

Management And Prevention Of Spontaneous Combustion 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	4A ACUTE	DO NOT PROCEED	Elimination Remove the hazard.	
LIKELY	2 MODERATE	3 HIGH	3 HIGH	4 ACUTE	4 ACUTE			Substitution Replace the hazard.	
POSSIBLE	1 LOW	2 MODERATE	3 HIGH	4 ACUTE	4 ACUTE			Isolation Isolate People from the hazard	
UNLIKELY	1 LOW	1 LOW	2 MODERATE	3 HIGH	4 ACUTE			Engineering Isolate the hazard	
RARE	1 LOW	1 LOW	2 MODERATE	3 HIGH	3 HIGH			Administrative Change	
						1L LOW	Monitor and keep records.	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	
Consequence Scale:								4. Engineering	
Consequence		People (injury/illness)		Project / Assets		Compliance / Reputation		5. Administrative	
Catastrophic		Fatality or permanent total disability		project shutdown		Significant regulator intervention; criminal prosecution		6. PPE	
Major		Serious injury/illness (hospital > 5 days)		critical delay		Improvement notice; major media coverage		Always document why a lower-order control is accepted if elimination or substitution is not reasonably practicable.	
Moderate		Medical-treatment injury; lost-time > 1 day		moderate delay		Minor breach; adverse client comment		<i>aligned with Safe Work Australia's Managing the risk of fatigue at work (2023) and ISO 45001:2018 clauses 6–8.</i>	
Minor		First-aid only, no lost time		negligible delay		Isolated non-conformance			
Insignificant		No injury		no schedule impact		Deviation caught and corrected on site			

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	Lack of material knowledge, Untrained personnel	3H	<ul style="list-style-type: none"> - Conduct comprehensive risk assessment before operations - Train all staff on spontaneous combustion risks - Compile and distribute material safety data sheets - Develop emergency response procedures - Ensure communication systems are operational - Schedule regular staff training sessions - Prepare personal protective equipment (PPE) - Limit access to trained personnel only - Maintain a log of safety drills - Review risk assessment regularly 	2M
2. Material Handling	Friction during material handling, Inadequate storage conditions	3H	<ul style="list-style-type: none"> - Use appropriate storage containers - Implement controlled movement systems - Monitor storage area temperature and humidity - Ensure adequate ventilation - Conduct regular inspections of materials - Rotate stock to avoid prolonged storage - Use fire-resistant materials where possible - Label all materials with handling instructions - Prohibit smoking in storage areas - Instruct personnel in safe handling techniques 	2M
3. Transportation	Vehicle emissions igniting materials, Improper loading procedures	3H	<ul style="list-style-type: none"> - Use vehicles with appropriate shielding systems - Follow loading protocols strictly - Train drivers in material hazards - Conduct vehicle maintenance regularly - Ensure secure load containment - Implement emission reduction strategies - Use GPS tracking for route management - Limit transport in adverse weather conditions 	2M

Category	Sub-category	Item
Category 1	4A	Item 1
		Item 2
		Item 3
		Item 4
		Item 5
		Item 6
		Item 7
		Item 8
		Item 9
		Item 10
Category 2	3H	Item 1
		Item 2
		Item 3
		Item 4
		Item 5
		Item 6
		Item 7
		Item 8
		Item 9
		Item 10

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7. Emergency Procedures	Delays in response, Lack of evacuation routes	4A		2M
8. Waste Management	Improper disposal methods Accumulation of combustible waste	3H		1L
9. Fire Suppression Systems	System malfunctions, Inadequate coverage	4A		2M

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10. Personal Protective Equipment (PPE)	Incorrect PPE use, PPE degradation	2M		1L
11. Security Measures	Unauthorised access, Vandalism	3H		2M
12. Staff Training	Inadequate training, Training non-compliance	2M		1L

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13. Monitoring and Review	Unaddressed audit findings, Lack of process updates	3H		1L
14. Communication Protocols	Miscommunication during emergencies, Lack of information dissemination	3H		1L
15. Incident Reporting	Failure to report incidents, Incomplete incident reports	3H		1L

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			<div></div> <div></div> <div></div> <div></div> <div></div> <div></div>	
16. Management Accountability	Lack of oversight, Failure to enforce policies	3H	<div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div>	2M
17. Review and Continuous Improvement	Complacency in risk procedures, Resistance to change	2M	<div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div>	1L
18. Regulatory Compliance	Non-compliance with legal standards, Unawareness of regulatory changes	4A	<div></div> <div></div> <div></div>	2M

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19. Stakeholder Engagement	Conflicting stakeholder interests, Resistance from local community	3H		1L
20. Environmental Monitoring	Pollution impacting spontaneous combustion, Environmental data misinterpretation	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