

Work With Respirable Particles 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	dust exposure, inhalation of particulates	3H	<ul style="list-style-type: none"> - Ensure proper signage is installed. - Use dust suppression methods such as water sprays prior to activity. - Ensure all workers have completed training on hazards associated with respirable particles. - Restrict access to only trained personnel. - Conduct a safety briefing before starting work. - Review the Material Safety Data Sheet (MSDS) for respiratory particles. - Ensure ventilation systems are functioning properly. - Calibrate dust monitoring equipment before use. - Maintain a clean work environment. - Ensure emergency plans are in place. 	2M
2. Equipment Inspection	equipment malfunction, leak of airborne particles	3H	<ul style="list-style-type: none"> - Inspect respiratory protective equipment before use. - Ensure all filters are correctly fitted and functional. - Check for damage or wear in particle containment systems. - Regular maintenance checks on dust extraction systems. - Use pressure gauges to detect leaks. - Ensure regular inspection of seals and gaskets. - Replace faulty equipment immediately. - Ensure calibration of detection equipment. - Keep an equipment maintenance log. - Provide workers with adequate equipment training. 	1L
3. Application of Control Systems	ineffectiveness of dust controls, bypass of safety systems	4A	<ul style="list-style-type: none"> - Install high-efficiency particulate air (HEPA) filters. - Use enclosures around dust-generating processes. - Ensure all workers are trained in using machine controls. - Conduct routine checks for system integrity. - Never disable or bypass safety interlocks. - Install alarms to alert of system malfunctions. - Use automated systems to reduce human error. - Clearly label all control systems. 	2M

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			<ul style="list-style-type: none"> - Ensure backup systems are functional. - Maintain a regular audit schedule for control measures. 	
4. Personal Protective Equipment Usage	improper fit, non-compliance with PPE use	3H	<ul style="list-style-type: none"> - Ensure all PPE is worn correctly and in accordance with manufacturer instructions. - Conduct regular fit checks and adjustments. - Provide training on proper PPE use. - Ensure PPE is in good condition and replaced as needed. - Establish a PPE inspection and maintenance schedule. - Encourage workers to report any issues with PPE. - Provide a safe and comfortable environment for PPE use. - Ensure PPE is stored properly and protected from damage. - Establish a PPE inventory and tracking system. - Provide a safe and secure storage area for PPE. - Ensure PPE is accessible to all workers. - Establish a PPE replacement and disposal schedule. - Provide a safe and secure disposal method for PPE. - Encourage workers to report any issues with PPE. - Provide a safe and comfortable environment for PPE use. - Ensure PPE is stored properly and protected from damage. - Establish a PPE inventory and tracking system. - Provide a safe and secure storage area for PPE. - Ensure PPE is accessible to all workers. - Establish a PPE replacement and disposal schedule. - Provide a safe and secure disposal method for PPE. 	1L
5. Ventilation Systems Operation	failure of air flow, exposure to trapped particulates	4A	<ul style="list-style-type: none"> - Ensure ventilation systems are properly maintained and calibrated. - Conduct regular air flow measurements and adjustments. - Provide training on proper ventilation system operation. - Ensure ventilation systems are in good condition and replaced as needed. - Establish a ventilation system inspection and maintenance schedule. - Encourage workers to report any issues with ventilation systems. - Provide a safe and comfortable environment for ventilation system use. - Ensure ventilation systems are stored properly and protected from damage. - Establish a ventilation system inventory and tracking system. - Provide a safe and secure storage area for ventilation systems. - Ensure ventilation systems are accessible to all workers. - Establish a ventilation system replacement and disposal schedule. - Provide a safe and secure disposal method for ventilation systems. - Encourage workers to report any issues with ventilation systems. - Provide a safe and comfortable environment for ventilation system use. - Ensure ventilation systems are stored properly and protected from damage. - Establish a ventilation system inventory and tracking system. - Provide a safe and secure storage area for ventilation systems. - Ensure ventilation systems are accessible to all workers. - Establish a ventilation system replacement and disposal schedule. - Provide a safe and secure disposal method for ventilation systems. 	2M
6. Cleaning and Maintenance	dust re-suspension, contamination through improper disposal	3H	<ul style="list-style-type: none"> - Ensure cleaning and maintenance activities are performed in a controlled manner. - Use appropriate cleaning and maintenance techniques. - Provide training on proper cleaning and maintenance procedures. - Ensure cleaning and maintenance equipment is in good condition and replaced as needed. - Establish a cleaning and maintenance schedule. - Encourage workers to report any issues with cleaning and maintenance. - Provide a safe and comfortable environment for cleaning and maintenance. - Ensure cleaning and maintenance equipment is stored properly and protected from damage. - Establish a cleaning and maintenance inventory and tracking system. - Provide a safe and secure storage area for cleaning and maintenance equipment. - Ensure cleaning and maintenance equipment is accessible to all workers. - Establish a cleaning and maintenance replacement and disposal schedule. - Provide a safe and secure disposal method for cleaning and maintenance equipment. - Encourage workers to report any issues with cleaning and maintenance. - Provide a safe and comfortable environment for cleaning and maintenance. - Ensure cleaning and maintenance equipment is stored properly and protected from damage. - Establish a cleaning and maintenance inventory and tracking system. - Provide a safe and secure storage area for cleaning and maintenance equipment. - Ensure cleaning and maintenance equipment is accessible to all workers. - Establish a cleaning and maintenance replacement and disposal schedule. - Provide a safe and secure disposal method for cleaning and maintenance equipment. 	1L

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7. Emergency Procedures Training	panic in emergency, lack of knowledge on emergency equipment	2M		1L
8. Monitoring and Record Keeping	inaccuracy in data, failure to record developments	3H		2M
9. Communication and Reporting	miscommunication of risks, failure to report health issues	3H		2M

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10. Regular Training and Awareness Programs	knowledge atrophy, carelessness due to complacency	2M		1L
11. Waste Management	improper waste segregation, exposure during handling of waste	3H		2M
12. Site Planning and Layout	poor layout leading to dust spread, inadequate space for safe operation	3H		1L

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13. Supervision and Enforcement	non-compliance with protocols, lack of enforcement leading to unsafe practices	3H		2M
14. Health Surveillance	undetected respiratory conditions, delayed medical intervention	4A		2M
15. Review and Continuous Improvement	obsolescence of safety measures, resistance to change	3H		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.