

Use Of Gas-Powered Tools 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. Site Preparation	Slips and trips, Unsecured equipment	3H	<ul style="list-style-type: none"> - Conduct a site inspection to identify potential trip hazards - Ensure all equipment is securely stored away from walkways - Use signage to alert workers to potential hazards - Wear appropriate safety footwear - Keep work area clean and tidy - Assign a safety officer to monitor conditions - Use non-slip mats where necessary - Implement regular site check-ups - Train workers on hazard identification - Use brightly colored tape to mark edges 	2M
2. Tool Inspection	Faulty equipment, Lack of inspection	3H	<ul style="list-style-type: none"> - Conduct regular maintenance checks on all equipment - Follow manufacturer's recommended service schedules - Train workers on equipment checks - Use only qualified technicians for repairs - Replace damaged tools immediately - Check safety features prior to use - Use checklists for equipment inspection - Maintain a log of inspections and repairs - Visual inspection before each use - Ensure all repairs are documented 	1L
3. Fuel Handling	Fuel spills, Inhalation of fumes	4A	<ul style="list-style-type: none"> - Use appropriate PPE, including gloves and masks - Store fuel in approved containers - Refuel in well-ventilated areas - Have spill kits readily available - Train workers in spill response techniques - Prohibit smoking in refueling areas - Keep fire extinguishers nearby - Only trained personnel to handle fuel 	2M

Incident		Root Cause	Contributing Factors	Preventive Measures
Incident 1: Fuel System Malfunction, Backfire	3H	Human Error: Operator neglected to check fuel levels before starting the engine.	<ul style="list-style-type: none"> Improper fuel tank venting. Excessive fuel pressure. Worn fuel filter. Leaking fuel lines. Incorrect fuel/air mixture. Overheating engine. Blocked air filter. Faulty spark plugs. Exhaust system leaks. Contaminated fuel. Improper fuel tank cleaning. Incorrect fuel tank filling procedure. Improper fuel tank venting. Excessive fuel pressure. Worn fuel filter. Leaking fuel lines. Incorrect fuel/air mixture. Overheating engine. Blocked air filter. Faulty spark plugs. Exhaust system leaks. Contaminated fuel. Improper fuel tank cleaning. Incorrect fuel tank filling procedure. 	<ul style="list-style-type: none"> Implement regular checks on fuel containers. Ensure proper fuel tank venting. Monitor fuel pressure. Replace fuel filter regularly. Inspect fuel lines for leaks. Adjust fuel/air mixture. Allow engine to cool before refueling. Replace air filter as recommended. Inspect and replace spark plugs. Check exhaust system for leaks. Use clean, uncontaminated fuel. Follow proper fuel tank cleaning procedures. Follow correct fuel tank filling procedures.
	4A	Operator error: Fuel tank was not properly vented before refueling.	<ul style="list-style-type: none"> Improper fuel tank venting. Excessive fuel pressure. Worn fuel filter. Leaking fuel lines. Incorrect fuel/air mixture. Overheating engine. Blocked air filter. Faulty spark plugs. Exhaust system leaks. Contaminated fuel. Improper fuel tank cleaning. Incorrect fuel tank filling procedure. Improper fuel tank venting. Excessive fuel pressure. Worn fuel filter. Leaking fuel lines. Incorrect fuel/air mixture. Overheating engine. Blocked air filter. Faulty spark plugs. Exhaust system leaks. Contaminated fuel. Improper fuel tank cleaning. Incorrect fuel tank filling procedure. 	<ul style="list-style-type: none"> Implement regular checks on fuel containers. Ensure proper fuel tank venting. Monitor fuel pressure. Replace fuel filter regularly. Inspect fuel lines for leaks. Adjust fuel/air mixture. Allow engine to cool before refueling. Replace air filter as recommended. Inspect and replace spark plugs. Check exhaust system for leaks. Use clean, uncontaminated fuel. Follow proper fuel tank cleaning procedures. Follow correct fuel tank filling procedures.

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7. Shutting Down Equipment	Residual pressure, Inadvertent restarting	3H		1L
8. Equipment Maintenance	Incomplete maintenance, Use of incorrect parts	4A		2M
9. Noise Control	Hearing damage, Noise pollution	3H		2M

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10. Vibration Management	Vibration injury, Equipment degradation	3H		1L
11. Respiratory Protection	Inhalation of dust and fumes, Insufficient ventilation	4A		2M
12. Fire Safety	Flammable materials, Equipment sparks	4A		2M

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13. Environmental Safety	Pollution, Waste management issues	3H		2M
14. Emergency Preparedness	Inadequate response plans, Delayed emergency services	4A		1L
15. Fatigue Management	Operator fatigue, Reduced responsiveness	3H		1L

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			<div></div> <div></div> <div></div> <div></div> <div></div> <div></div>	
16. Weather Considerations	Sun exposure, Adverse weather conditions	3H	<div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div>	2M
17. Personal Protective Equipment (PPE)	Inappropriate use, Insufficient PPE	3H	<div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div>	1L
18. Training and Competency	Lack of knowledge, Improper tool handling	4A	<div></div> <div></div> <div></div>	2M

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19. Communication	Miscommunication, Failure of communication devices	4A		1L
20. Work-Life Balance	Stress, Burnout	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>

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.