Excavator Attachments

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:

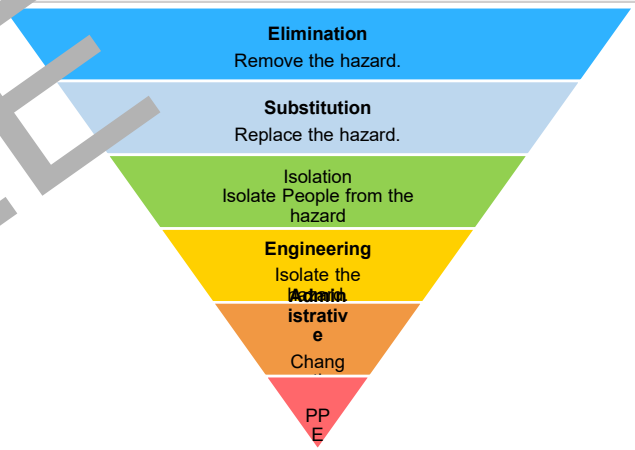
CLIENT OR PRINCIPAL CONTRACTOR DETAILS

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. Governance, Legislation and WHS Duties	• Lack of clear allocation of WHS duties for excavator attachment selection, use and maintenance under WHS Act 2011 and WHS Regulations • Inadequate understanding by Officers and senior managers of due diligence obligations in relation to plant and attachments • No systematic process to ensure excavator attachments and quick-hitch devices comply with relevant Australian Standards and regulatory requirements • Failure to consult, cooperate and coordinate with other PCBUs on multi-PCBU sites regarding compatible attachments, operating envelopes and responsibilities • Absence of documented risk management procedure specifically addressing the lifecycle of excavator attachments	High	• Develop and implement a plant and attachment management policy that assigns clear WHS responsibilities in accordance with WHS Act 2011 (PCBU, Officers, workers, contractors) and WHS Regulation plant provisions • Ensure Officers complete due diligence training focused on plant and attachment risks, including obligations relating to provision and maintenance of safe plant, systems of work, information, training, supervision and resources • Establish a compliance register for all excavator attachments capturing design approvals, manufacturer instructions, load ratings, serial numbers, inspection records, and applicable Australian Standards (e.g. AS 4772, AS 1418 series, AS 2550 where relevant) • Integrate excavator attachment risk management into the organisation's WHS risk management procedure (identify, assess, control, review) with formal review triggers (incident, change of plant, introduction of new attachment types) • Implement a coordination procedure requiring documented consultation and coordination with principal contractors, host employers and other PCBUs on site where attachments are used, including interface risk agreements and responsibilities for plant and traffic management • Schedule periodic WHS governance audits (internal or external) to verify that attachment management practices align with the WHS Act 2011, WHS Regulations and site-specific conditions, and to verify that identified non-conformances are closed out • Maintain and periodically review a legal and standards register for plant and attachments, including monitoring of regulator alerts, safety bulletins and prohibition notices relating to excavator attachments and quick hitches	Medium
2. Procurement, Design and Selection of Attachments	• Purchase of incompatible or non-certified attachments that do not match excavator specifications or quick-hitch systems • Sourcing attachments from suppliers who cannot demonstrate compliance with Australian Standards or provide engineering certification and load rating information • Procurement decisions driven primarily by cost rather than safety, durability and suitability for task and environment • Lack of formal engineering review of custom or modified attachments, including lifting points, ripper tynes, grabs and tiltrotators • Failure to obtain and retain manufacturer instructions, load charts and technical data for each attachment	High	• Implement a procurement procedure for excavator attachments requiring documented technical assessment of compatibility with base machine (weight, hydraulic capacity, quick-hitch type, operating envelope, control system interface) • Mandate that all new attachments are supplied with manufacturer's data sheets, operation and maintenance manuals, load ratings, design registrations if applicable, and statements of compliance with relevant Australian Standards • Require pre-purchase engineering review and sign-off (internal or external engineer) for custom, high-risk or modified attachments, particularly those used for lifting, handling people, demolition or rock breaking • Include WHS performance and evidence of compliance with Australian legislation and standards as key evaluation criteria in supplier selection and tender processes for attachments • Standardise preferred quick-hitch and locking systems across the fleet where practicable, prioritising designs with positive locking, fail-safe features and clear lock / unlock status indication in the cab • Prohibit procurement of second-hand or imported attachments without documented verification of structural integrity, compatibility, prior use history (where available) and conformity to Australian requirements	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
	• Selection of attachment locking systems that rely solely on operator action without design safeguards or secondary locking arrangements		• Establish and maintain a central attachment register linked to plant asset management systems, capturing approved applications, compatible machines, and any engineering limitations	
3. Engineering Controls, Compatibility and Configuration Management	• Use of attachments on excavators for which they were not assessed or approved, leading to structural overload or instability • Incorrect coupling of attachments due to incompatible quick-hitch systems, pin sizes or geometry, increasing risk of detachment • Uncontrolled modifications to attachments (welded lugs, altered pins, cutting) without engineering assessment, compromising structural integrity • Lack of documented configuration control for which machine–attachment combinations are permitted and under what conditions • Inadequate guarding of moving parts, hydraulic components and pinch points on specific attachment types (e.g. grabs, mulchers, augers) • Failure to integrate control system requirements (e.g. [illegible] lock indicators, interlocks) with machine electronics and in-cab displays	High	• Develop a formal configuration management system that lists approved excavator–attachment combinations, including maximum safe working loads, outreach limits and any operational restrictions for each combination • Prohibit any structural modification to attachments (welding lifting lugs, changing pins, welding repairs) unless assessed, designed and certified by a competent engineer; retain engineering certificates with the attachment records • Implement engineering controls to prevent mis-coupling, such as standardised pin diameters and spacing within a fleet, quick-hitches with automatic locking, mechanical failsafes and visual lock status indicators • Ensure that guarding and protective structures on attachments comply with relevant Australian Standards and are considered during procurement, with a documented process for verifying guards are present and effective before deployment • Integrate quick-hitch control systems with the machine such that attachment release cannot occur without deliberate, multi-step operator action and only when the attachment is in a safe position (e.g. grounded), as far as reasonably practicable • Maintain technical drawings, design documentation and OEM bulletins for each attachment, ensuring configuration changes (e.g. software updates, hydraulic circuit changes) are documented and assessed for WHS impacts • Include engineering review of attachments used for lifting (e.g. lifting eyes on buckets, grabs) to ensure compliance with lifting equipment requirements and clear differentiation between lifting-rated and non-lifting attachments	Medium
4. Training, Competency and Authorisation Systems	• Operators and doggers not trained in the specific risks associated with different attachment types and quick-hitch systems • No formal competency assessment for attachment changeover, lock verification, or operation of specialised attachments (e.g. rock saws, mulchers) • Inadequate understanding of load limits, stability changes and swing radii when different attachments are used • Supervisors and leading hands lacking knowledge to verify operator	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
	competence and correct attachment configuration • High reliance on on-the-job training without structured learning outcomes, assessment or refresher requirements		[redacted]	
5. Policies, Procedures and Safe Systems of Work	• Absence of a documented procedure covering attachment selection, changeover, verification, and de-rating of lifting capacities • Inconsistent practices between crews and sites regarding attachment use and verification routines • Procedures focused only on machine operation, not on attachment management and associated exclusion zones or lifting limits • Lack of clear rules defining when attachments can and cannot be used for lifting, demolition or work near services and structures • Failure to embed attachment safety requirements into contractor management and subcontractor work methods	High	[redacted]	Medium
6. Inspection, Maintenance and Integrity Management	• Inadequate inspection and maintenance regimes for attachments, quick-hitches and associated hydraulic systems • Wear, fatigue, cracking or corrosion in pins, bushes, couplers and structural	High	[redacted]	Low

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	components not being detected before failure • Reliance solely on operators to identify defects without scheduled competent person inspections • Use of attachments after impact damage or overload events without engineering assessment • Incomplete or inaccurate maintenance records leading to unknown service history for high-risk attachments		[redacted]	
7. Pre-Use Verification, Checklists and Technology Systems	• Absence of a formalised system to verify correct attachment [illegible]ling and locking before work [illegible]mences • Inconsistent or u[illegible]ocumented pre-start checks leading to [illegible] incorrectly engaged attachments • Reliance on manual checks alone where engineering or tech[illegible]al aids could significantly reduce risk • Failure to capture and trend recurring attachment or quick-hitch issues identified during pre-use checks	High	[redacted]	Medium
8. Site Planning, Traffic and Interface Management	• Poor site layout and traffic management leading to excavators with attachments operating too close to workers, vehicles and structures	High	[redacted]	Medium

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	• Inadequate planning for swing radius and reach of various attachments, causing workers or plant to enter high-risk zones • Lack of integration between attachment risks and overall traffic management plan on multi-PCBU or congested sites • Inconsistent use of spotters, barriers and signage when high-risk attachments are in operation		[redacted]	
9. Contractor, Hire and Subcontractor Management	• Contractors or hire providers supplyi excavators and attachments without adequate documentation, maintenance history or proof of com ance • Inconsistent stan rds between the principal PCBU ar contracto regarding attachme gement, training and inspection • Reliance on hire company syst s without verification that th et or exceed site WHS requirements • Poor communication of site-specific attachment risks and controls to subcontractors	High	[redacted]	Medium
10. Change Management and Introduction of New Attachments	• Uncontrolled introduction of new or novel attachment types without formal risk assessment and trial • Failure to consider WHS impacts when changing quick-hitch systems, hydraulic	High	[redacted]	Medium

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	circuits or control systems affecting attachments • Insufficient training and procedural updates when new attachments are rolled out across the fleet • Legacy attachments remaining in use after changes to standards, manufacturer guidance or regulator alerts		[redacted]	
11. Emergency Preparedness, Incident Management and Reporting	• Lack of specific emergency response planning for attachment detachment, hydraulic failure, entra[illegible] struck-by incidents • Workers and sup[illegible]visors u[illegible]w to isolate attachme[illegible]ake pla safe following an incident or near mi • Under-reporting of attachment-r[illegible]ated near misses that could ind[illegible] systemic design or management failures • Delays in notifying regulators where notifiable incidents involving plant and attachments occur	High	[redacted]	Medium
12. Monitoring, Consultation and Continual Improvement	• Failure to systematically monitor the effectiveness of attachment-related controls and management systems • Limited worker participation in identifying practical issues with	Medium	[redacted]	Low

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	attachments, quick-hitches and procedures • No structured review of attachment management following organisational changes, acquisitions or major projects • Inadequate integration of lessons learnt from incidents, audits and industry developments into systems		[redacted]	

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