system - Ensure all equipment is properly maintained - Use fall protection where applicable - Keep work areas clean and free of clutter - Use proper lifting techniques - Implement a lockout/tagout procedure - Use appropriate PPE (hard hats, safety glasses, etc.) - Establish a no-go zone for unauthorized personnel - Use remote operation where possible - Implement a safety watch system - Ensure all personnel are trained and competent - Use designated personnel for hazardous tasks - Implement a safety audit process - Use safety harnesses and fall arrest systems - Establish a clear line of sight for all operations - Use safety cones and traffic lights - Implement a safety meeting schedule - Use safety vests and reflective gear - Establish a safety culture of zero tolerance for violations - Use safety data sheets (SDS) for all materials - Implement a safety inspection checklist - Use safety barriers and guardrails - Establish a safety protocol for emergency situations - Use safety harnesses and fall arrest systems - Establish a clear line of sight for all operations - Use safety cones and traffic lights - Implement a safety meeting schedule - Use safety vests and reflective gear - Establish a safety culture of zero tolerance for violations - Use safety data sheets (SDS) for all materials - Implement a safety inspection checklist - Use safety barriers and guardrails - Establish a safety protocol for emergency situations 	1L

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7. Equipment Maintenance	Wear and tear risks, Hydraulic failure	3H		1L
8. Waste Management	Environmental contamination, Inadequate waste disposal	3H		1L
9. Communication Procedures	Information miscommunication, Delayed emergency response	3H		1L

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10. Emergency Procedures	Inadequate emergency plan, Response time delays	4A		2M
11. Site Security	Unauthorised entry, Theft of equipment	3H		1L
12. Worker Training	Lack of skills, Non-compliance with procedures	3H		1L

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13. Weather Monitoring	Severe weather conditions, Heat stress	3H		1L
14. Public Safety	Dust dispersion to public during demolition	3H		1L
15. Post Demolition Review	Overlooked hazards, Non-compliance issues	3H		1L

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16. Decontamination	Contaminant spread, Inadequate decontamination process	3H		1L
17. Utility Management	Electrical hazards, Gas line ruptures	4A		2M
18. Handling Hazardous Materials	Chemical exposure, Incorrect storage	4A		2M

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19. Recycling Procedures	Metal cuts, Heavy lifting	3H		1L
20. Transport Logistics	Traffic interactions, Load shift during transit	3H		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>

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>

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>

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.

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>

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>

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