

Grit Blasting Operations 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:								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				
								<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 inhalation, noise exposure	3H	<ul style="list-style-type: none"> - Ensure all personnel wear appropriate PPE including dust masks and ear protection. - Conduct noise level assessments and implement engineering controls if necessary. - Provide training on the hazards of dust inhalation and proper PPE use. - Ensure ventilation systems are operational and effective. - Limit exposure times for all personnel involved in the operation. - Establish a communication plan for emergencies related to dust or noise exposure. - Ensure all grit blasting materials are labelled and stored properly. - Conduct pre-operation equipment checks to ensure proper functioning. - Use water suppression systems to minimize dust generation. - Post warning signs in high-noise areas. - Implement regular workplace hygiene practices to reduce dust accumulation. 	2M
2. Work Area Setup	trip hazards, exposure to moving equipment	3H	<ul style="list-style-type: none"> - Mark and communicate designated walkways for personnel. - Ensure hoses and cables are routed in a manner to prevent trip hazards. - Conduct training on the importance of keeping the work area clean and organised. - Use barriers and signs to clearly mark hazard zones around moving equipment. - Supervise the work area to enforce compliance with safety protocols. - Inspect and maintain working surfaces regularly. - Implement a clear communication procedure for equipment operation awareness. - Restrict access to the work area to authorised personnel only. - Perform regular site inspections to identify potential trip hazards. - Establish and enforce a housekeeping schedule for the work area. 	2M
3. Grit Blaster Assembly	equipment malfunction, manual handling injuries	3H	<ul style="list-style-type: none"> - Ensure only trained and competent personnel perform grit blaster assembly. - Use lifting aids or team lifting to prevent manual handling injuries. - Conduct regular maintenance checks on equipment to ensure functionality. - Provide ergonomic training to minimise manual handling risks. - Ensure assembly instructions and safety procedures are clearly available and followed. - Utilize mechanical aids wherever possible to reduce manual handling. - Conduct checks on all components for wear and tear before use. 	2M

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			<ul style="list-style-type: none"> - Train staff on proper handling techniques and posture. - Use calibration tools to ensure equipment is set up correctly. - Include emergency contact information readily available at the site. 	
4. Personal Protective Equipment Inspection	PPE failure, chemical exposure	3H	<p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p>	2M
5. Blaster Operation Start-up	operator error, equipment failure	4A	<p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p>	3H
6. Grit Blasting Operation	dust generation, high-pressure equipment	4A	<p>[REDACTED]</p>	3H

Sample

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9. Emergency Procedures and Response	fire, chemical spills	4A		3H
10. Completion and Shutdown	equipment left in unsafe state, unauthorised access	3H		2M

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11. Waste Management	contamination, sharps injury	3H	<ul style="list-style-type: none"> 1. Use appropriate personal protective equipment (PPE) such as gloves, gowns, and masks. 2. Handle waste materials carefully and avoid contact with skin or clothing. 3. Dispose of waste materials in designated containers and follow proper disposal procedures. 4. Clean and disinfect work surfaces and equipment after use. 5. Avoid eating, drinking, or smoking in the work area. 6. Use sharps containers for disposal of needles, scalpels, and other sharp instruments. 7. Follow proper hand hygiene techniques, including washing hands with soap and water or using hand sanitizer. 8. Avoid touching your face or eyes while working. 9. Use caution when handling hazardous materials and follow safety protocols. 10. Report any spills or accidents immediately to the supervisor. 	2M
12. Environmental Safeguards	pollution, wildlife disturbance	4A	<ul style="list-style-type: none"> 1. Implement measures to prevent pollution, such as proper disposal of waste and use of environmentally friendly products. 2. Avoid activities that may disturb wildlife, such as hunting or trapping. 3. Establish buffer zones or protected areas for sensitive habitats. 4. Monitor and assess the impact of activities on the environment. 5. Implement erosion control measures to prevent soil erosion and sedimentation. 6. Use best management practices to minimize noise and vibration. 7. Implement water conservation measures to reduce water consumption. 8. Avoid using pesticides or herbicides that may harm wildlife. 9. Implement measures to prevent air pollution, such as using low-sulfur fuel and maintaining equipment. 10. Follow local regulations and guidelines for environmental protection. 	3H
13. Transportation of Materials	spillage, load shift	3H	<ul style="list-style-type: none"> 1. Secure loads properly using appropriate tie-down techniques. 2. Use proper loading and unloading procedures to prevent spills or damage. 3. Inspect vehicles and equipment before use to ensure they are in good condition. 4. Avoid overloading vehicles and adhere to weight limits. 5. Use spill containment measures, such as spill kits or absorbent materials. 6. Implement measures to prevent load shift, such as proper stacking and securing. 7. Follow traffic rules and regulations while operating vehicles. 8. Use proper driving techniques to avoid accidents. 9. Implement measures to prevent fuel leaks or spills. 10. Report any spills or accidents immediately to the supervisor. 	2M

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14. Post-Operation Review	latent defects, process inefficiencies	3H		2M
15. Operator Training and Evaluation	skills deficiency, non-compliance with protocols	3H		2M
16. Record Keeping and Documentation	data loss, non-compliance	3H		2M

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			<div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div>	

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>

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