Truck Loading Unloading and General Load Restraint

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:

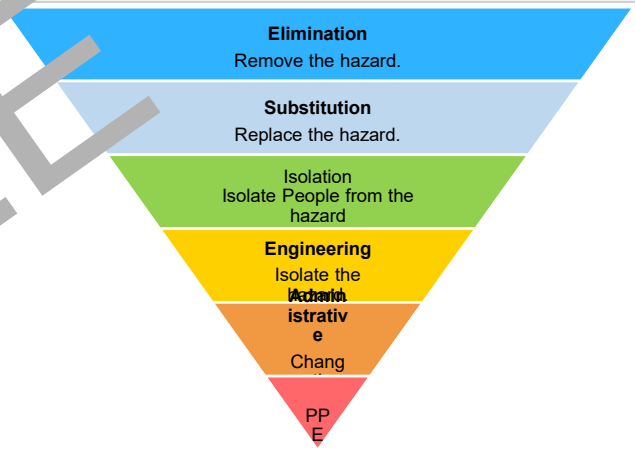
CLIENT OR PRINCIPAL CONTRACTOR DETAILS

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, WHS Duties and Legal Compliance	• Lack of clear assignment of PCBU, officer and worker duties for truck loading, unloading and load restraint under the WHS Act 2011 and HVNL • Board and senior management not aware of Chain of Responsibility (CoR) obligations for load restraint and vehicle loading limits • Absence of documented policies covering safe truck loading, general load restraint and use of ratchet straps, bars, boards and pogo sticks • Inadequate WHS consultation mechanisms with loaders, drivers and subcontractors involved in freight tasks • Failure to integrate Australian load restraint guidelines, Codes of Practice and relevant Standards into company procedures • Insufficient resources (time, budget, competent people) allocated to implement and maintain WHS and CoR systems • Inadequate verification that subcontractors and transport operators comply with legal requirements and company WHS standards	4A	• Develop and endorse a corporate Truck Loading, Unloading and Load Restraint Policy that explicitly references WHS Act 2011, WHS Regulations, HVNL and the Load Restraint Guide (current edition) • Define and document WHS and CoR responsibilities for officers, managers, schedulers, supervisors, drivers and loading personnel, and include these in position descriptions and contracts • Establish a WHS governance structure with regular senior management reviews of load restraint performance, incidents and compliance audits • Embed compliance with Australian Standards and recognised guidance (e.g. Load Restraint Guide, AS/NZS 5340 series where applicable) into procurement, operations and contractor management processes • Implement formal WHS consultation processes (HSCs, toolbox talks, safety committees) specifically including top of load distribution, securing loads and operation of restraint devices • Allocate dedicated budget and time for development, implementation and review of load restraint systems, training, engineering controls and inspection regimes • Implement a contractor management procedure that requires evidence of CoR compliance, training records, policies and risk assessments for loading and load restraint activities • Conduct periodic independent compliance reviews or audits of the load restraint system and report findings to the executive team	3H
2. Vehicle and Load Restraint Equipment Procurement and Design	• Procurement of flat bed trucks and trailers that are not fit-for-purpose for the types, sizes and weights of loads carried • Insufficient anchor points, lashing points or tie rails to allow correct use of heavy duty ratchet straps and chains • Use of non-compliant, damaged or low-rated ratchet straps, chains, winches, boards, pogo sticks and bars • Incompatible load restraint systems for specific freight (e.g. no side gates, headboards or load-rated barriers for loose items) • Lack of engineered solutions for regular high-risk loads, leading to	4A	• Develop engineering and WHS-based procurement specifications for flat bed trucks, trailers and load restraint systems that detail minimum load restraint capacities, anchor point layouts and headboard/gate requirements • Specify only load restraint equipment (ratchet straps, chains, winches, boards, bars, pogo sticks) that meet relevant Australian Standards and are clearly marked with Working Load Limit (WLL) and identification tags • Require design review and sign-off by a competent engineer for any custom restraint systems, including pogo boards, load bars and removable headboards • Standardise anchor point configuration and load restraint hardware across the fleet to support consistent training and procedures • Incorporate fixed and adjustable restraint systems for frequently carried load types (e.g. curtain-side restraints, headboards, chocks, blocking and bracing) to reduce reliance on manual strapping alone	2M

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	reliance on ad-hoc strapping down and improvisation • Failure to consider ergonomic design and safe access for tensioning and releasing ratchet straps and load bars • No standardisation of load restraint equipment ratings and labelling across the fleet		• Ensure vehicles are designed with safe access and egress for load restraint tasks (e.g. non-slip decks, access steps, handrails, tie-off points for fall protection where reasonably practicable) • Include requirements for storage of ratchet straps, chains and loose restraint equipment in secure, designated compartments to prevent damage and contamination • Establish a design change management process to assess WHS impacts before modifying truck bodies, decks or restraint systems	
3. Load Planning, Stability and Distribution Management	• Inadequate planning for load configuration on flat bed trucks leading to unstable or top-heavy loads • Failure to apply load distribution principles resulting in axle overloading, unbalanced side-to-side loading or exceeding gross vehicle mass • No systematic approach to separating incompatible or loose items that can shift during transport • Reliance on driver or loader judgement alone rather than documented guidelines for stacking heights and centre-of-gravity considerations • Insufficient guidance on rectifying vehicle overloads or redistributing freight when weighing shows non-compliance • Lack of standardised methods for planning mixed loads that require different restraint systems (e.g. pallets, machinery, long product) • No documented approach for calculating required number, capacity and positioning of straps and restraints		• Develop and implement a documented Load Planning Procedure that covers load distribution, centre-of-gravity, stacking limits and segregation of loose items • Provide standard load configuration guides and visual diagrams for common freight types and vehicle combinations, including axle loading examples • Mandate the use of load calculation tools or worksheets to determine the number and placement of ratchet straps or other restraints based on WLL and load mass • Implement a policy that requires weighing vehicles (on-site or public weighbridge) when there is any doubt about mass limits or load distribution, with clear instructions for rectifying overloads • Include in procedures specific rules for handling partial loads, backloads and mixed freight to maintain stability and adequate restraint in all directions • Train planners, supervisors, loaders and drivers in load stability concepts including friction, blocking, bracing and restraint angles • Require supervisory review or approval for non-standard loads, over-dimensional items and loads with elevated centres of gravity • Integrate load planning checks into pre-dispatch sign-off processes to verify compliance before vehicles leave site	2M
4. Load Restraint Systems, Standards and Technical Guidance	• Lack of a consistent company-wide standard for securing loads on flat bed trucks and trailers • Use of incorrect restraint methods for particular load types (e.g. relying solely on friction for slippery loads) • Failure to properly secure loose items, dunnage, tarps, boards, bars and tools before transport	4A	[redacted]	2M

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	• Inadequate guidance on the correct use and limitations of heavy duty ratchet straps, chains, boards, pogo sticks and load bars • No clear criteria for when higher level engineering controls (e.g. headboards, side gates, crates) must be used instead of, or in addition to, straps • Restraint system design not considering dynamic forces from braking, cornering and road conditions • Inconsistent practices between day shift, night shift and different depots leading to confusion and non-compliance		[redacted]	
5. Training, Competency and Verification of Loaders and Drivers	• Loaders and drivers not trained in understanding load distribution principles and restraint forces • Inadequate competency in selecting and using appropriate ratchet straps, chains, winches, boards and bars • Lack of formal verification or assessment of competen[illegible]truck loading, unloading a[illegible]general load restraint • Reliance on infor[illegible] learning without standardised trainin[illegible] materials or assessment tools • Training not addressing [illegible] risks such as fatigue, time pressure, communication breakdowns and CoR obligations • No refresher training or competency reassessment after incidents, near misses or equipment changes • Subcontractor drivers excluded from company training and competency programs	4A	[redacted]	2M
6. Supervision, Verification and Pre-Departure Checks	• Inadequate supervision of loading operations leading to inconsistent or unsafe load restraint practices	3H	[redacted]	2M

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	• No formal pre-departure verification that loads are adequately secured and within mass limits • Supervisors lacking clear authority or guidance to stop dispatch when restraint standards are not met • Over-reliance on driver self-checks without systematic oversight or secondary verification • Absence of documented checklists for load security, restraint equipment condition and load documentation • Failure to detect and correct improper use of ratchet straps, bars, boards and pogo sticks prior to departure		[redacted]	
7. Equipment Inspection, Maintenance and Replacement Systems	• No formal inspection program for ratchet straps, winches, chains, hooks, pogo boards, load bars and anchor points • Use of damaged, worn, contaminated or under-rated straps and restraint devices due to lack of tagging or tracking • Vehicle decks, headboards and tie rails deteriorating without detection, compromising restraint capacity • Inadequate systems for reporting, quarantining and replacing defective load restraint equipment • Storage practices that expose straps and bars to UV, chemicals, abrasion or crushing damage • Maintenance work on restraint equipment not performed by competent persons or without reference to manufacturers' specifications	3H	[redacted]	1L

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8. Traffic, Pedestrian and Loading Zone Management	• Poorly designed or unmanaged loading zones leading to interaction between trucks, forklifts and pedestrians • Inadequate segregation of loading/unloading areas for flat bed trucks from general traffic and public access • Lack of standard rules for positioning vehicles before loading, unloading and tightening load straps • Time pressure causing vehicles to move before load restraint is fully applied or checked • Insufficient lighting, signage and line marking in loading areas affecting visibility of straps, dunnage and workers • No system for controlling external drivers and visitors in loading and restraint zones	3H	[redacted]	2M
9. Fatigue, Workload and Time Pressure Management	• Scheduling practices that create unrealistic timeframes for loading, securing and transporting loads • Drivers and loaders working extended hours or irregular shifts leading to reduced attention to correct load[illegible] and restraint • Incentive schemes or pay structures that reward speed over compliance and safety • Insufficient staffing levels during peak periods causing rushed or incomplete securing of loads • Failure to integrate fatigue risk management into loading and transport planning systems • Under-reporting of fatigue-related concerns due to cultural or commercial pressure	3H	[redacted]	2M
10. Information, Documentation and	• Incomplete or inaccurate documentation regarding load type,	3H		1L

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Communication Systems	weight, centre-of-gravity and restraint requirements • Lack of clear communication between consignor, loader, scheduler and driver about special handling or restraint needs • Procedures and load restraint guidelines not readily accessible or not kept up to date • Reliance on verbal instructions leading to misunderstanding about securing loads for transporting • No formal handover process where multiple parties are involved in loading and securing the same vehicle • Language barriers or literacy issues affecting understanding of loading and restraint requirements		[redacted]	
11. Incident Reporting, Investigation and Corrective Actions	• Under-reporting of near misses, minor load shifts or restraint failures • Superficial incident investigations that focus on worker behaviour instead of system and management causes • Recurrent issues with inadequate securing of loads due to ineffective corrective actions • Lack of trend analysis across sites, vehicle types or contractors • Delayed or poorly communicated outcomes from investigations leading to repeated mistakes • Failure to involve competent persons with load restraint expertise in investigations	3H	[redacted]	1L

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12. Change Management for New Loads, Equipment and Processes	• Introduction of new load types, packaging or restraint devices without formal risk assessment • Modification of trucks, flat bed bodies or headboards without engineering review of load restraint implications • Implementation of new loading technologies or apps without verifying compatibility with existing WHS and CoR systems • Lack of transitional support when procedures or equipment for load restraint are updated • Failure to consult affected workers on practical implications of changes to loading and securing processes	3H	[redacted]	2M
13. Contractor, Third-Party and Site Interface Management	• Inconsistent load restraint standards between company sites and third-party depots or customers • Contractors loading or unloading trucks without following the host PCBU's procedures • Ambiguity over who is responsible for load planning, securing and verification when multiple parties handle the same vehicle • Limited oversight of external carriers' training, equipment condition and compliance with Australian load restraint requirements • Breakdowns in communication where loads are partially secured at one site and completed at another	3H	[redacted]	2M

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			[redacted]	
14. Emergency Response and En-Route Load Failure Management	• No clear procedure for drivers to follow if loads shift, straps fail or items fall during transport • Drivers attempting ad-hoc rectification of load issues on road shoulders or unsafe locations • Lack of appropriate emergency equipment for managing load failures or securing loose items mid-journey • Inadequate communication systems to summon assistance in remote or high-risk environments • Failure to notify regulators, emergency services or the PCBU in line with notifiable incident requirements	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

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