

Front-End Loader Operation 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 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	Wrong PPE use, Inadequate training	3H	<ul style="list-style-type: none"> - Ensure all operators are wearing appropriate PPE before entering the work area - Verify certification and competencies of all operators for the front-end loader - Conduct a toolbox talk to outline the day's activities and potential risks - Review site rules and procedures with all team members - Establish emergency protocols and ensure they are communicated - Implement a buddy system for new or inexperienced operators - Provide refresher training for operators where necessary - Ensure communication devices are operational and distributed among team members - Conduct a walk-around to identify any new hazards - Ensure safety signage is clearly visible on site 	2M
2. Conduct Pre-Start Check	Mechanical failure, Fluid leaks	3H	<ul style="list-style-type: none"> - Complete pre-start checklist for the front-end loader - Inspect all fluid levels, hoses, and connections - Test operational controls for functionality - Examine tyres for damage or pressures that are too low - Check for any visible signs of wear or fatigue in machinery - Ensure all safety features such as seat belts and alarms are functioning - Report and tag out any defects or issues immediately - Maintain regular scheduling of services in accordance with manufacturer's specification - Verify updated maintenance log is present in the loader - Keep a spill kit accessible near the loader location 	2M
3. Mount Loader	Slips and trips, Unstable mount	2M	<ul style="list-style-type: none"> - Use handrails and steps provided on the loader for mounting - Wear non-slip footwear to reduce slip hazard - Face the machine while climbing to maintain three points of contact - Clear all debris or obstacles around mounting area - Use a step stool if necessary for safe access - Ensure area around loader is well-lit and visible - Conduct regular housekeeping to maintain safe access points - Educate workers on safe mounting procedures 	1L

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
			<ul style="list-style-type: none"> - Ensure any access aids are inspected regularly - Avoid climbing during adverse weather conditions 	
4. Start Machine	Unexpected movements, Starting malfunction	3H	<ul style="list-style-type: none"> - Read and understand the manufacturer's instructions before starting the machine. - Ensure all safety guards are in place and functioning correctly. - Check that the work area is clear of obstructions and personnel. - Wear appropriate PPE (hard hat, safety glasses, gloves, etc.). - Perform a pre-start inspection of the machine. - Follow the correct start-up procedure as outlined in the manual. - Do not attempt to start the machine if you are unsure or if it appears faulty. - Keep hands and feet away from moving parts. - Stop the machine immediately if you notice any unusual sounds or vibrations. - Do not touch the machine until it has completely stopped. - Lock out/tag out the machine before performing any maintenance or repairs. 	2M
5. Navigate Workspace	Obstructions, Poor visibility	3H	<ul style="list-style-type: none"> - Conduct a thorough walk-through of the workspace before starting work to identify potential obstructions. - Use designated pathways and avoid shortcuts. - Communicate clearly with other team members about your location and intended movements. - Use reflective gear or lights if working in low-visibility conditions. - Stop immediately if you encounter an unexpected obstacle or change in floor conditions. - Maintain a safe distance from other workers and equipment. - Use hand signals or verbal cues to coordinate movements around shared spaces. - Report any hazards or changes in the workspace to the supervisor immediately. - Stay alert and focused throughout the entire task. - Do not drink alcohol or consume drugs while operating machinery or navigating the workspace. 	2M
6. Load Materials	Overloading, Material spill	3H	<ul style="list-style-type: none"> - Verify the weight and distribution of materials being loaded against the machine's capacity. - Use proper lifting techniques to prevent injury and ensure stability. - Securely fasten materials to prevent shifting or falling during transport. - Avoid overfilling containers or compartments. - Inspect loading areas for spills or leaks before and after loading. - Clean up any spills immediately to prevent slips, trips, and falls. - Use containment measures (like spill kits) if a leak occurs. - Report any issues related to material handling to the supervisor. - Do not attempt to load materials if you are unsure of the correct procedure. - Prioritize safety over speed when handling materials. 	2M

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
7. Transport to Site	Falling load, Rollover risk	4A		3H
8. Unload Materials	Load shift, Personnel in exclusion zone	3H		2M
9. Fuel the Loader	Fuel spills, Fire hazard	3H		2M

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
10. Shutdown Process	Improper shutdown, Residual energy hazards	3H		2M
11. Inspect Post-Operation	Unnoticed damage, Contamination hazards	2M		1L
12. General Housekeeping	Slip, trips and falls, Falling objects	2M		1L

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
13. Maintenance Scheduling	Unscheduled downtimes, Inspection oversight	3H		2M
14. Emergency Procedures	Panic during an emergency, Miscommunication	3H		2M
15. Post-Project Decommissioning	Residual contamination, Equipment failure	2M		1L

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
			<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>

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.