

Farming Machinery

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. Governance, WHS Duties & Consultation	<ul style="list-style-type: none"> Lack of clear assignment of WHS responsibilities for farming machinery under WHS Act 2011 Inadequate WHS policy covering procurement, operation and maintenance of farming machinery Insufficient consultation with workers, contractors and PCBUs sharing the farm workplace Failure to consider WHS when planning seasonal activities (e.g. baling hay, cultivating, harvesting) No formal process to ensure officers exercise due diligence regarding machinery risks Poor integration of contractor management into the farm WHS system 	4A	<ul style="list-style-type: none"> Develop and implement a farm WHS policy and machinery management procedure aligned to WHS Act 2011 and WHS Regulations 2011 Allocate and document WHS responsibilities (officers, supervisors, leading hands, contractors) specific to farming machinery Establish a structured consultation framework (toolbox talks, pre-season planning meetings, HSR involvement) to discuss machinery risks (including bale cutters, balers and disc cultivators) Include machinery risk management as a standing agenda item at management and safety meetings Ensure officers exercise due diligence with specific focus on plant and high-risk seasonal activities Implement a contractor management procedure that requires evidence of competence, insurances and WHS systems for all party operating or maintaining machinery on site 	3H
2. Machinery Procurement, Design & Guarding	<ul style="list-style-type: none"> Purchase of machinery (tractors, balers, bale cutters, disc cultivators) without adequate guarding for Australian conditions Incompatible or unapproved PTO shafts, power take-off drivelines and rotating components Insufficient guarding of belts, chains, cutters, blades and nip points on balers and bale cutters Lack of ROPS and FOPS protection on tractors and loaders used with hay handling equipment Inadequate assessment of second-hand machinery against WHS plant requirements Non-compliant modification of machinery (removal of guards, altered PTO speeds, unapproved attachments) 	4A	<ul style="list-style-type: none"> Develop a machinery and plant procurement procedure requiring verification of compliance with relevant Australian Standards, manufacturer specifications and WHS Regulations for plant Specify that all tractors, balers, bale cutters and disc cultivators must be supplied with compliant fixed and interlocked guards over PTOs, drive shafts, cutters and other moving parts Require ROPS/FOPS and certified operator protection structures on tractors and loaders in line with national guidance and manufacturer recommendations Mandate pre-purchase risk assessments for all new and second-hand plant, including review of safety features, guarding and safe access points Prohibit unauthorised modification of machinery and implement an engineering change management process requiring competent person sign-off Maintain a plant register documenting make, model, serial number, guarding configuration and any engineering risk controls 	2M
3. Plant Registration, Documentation & Information	<ul style="list-style-type: none"> Missing or incomplete operator manuals for tractors, balers, bale cutters and disc cultivators 	3H	<ul style="list-style-type: none"> Maintain a central plant and machinery register including registration status, manuals, risk assessments and inspection schedules 	2M

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	<ul style="list-style-type: none"> Failure to register registrable plant and relevant high-risk plant where required by WHS Regulations Lack of documented safe operating limits (e.g. maximum slopes for cultivation, baling conditions, PTO speed limits) Outdated or inconsistent safety decals and warning signage on machinery Workers unable to access or understand critical safety information (language and literacy barriers) 		<ul style="list-style-type: none"> Ensure all plant subject to statutory registration is identified, assessed and registered in accordance with WHS Regulations and regulator requirements Obtain, file and make accessible current operator manuals and safety information for all machinery on site (physical copies in workshops and digital copies on a shared system) Implement a system to inspect and replace damaged, missing or illegible safety decals and signage on all machinery Develop simplified Safe Work Instructions (SWIs) supported by diagrams and pictograms for key machinery, addressing language and literacy needs Include limits of use (e.g. maximum bale size, moisture content for baling hay, safe operating slope for disc cultivators) in SWIs and specific procedures 	
4. Competency, Licensing & Training Systems	<ul style="list-style-type: none"> Untrained or inexperienced workers operating tractors, balers, bale cutters or disc cultivators No formal competency assessment prior to allowing solo operation of machinery Inadequate training on specific hazards of baling hay, bale cutting and disc cultivation (e.g. entanglement, ejection of material, dust and fire risk) Lack of verification of high-risk licences where applicable (e.g. telehandlers, forklifts used for hay handling) Informal 'buddy' training without documented outcomes or standardisation Failure to provide refresh training or training following incidents, near misses or equipment change 	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>	2M
5. Safe Systems of Work & Procedures	<ul style="list-style-type: none"> Absence of farm-wide machinery procedures for start-up, isolation, maintenance and emergency response Over-reliance on informal custom and practice instead of documented systems No specific procedures addressing bale cutter operation, unjamming balers or clearing disc cultivator blockages 	4A	<p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p>	2M

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	<ul style="list-style-type: none"> Inconsistent application of lock-out/tag-out practices when clearing jams or performing minor maintenance Failure to define who may operate, adjust or repair machinery during production Lack of clear rules around children and visitors in machinery operational zones 		[REDACTED]	
6. Maintenance, Inspection & Pre-Start Systems	<ul style="list-style-type: none"> Inadequate planned maintenance leading to mechanical failure (brakes, steering, hydraulics, PTO shafts, guards) Lack of regular inspections of balers, bale cutters and disc cultivators for cracked components, loose fasteners, worn blades and damaged guards No system to ensure pre-start checks are completed and defects reported Use of makeshift repairs (e.g. wire on rope on guards) that compromise safety Failure to remove defective machinery from service pending repair Poor recordkeeping on service history, inspections and repairs 	4A	[REDACTED]	2M
7. Isolation, Lock-Out/Tag-Out & Energy Control	<ul style="list-style-type: none"> Uncontrolled release of mechanical, hydraulic or stored energy during maintenance, cleaning or jam clearing Failure to isolate PTOs and moving parts before accessing bale cutters or baler pick-up and knotter areas Workers reaching into disc cultivator or cutting components while partially energised Unclear lock-out responsibility when external contractors perform maintenance on farm machinery Inconsistent use of tags and locks resulting in inadvertent re-energisation 	4A	[REDACTED]	2M

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			[REDACTED]	
8. Traffic Management, Farm Layout & Field Operations	<ul style="list-style-type: none"> • Machinery collisions with people, vehicles or structures in yards, laneways and paddocks • Reversing tractors with balers or implements attached in confined areas without controls • Poor segregation of pedestrian walkways and machinery routes near sheds and bale storage • Operating disc cultivators or hay balers on unsafe slopes or unstable ground leading to rollovers • Inadequate field planning causing overlap of operations (e.g. baling, bale cutting, loading) in the same area • Uncontrolled public or neighbour access to operational paddocks and farm roads 	4A	[REDACTED]	2M
9. Seasonal Workload, Fatigue & Work Scheduling	<ul style="list-style-type: none"> • Extended working hours during hay baling and cultivation seasons leading to operator fatigue • Pressure to complete baling in adverse weather changes causing unsafe work speeds and short-cuts • Inadequate rest breaks for machinery operators performing monotonous tasks in long paddock runs • Fatigued decision-making around unblocking machinery, servicing while running or operating in poor visibility • Driving machinery on public roads when fatigued after long field shifts 	3H	[REDACTED]	2M
10. Fire, Explosion & Dust Management (Hay & Cultivation)	<ul style="list-style-type: none"> • Ignition of dry hay or dust on hot engine and exhaust surfaces during baling operations • Fires caused by mechanical failure (e.g. overheated bearings, friction on 	4A	[REDACTED]	2M

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	<ul style="list-style-type: none"> disc cultivators, electrical shorts on balers) • Spontaneous combustion of poorly cured hay bales stored in sheds or stacks • Dust explosions or dense dust clouds around bale cutters and during disc cultivation in dry conditions • Lack of fire response planning for machinery fires in remote paddocks 		[REDACTED]	
11. Environmental, Chemical & Noise Exposure	<ul style="list-style-type: none"> • Prolonged exposure to whole-body vibration and noise from tractors, balers and disc cultivators • Dust inhalation from dry soil cultivation and hay handling around bale cutters and balers • Potential exposure to fuel, oils, greases and hydraulic fluids during servicing without adequate controls • Poor management of run-off and contamination from machinery washing and refuelling areas • Insufficient controls on noise exposure for workers and neighbours during extended baling and cultivation operations 		[REDACTED]	2M
12. Remote & Isolated Work, Communications & Emergency Response	<ul style="list-style-type: none"> • Operators working alone in remote paddocks with limited mobile coverage while using heavy machinery • Delayed emergency response in the event of entanglement, rollover or fire involving balers, bale cutters or disc cultivators • Lack of clear procedure for check-ins, location tracking and escalation when operators fail to report in 	4A	[REDACTED]	2M

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	<ul style="list-style-type: none"> Inadequate first aid supplies and training to deal with serious injuries associated with machinery No tested process for contacting emergency services and guiding them to remote field locations 		[REDACTED]	
13. Contractor, Labour Hire & Visitor Management	<ul style="list-style-type: none"> Contractor and labour hire workers operating farming machinery without alignment to farm WHS systems Assumptions that contractors are fully competent and compliant without verification Visitors entering machinery operating areas, bale stacks or cultivation zones without induction Poor coordination where contractors bring their own machinery (balers, disc cultivators, bale cutters) with differing safety features and procedures 	3H	[REDACTED]	2M
14. Incident Reporting, Investigation & Continuous Improvement	<ul style="list-style-type: none"> Under-reporting of incidents, near misses and equipment defects involving farming machinery Failure to investigate related incidents to identify underlying systemic causes Repeat incidents due to poor follow-up and verification of corrective actions Lack of trend analysis on machinery incidents (e.g. recurring near misses with baler blockages or disc failures) 	3H	[REDACTED]	1L

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.