

Grader

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:	
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. Procurement and Design Selection	<ul style="list-style-type: none"> • Selection of graders that are not fit for purpose for the site conditions or tasks required • Lack of consideration of operator visibility, ergonomic layout and control design during procurement • Failure to specify critical safety features such as ROPS/FOPS, seat belts, emergency stops, alarms and cameras • Inadequate assessment of compatibility with existing site traffic management and plant systems • Purchase or hire of graders without documented compliance to relevant Australian Standards and manufacturer requirements • No formal pre-acceptance inspection and commissioning process prior to fit use 	High	<ul style="list-style-type: none"> • Establish and implement a documented plant procurement procedure that requires WHS review prior to purchasing or hiring any grader • Specify compliance with WHS Act 2011, WHS Regulations, and applicable Australian Standards (e.g. AS 5327 for earth-moving machinery, where relevant) in purchase and hire contracts • Include minimum safety specifications in all goods procurement documents, such as ROPS/FOPS, certified seat belts, reversing alarms, cameras, adequate lighting, access systems and lockable isolation • Require supplier to provide verification of compliance (certificates, declarations of conformity, test reports) and full operator and service manuals in English • Implement a structured pre-acceptance inspection checklist to be completed by a competent person before a grader is allowed onto site, including confirmation of safety systems and guarding • Ensure grader configuration (blade size, attachments, tyres, road-rail systems where applicable) is matched to the intended tasks, terrain and load conditions • Involve operators, WHS representatives and maintenance personnel in equipment selection and trials to identify practical safety and usability issues • Require supplier to demonstrate key safety features and provide training handover as part of the procurement terms • Document all procurement decisions and risk assessments, including justification for any deviations from the organisation's standard plant specification 	Medium
2. Governance, WHS Management System and Legal Compliance	<ul style="list-style-type: none"> • Lack of clear organisational responsibilities for grader safety management • Inadequate understanding of PCBU duties and officer due diligence obligations under the WHS Act 2011 • Absence of a structured WHS management system covering mobile plant risk management • Insufficient consultation with workers and HSRs on grader-related risks, procedures and changes • Poor integration of grader risks into the overall risk register and business planning processes • Inadequate contractor and labour-hire management processes for grader operations 	High	<ul style="list-style-type: none"> • Define and document roles, responsibilities and accountabilities for grader safety within the WHS management system, including officers, managers, supervisors and operators • Ensure officers are trained in their due diligence obligations under the WHS Act 2011 and receive regular reports on grader-related risk, incidents and compliance • Integrate grader risk management into the organisation's formal WHS risk management procedure, including hazard identification, risk assessment, control implementation and review • Establish a process for consultation, cooperation and coordination with workers, contractors, labour-hire firms and other PCBUs where graders are used on shared worksites • Maintain a WHS legal register that includes plant-related legislative requirements and ensure periodic compliance audits specific to graders and mobile plant • Incorporate grader safety performance indicators (e.g. incidents, near misses, inspections, training completion) into regular management review meetings • Include grader and mobile plant controls within broader policies such as fatigue management, drug and alcohol, fitness for work and traffic management • Ensure all contractor and labour-hire arrangements require evidence of competency, safe systems of work, maintenance regimes and insurances for any grader brought to site • Conduct periodic independent audits or third-party reviews of grader safety management to verify effectiveness and legal compliance 	Medium

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3. Training, Competency and Authorisation	<ul style="list-style-type: none"> Operators lacking adequate training or verification of competency to operate graders in the specific work environment Over-reliance on informal on-the-job learning without structured assessment Failure to recognise site-specific hazards such as steep grades, confined work areas or underground services in competency programs No system for authorising, recording and periodically reassessing grader operators Supervisors unable to competently assess grader operation and intervene when unsafe practices occur Inadequate induction for spotters, ground workers and other personnel working around graders 	High	<ul style="list-style-type: none"> Implement a formal training and competency management system for all grader operators that meets WHS Act 2011 due diligence requirements Require completion of recognised training (e.g. nationally recognised units of competency for grader operation where applicable) plus structured site-specific familiarisation Develop and use documented competency assessment tools that cover machine controls, systems of work, hazard identification and emergency procedures Issue written authorisations/licenses for grader operation on site and maintain an up-to-date operator register with expiry or reassessment dates Provide additional practical training modules for specific site conditions such as working near edges, on unsealed roads, around live traffic or near utilities Ensure supervisors receive training to monitor capabilities, limitations and key safety requirements so they can effectively monitor and correct unsafe practices Include information on grader hazards and exclusion zones in site induction programs for all personnel, including subcontractors and visitors where relevant Conduct refresher training after significant incidents, near misses, introduction of new graders or significant procedural changes Audit training and competency records regularly to confirm only authorised persons operate graders and that records are accurate and complete 	Medium
4. Policies, Procedures and Safe Systems of Work	<ul style="list-style-type: none"> Absence of documented policies and procedures specific to grader operations and interfaces with other activities Inconsistent or informal work practices between shifts, crews or contractors Failure to integrate grader control into broader site traffic management and construction methodologies Procedures not reflecting current equipment, technology or regulatory requirements Lack of clarity on communication protocols between operators, spotters and supervisors No requirement for formal risk assessments or permits for higher-risk grader tasks (e.g. working near edges, in public road corridors or near services) 	High	<p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p>	Medium

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			[REDACTED]	
5. Maintenance, Inspection and Plant Integrity Systems	<ul style="list-style-type: none"> • Unplanned mechanical failures due to inadequate preventative maintenance systems • Use of graders with defective safety-critical components such as brakes, steering, warning devices or ROPS/FOPS • Poor record-keeping for inspections, servicing and repairs • Modification of graders without engineering review, creating new or increased risks • Reliance on operators to self-manage defects without a formal reporting and rectification process 	High	[REDACTED]	Medium
6. Traffic Management and Worksite Integration	<ul style="list-style-type: none"> • Conflicts between graders, other mobile plant, light vehicles and pedestrians due to poor traffic management planning • Inadequate systems to control access to work areas where graders are operating • Lack of coordination between multiple PCBUs sharing the same worksite or road corridor 	High	[REDACTED]	Medium

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	<ul style="list-style-type: none"> • Insufficient planning for operating graders near public roads, live traffic or adjacent properties • Inadequate systems for managing reversing, blind spots and limited visibility areas 		<p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p>	
7. Fatigue, Fitness for Work and Human Factors Management	<ul style="list-style-type: none"> • Operators working excessive hours on consecutive shifts leading to fatigue-related errors • Medical or physical conditions affecting an operator's ability to safely control grader • Use of alcohol or other drugs impairing judgement, reaction times and coordination • Psychosocial factors such as stress, time pressure or bullying influencing decision-making and risk-taking • No formal system to manage fit-for-work assessments and reporting for grader operators 	High	<p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p>	Medium

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			[REDACTED]	
8. Change Management and Introduction of New Plant or Processes	<ul style="list-style-type: none"> • Introduction of new graders, technologies or attachments without proper risk assessment • Changes in work methods, site layout or production schedules affecting grader risks not being identified or controlled • Software or control system updates to graders not evaluated for safety impacts • Inadequate communication of changes to workers, supervisors and contractors 	Medium	[REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED]	Low
9. Emergency Preparedness and Incident Management	<ul style="list-style-type: none"> • Lack of planning for grader-related emergencies such as rollovers, collisions, fires or medical events involving operators • Slow or uncoordinated emergency response due to unclear roles and communication paths • Failure to learn from grader incidents and near misses due to weak investigation and review processes • Emergency equipment not suitable for or accessible to grader operations 	High	[REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED]	Medium

SAMPLE

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			[REDACTED]	
10. Monitoring, Consultation and Continuous Improvement	<ul style="list-style-type: none"> • Failure to detect deteriorating grader safety performance due to inadequate monitoring • Limited worker participation in identifying hazards and improvement opportunities related to graders • Inconsistent application of controls over time due to lack of training and reinforcement • No structured process to review the effectiveness of grader controls management level 	Medium	[REDACTED]	Low

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 FOR 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 2025
 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) Regulation 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>

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>

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

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.