

Adjustment Of Gas Burner Flames 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 the 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	Gas leakage, Fire hazards	4A	<ul style="list-style-type: none"> - Conduct a comprehensive risk assessment before commencing work - Ensure all workers are trained in gas safety protocols - Check that fire extinguishers are accessible and operational - Schedule maintenance tasks during low-activity periods - Adhere to manufacturer's instructions for equipment use - Wear appropriate personal protective equipment (PPE) - Maintain communication with on-site supervisors - Inspect all gas lines and connections for signs of wear - Ensure ventilation systems are functioning properly - Keep the work area clear of combustibles 	3H
2. Site Inspection	Trip hazards, Uneven surfaces	3M	<ul style="list-style-type: none"> - Conduct a walk-through to identify hazards - Mark and barricade hazardous areas - Use signage to alert workers of potential trip hazards - Repair or cover uneven surfaces where possible - Brief workers on site-specific hazards - Use appropriate footwear to prevent slips and trips - Keep the work area tidy and free of obstruction - Coordinate with site management for required repairs - Supervise workers during inspection to address hazards - Document inspections and findings for future reference 	2M
3. Equipment Check	Equipment malfunction, Electrical hazards	4A	<ul style="list-style-type: none"> - Perform regular maintenance on all equipment - Verify calibration and operation of gas analyzers - Use insulated tools to prevent electrical shocks - Confirm power sources have ground fault protection - Review equipment manuals for safe operation protocols - Isolate power source before performing maintenance - Conduct pre-start inspections to identify faults - Replace defective components immediately 	3H

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
			<ul style="list-style-type: none">- Train workers in equipment handling and troubleshooting- Establish emergency shutdown procedures	
4. Ventilation Setup	Poor air quality, Toxic fumes	3H	<ul style="list-style-type: none">- Use high-quality, certified air filters- Perform regular maintenance on ventilation equipment- Ensure proper placement and operation of fans- Monitor air quality continuously- Use personal protective equipment (PPE) like respirators- Limit the number of workers in the area- Establish a no-smoking policy- Post warning signs about hazardous conditions- Provide adequate training for workers- Conduct regular safety drills- Ensure proper ventilation system design- Use leak detection systems- Implement strict access control- Perform regular safety audits- Establish a clear communication protocol- Use proper handling techniques for hazardous materials- Ensure proper storage of hazardous materials- Implement a strict permit-to-work system- Conduct regular safety meetings- Ensure proper labeling of hazardous materials- Use proper disposal methods for hazardous waste- Implement a strict safety protocol for emergency situations- Ensure proper training for emergency responders- Conduct regular safety training for all workers- Implement a strict safety protocol for equipment use- Ensure proper maintenance of equipment- Use proper handling techniques for equipment- Implement a strict safety protocol for equipment storage- Ensure proper labeling of equipment- Use proper disposal methods for equipment- Implement a strict safety protocol for equipment disposal- Ensure proper training for equipment disposal- Conduct regular safety training for all workers- Implement a strict safety protocol for equipment use- Ensure proper maintenance of equipment- Use proper handling techniques for equipment- Implement a strict safety protocol for equipment storage- Ensure proper labeling of equipment- Use proper disposal methods for equipment- Implement a strict safety protocol for equipment disposal- Ensure proper training for equipment disposal	2M
5. Gas Line Inspection	Gas leaks, Corrosion	4A	<ul style="list-style-type: none">- Use gas leak detectors- Perform regular inspections of gas lines- Use proper tools and equipment for inspection- Ensure proper ventilation during inspection- Use personal protective equipment (PPE) like gas masks- Limit the number of workers in the area- Establish a no-smoking policy- Post warning signs about hazardous conditions- Provide adequate training for workers- Conduct regular safety drills- Ensure proper ventilation system design- Use leak detection systems- Implement strict access control- Perform regular safety audits- Establish a clear communication protocol- Use proper handling techniques for hazardous materials- Ensure proper storage of hazardous materials- Implement a strict permit-to-work system- Conduct regular safety meetings- Ensure proper labeling of hazardous materials- Use proper disposal methods for hazardous waste- Implement a strict safety protocol for emergency situations- Ensure proper training for emergency responders- Conduct regular safety training for all workers- Implement a strict safety protocol for equipment use- Ensure proper maintenance of equipment- Use proper handling techniques for equipment- Implement a strict safety protocol for equipment storage- Ensure proper labeling of equipment- Use proper disposal methods for equipment- Implement a strict safety protocol for equipment disposal- Ensure proper training for equipment disposal	3H
6. Flame Adjustment	Burns, Explosion	4A	<ul style="list-style-type: none">- Use proper flame adjustment techniques- Perform regular inspections of flame adjustment equipment- Use proper tools and equipment for flame adjustment- Ensure proper ventilation during flame adjustment- Use personal protective equipment (PPE) like heat-resistant gloves- Limit the number of workers in the area- Establish a no-smoking policy- Post warning signs about hazardous conditions- Provide adequate training for workers- Conduct regular safety drills- Ensure proper ventilation system design- Use leak detection systems- Implement strict access control- Perform regular safety audits- Establish a clear communication protocol- Use proper handling techniques for hazardous materials- Ensure proper storage of hazardous materials- Implement a strict permit-to-work system- Conduct regular safety meetings- Ensure proper labeling of hazardous materials- Use proper disposal methods for hazardous waste- Implement a strict safety protocol for emergency situations- Ensure proper training for emergency responders- Conduct regular safety training for all workers- Implement a strict safety protocol for equipment use- Ensure proper maintenance of equipment- Use proper handling techniques for equipment- Implement a strict safety protocol for equipment storage- Ensure proper labeling of equipment- Use proper disposal methods for equipment- Implement a strict safety protocol for equipment disposal- Ensure proper training for equipment disposal	3H

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7. Testing and Monitoring	Failure to detect faults, Inadequate monitoring	3H		2M
8. Shutdown Procedure	Incorrect shutdown, Residual energy, Equipment damage	4A		3H
9. Emergency Response	Inadequate response, Communication failure	3H		2M

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10. Documentation and Reporting	Incomplete records, Poor communication	3H		2M
11. Clean-Up	Chemical exposure, Slip hazards	3H		2M
12. Exit Assessment	Overlooked equipment, Miscommunication	3H		2M

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13. Review and Feedback	Lack of improvement, Resistance to change	2M		1L
14. Documentation Update	Outdated procedures, Inaccurate records	3H		2M
15. Continuous Improvement	Stagnation, Complacency	2M		1L

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			<div></div> <div></div> <div></div> <div></div> <div></div> <div></div>	
16. Final Sign-Off	Oversights, Lack of accountability	3H	<div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div>	2M

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.