Front End Loader			
Business Name:		ABN:	
Business Address:			
Contact Person:	Phone:	Email:	

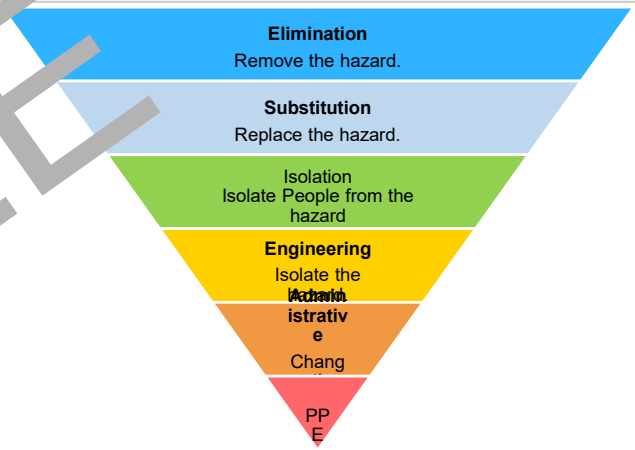
THIS RISK ASSESSMENT IS APPROVED BY THE PCBU OF THE PROJECT		
Under the Work Health and Safety Regulation (WHS Regulation), a person conducting a business or undertaking (PCBU) is required to ensure that a RISK ASSESSMENT is prepared before the proposed work starts.		
Full Name:		
Signature:	Title:	Date:

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
ALMOST CERTAIN	3 HIGH	3 HIGH	4 ACUTE	4 ACUTE	4 ACUTE		
LIKELY	2 MODERATE	3 HIGH	3 HIGH	4 ACUTE	4 ACUTE	4A ACUTE	DO NOT PROCEED
POSSIBLE	1 LOW	2 MODERATE	3 HIGH	4 ACUTE	4 ACUTE	3H HIGH	Rev before work
UNLIKELY	1 LOW	1 LOW	2 MODERATE	3 HIGH	4 ACU	2M MO RATE	Ensure control measures in place.
RARE	1 LOW	1 LOW	2 MODERATE	3 HIGH	3 H	1L LOW	Monitor and keep records.

HIERARCHY OF CONTROLS



Risk Rating & Required Action:

4A	Stop work. The risk is intolerable. E inate the hazar redesign the activity before proceeding. A Safe Work Method Statement (SWMS) or hi er-level authorisati is required.
3H	Review and approve additional c rols b ask arts. Senior supervisor sign-off needed.
2M	Ensure all nominated controls are in ace and effe ive. 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. Organisational WHS Governance and Legal Compliance	• Lack of clear WHS responsibilities for front end loader operations at officer, manager and supervisor level • Failure to align company procedures with WHS Act 2011, WHS Regulations and relevant Australian Standards (e.g. AS 5327, AS/NZS 4801 / ISO 45001 equivalent systems) • Inadequate consultation with workers, HSRs and contractors on loader-related risks and changes to systems of work • No formal process to identify reasonably foreseeable risks specific to front end loaders and attachments • Inadequate WHS resourcing (time, budget, competent people) to manage plant risks • Lack of due diligence by officers in verifying that loader risks are being effectively controlled	High	• Establish and document a Plant and Mobile Equipment Safety Management Procedure that specifically covers front end loaders and wheel loader attachments, referencing WHS Act 2011 and WHS Regulations Part 5.1 (Plant) • Define and record WHS roles, responsibilities and accountabilities for PCBU officers, managers, supervisors, maintenance personnel and operators in relation to front end loader operations • Incorporate front end loader risks into the organisation's WHS risk register, with scheduled review dates and responsible persons • Implement a documented due diligence framework for officers, including regular WHS performance reports, audits of loader-related controls and sign-off on corrective actions • Establish a formal WHS consultation process (safety committees, toolbox talks, HSR engagement) to review loader risks, near misses and proposed changes to plant or systems of work • Ensure access to competent WHS and plant specialists (internal or external) to advise on loader-specific legal compliance and best practice • Integrate front end loaders into the organisation's WHS objectives, KPIs and continuous improvement processes, including leading indicators (e.g. completion of inspections, close-out of actions)	Medium
2. Procurement, Design and Engineering Controls for Loaders and Attachments	• Procurement of loaders or attachments that are not fit for purpose, incompatible with site conditions or not designed to relevant standards • Lack of engineered controls (ROPS/FOPS, guarding, interlocks, emergency stops, visibility aids) suitable for the nature of work • Using non-genuine or unapproved attachments that do not match the loader's rated capacity or hydraulic system • Inadequate manufacturer documentation (operator manuals, load charts, attachment rating information) being supplied or retained • Failure to consider whole-of-life safety costs in procurement decisions (maintenance access, parts availability, safety upgrades) • Insufficient consideration of ergonomic and human factors (visibility, control	High	• Implement a formal plant procurement procedure requiring WHS review and sign-off before purchase, hire or lease of front end loaders and attachments • Specify minimum WHS design requirements in procurement documents, including ROPS/FOPS, operator restraint systems, compliant access/egress, guarding of pinch and crush points, and compliant lighting and visibility systems • Require written confirmation from suppliers that loaders and attachments comply with relevant Australian Standards, design registration requirements (if applicable) and OEM specifications, including load rating and compatibility • Mandate that only OEM-approved or engineer-verified attachments (e.g. buckets, forks, grabs, quick couplers) are procured, with documentation stored in equipment files • Include evaluation of visibility aids (cameras, proximity sensors, reversing alarms, mirrors), dust and noise controls, and climate controls in procurement assessments • Ensure all relevant manuals, technical data, maintenance schedules and load charts are obtained, recorded and made accessible prior to putting the loader into service • Adopt a pre-commissioning safety review process (including WHS and maintenance personnel) to verify that safety features are installed, functional and suitable for the intended tasks and environment	Medium

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SPECIFIC WORK STEPS	HAZARDS THAT MAY ARISE	INITIAL RISK	SPECIFIC MEASURES TO BE PUT IN PLACE TO ELIMINATE OR CONTROL THE RISKS	RESIDUAL RISK
	layout, vibration, noise) in equipment selection			
3. Site Planning, Traffic Management and Work Environment	• Poorly designed traffic flow leading to interaction between loaders, light vehicles and pedestrians • Inadequate demarcation of loader operating zones, stockpiles, loading areas and pedestrian walkways • Uncontrolled interaction between loaders and trucks during loading, tipping and manoeuvring • Insufficient assessment of ground conditions, gradients and edge stability in operating areas • Poor lighting, dust, noise or weather impacts that reduce visibility and situational awareness • Inadequate planning for refuelling, parking, isolation and emergency access routes	High	• Develop and enforce a site-specific Traffic Management Plan that addresses front end loader operations, including dedicated routes, exclusion zones and speed controls • Use engineered controls such as barriers, bollards, rumble strips and clearly marked crossings to physically separate pedestrian traffic from loader operating areas where reasonably practicable • Define and signpost designated loader operating zones, loading bays, stockpile areas and turn-around zones, supported by [redacted] and induction material • Implement a formal process for assessing and approving operating areas, including ground stability, gradients, underground services and edge protection near batters or drop-offs • Ensure adequate fixed and task lighting in operating areas, and specify operating restrictions during reduced visibility or adverse weather where risks cannot be controlled • Set up controlled refuelling, wash-down and maintenance areas with clear procedures, spill controls and traffic arrangements • Integrate loader operations into emergency management plans, including access/egress routes for emergency vehicles, safe parking/park-up procedures and emergency shutdown protocols	Medium
4. Loader and Attachment Selection, Suitability and Configuration Management	• Using loaders and attachments outside of their rated capacity or design intent • Changing attachments without a formal verification process, leading to instability or loss of load • Lack of a controlled configuration record for each loader and compatible attachments • Inadequate consideration of attachment weight and centre of gravity on loader performance and braking • Use of quick couplers or attachment systems without appropriate controls and verification procedures	High	[redacted]	Medium
5. Competency, Licensing, Training and Supervision	• Operators lacking formal competency in front end loader operation and attachment use	High		Medium

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	• Inadequate understanding of site-specific hazards, traffic rules and emergency procedures • Supervisors not competent to oversee safe loader operations and enforce procedures • No formal verification of licence, high risk work authorisations (where applicable) or prior experience • Failure to provide adequate training for spotters, truck drivers and ground workers interacting with loaders • Inadequate refresher training or competency reassessment after incidents or near misses		[redacted]	
6. Safe Systems of Work, Procedures and Permit Processes	• Absence of formalised safe systems of work for routine and non-routine loader tasks • Use of informal "custom and practice" methods that bypass engineering and administrative controls • Inadequate procedures for high-risk activities such as working near edges, stockpile management or reversing trucks in confined spaces • Lack of permit or authorisation systems for exceptional tasks (e.g. lifting with forks, work near live services, work at night) • Confusing, inaccessible or overly complex procedures that operators do not follow in practice	High	[redacted]	Medium
7. Inspection, Pre-Start, Maintenance and Repair Management	• Systemic failure to identify and address mechanical defects, poor tyre condition or faulty safety devices	High	[redacted]	Medium

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SPECIFIC WORK STEPS	HAZARDS THAT MAY ARISE	INITIAL RISK	SPECIFIC MEASURES TO BE PUT IN PLACE TO ELIMINATE OR CONTROL THE RISKS	RESIDUAL RISK
	• Inadequate preventative maintenance planning leading to unexpected breakdowns or loss of control • Maintenance work being performed without isolation, lockout or verification controls • Poor record keeping of inspections, maintenance tasks, repairs and defects • Use of unqualified or untrained personnel to perform maintenance or modifications on loaders and attachments		[redacted]	
8. Monitoring of Operations, Supervision, and Behavioural Safety	• Risk-taking behaviour such as speeding, overloading [redacted] outside designated [redacted] • Supervisors failing to intervene [redacted] unsafe practices [redacted] • Lack of real-time monitoring of load usage, operating hours and incidents • Normalisation of deviance where shortcuts become accepted practice • Inadequate feedback mechanisms for operators to raise concerns about plant, procedures or site conditions	High	[redacted]	Medium
9. Contractor, Hire Equipment and Third-Party Interface Management	• Contractor loader operators not working to the same safety standards, procedures or traffic rules as the principal PCBU	High	[redacted]	Medium

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SPECIFIC WORK STEPS	HAZARDS THAT MAY ARISE	INITIAL RISK	SPECIFIC MEASURES TO BE PUT IN PLACE TO ELIMINATE OR CONTROL THE RISKS	RESIDUAL RISK
	• Hired or short-term loaders and attachments arriving on site without adequate safety verification • Poor coordination between different PCBUs operating loaders, trucks and other mobile plant in shared areas • Unclear allocation of WHS responsibilities between host employer, labour hire provider and equipment owner		[redacted]	
10. Fatigue, Shift Work, Environmental and Health Factors	• Operator fatigue leading to impaired judgment, slower reaction times and increased collision or roll-over risk • Extended exposure to whole-body vibration, noise and dust without adequate controls • Heat stress or cold st[redacted]extreme environments affect[redacted]g operator performance • Psychosocial stre[redacted]oductio[redacted] pressure, time pressure, conflict) influencing risk-taking behaviours	Me[redacted]	[redacted]	Low
11. Emergency Preparedness, Incident Response and Recovery	• Delayed or ineffective response to loader-related incidents such as collisions, roll-overs, fires or load spills • Lack of clear procedures for emergency shutdown, evacuation and communication when an incident occurs • Inadequate access for emergency services to loader operating areas and fuel storage locations • Poor post-incident investigation, root cause analysis and corrective action implementation	High	[redacted]	Medium

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			[redacted]	
12. Documentation, Information Management and Continuous Improvement	• Outdated or conflicting information about loader capacities, approved attachments and operating rules • Loss of critical records (training, inspections, maintenance, risk assessments) needed to demonstrate due diligence • Failure to systematically review and update WHS controls as technology, legislation or site conditions change • Inconsistent communication of lesso learned from incidents, audits or exter guidance	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

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-of-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/forms-and-resources/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