

**Heavy Vehicle Truck and Prime Mover Operations**

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:	

SAMPLE

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			<b>Elimination</b> Remove the hazard.	
LIKELY	2 MODERATE	3 HIGH	3 HIGH	4 ACUTE	4 ACUTE	4A ACUTE	DO NOT PROCEED	<b>Substitution</b> 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.	<b>Engineering</b> Isolate the hazard	
RARE	1 LOW	1 LOW	2 MODERATE	3 HIGH	3 HIGH	1L LOW	Monitor and keep records.	<b>Administrative</b> Change	
								<b>PPE</b>	

  

Risk Rating & Required Action:	
<b>4A</b>	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.
<b>3H</b>	Review and approve additional controls before task starts. Senior supervisor sign-off needed.
<b>2M</b>	Ensure all nominated controls are in place and effective. Proceed with caution; monitor conditions.
<b>1L</b>	Proceed, following standard operating procedures. Monitor and keep records.

  

Consequence Scale:			
Consequence	People (injury/illness)	Project / Assets	Compliance / Reputation
<b>Catastrophic</b>	Fatality or permanent total disability	project shutdown	Significant regulator intervention; criminal prosecution
<b>Major</b>	Serious injury/illness (hospital > 5 days)	critical delay	Improvement notice; major media coverage
<b>Moderate</b>	Medical-treatment injury; lost-time > 1 day	moderate delay	Minor breach; adverse client comment
<b>Minor</b>	First-aid only, no lost time	negligible delay	Isolated non-conformance
<b>Insignificant</b>	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 & Legal Compliance	<ul style="list-style-type: none"> <li>Lack of clear allocation of WHS duties for officers, PCBUs and workers under WHS Act 2011</li> <li>Inadequate WHS policy specific to heavy vehicle and prime mover operations</li> <li>Failure to identify and comply with Heavy Vehicle National Law (HVNL) and Chain of Responsibility (CoR) obligations</li> <li>Insufficient consultation with workers, HSRs and contractors on heavy vehicle risks</li> <li>Absence of a documented WHS management system covering fleet operations</li> <li>Poor integration of WHS, fatigue, HR, and logistics policies leading to conflicting priorities (e.g. safety vs delivery times)</li> <li>Ineffective incident, near miss and notifiable incident reporting and escalation processes</li> </ul>	4A	<ul style="list-style-type: none"> <li>Develop and implement an organisation-wide WHS management system aligned with AS/NZS ISO 45001, covering all heavy vehicle and prime mover activities</li> <li>Define and document WHS roles, responsibilities and accountabilities for officers, managers, schedulers, mechanics and drivers in position descriptions and procedures</li> <li>Undertake scheduled legal compliance reviews covering WHS Act 2011, WHS Regulations, HVNL, CoR, road rules and relevant Australian Standards</li> <li>Implement a documented governance framework (WHS committee, HSRs, toolbox meetings) to consult workers and contractors on fleet safety issues</li> <li>Establish a documented incident and near miss reporting procedure, including criteria for notifiable incidents and mandatory escalation timeframes</li> <li>Require regular WHS performance reporting to senior management and the Board, including key lead and lag indicators for heavy vehicle operations</li> <li>Conduct annual management reviews of the WHS management system and fleet risk controls, with documented action plans and monitoring</li> </ul>	3H
2. Vehicle Procurement, Design & Safety Specifications	<ul style="list-style-type: none"> <li>Procurement focused on payload without minimum safety specifications</li> <li>Purchase or lease of vehicles that are not fit for intended purpose or operating environment (e.g. off-road, remote, urban delivery)</li> <li>Inadequate protection from rollovers, collisions and load shifts</li> <li>Prime movers and trailers lacking integrated safety technologies (e.g. ABS, EBS, stability control, collision avoidance)</li> <li>Poor cab design leading to musculoskeletal strain during cabin entry and exit</li> </ul>	4A	<ul style="list-style-type: none"> <li>Develop a fleet procurement standard specifying minimum WHS and safety requirements for heavy vehicles and prime movers (e.g. ANCAP/Euro NCAP ratings where applicable, ROPS, FOPS, EBS, ESC)</li> <li>Ensure procurement specifications are informed by consultation with drivers, mechanics, HSRs and WHS personnel</li> <li>Include mandatory engineered access systems for cabin entry and exit (non-slip steps, grab rails, three points of contact layout, adequate lighting)</li> <li>Specify advanced driver assistance systems (ADAS) such as lane departure warning, autonomous emergency braking, reversing cameras, proximity sensors and blind spot monitoring for new vehicles where practicable</li> <li>Standardise prime mover and trailer combinations where possible and ensure compatibility of braking, suspension and coupling systems is verified before purchase</li> <li>Require suppliers to provide documented evidence of compliance with Australian Design Rules (ADRs) and relevant Australian Standards</li> <li>Include life-cycle cost assessment in procurement, factoring in safety features, maintenance, fuel efficiency and residual values rather than purchase price alone</li> </ul>	2M

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	<ul style="list-style-type: none"> <li>Insufficient visibility and camera systems for reversing trucks and complex manoeuvres</li> <li>Incompatibility between prime movers and trailers affecting braking and stability performance</li> </ul>			
3. Fleet Maintenance, Inspection & Defect Management Systems	<ul style="list-style-type: none"> <li>Inadequate preventative maintenance program for trucks, trailers and prime movers</li> <li>Failure of braking, steering, suspension or coupling systems due to missed inspections</li> <li>Defective parking brakes leading to unplanned vehicle movement during coupling, decoupling, loading and parking</li> <li>Inconsistent pre-start checks by drivers due to lack of system or supervision</li> <li>Poor defect reporting culture, delaying repair of critical safety issues</li> <li>Lack of documented maintenance records to demonstrate compliance with WHS and HVNL requirements</li> </ul>	4A	<ul style="list-style-type: none"> <li>Implement a scheduled preventative maintenance program for all heavy vehicles, prime movers and trailers based on manufacturer recommendations and operating conditions</li> <li>Deploy a formal pre-start inspection system (paper or digital app) for drivers to verify critical safety items including brakes, parking brakes, tyres, steering lights, mirrors and reversing cameras before use</li> <li>Establish a defect reporting and tagging procedure, including prohibition on operating vehicles with critical safety defects until repaired and cleared by competent personnel</li> <li>Maintain complete, secure and auditable maintenance records for each vehicle, including repairs, servicing, inspections and defect closure</li> <li>Engage competent and licensed heavy vehicle mechanics to carry out maintenance, with verification of qualifications and ongoing competency checks</li> <li>Conduct periodic internal audits and random roadside-style inspections focusing on braking systems, parking brake effectiveness and coupling integrity</li> <li>Define minimum standards for tyre selection, tread depth and replacement intervals suitable for load, speed and route conditions</li> </ul>	2M
4. Driver Competency, Licensing & Training Systems	<ul style="list-style-type: none"> <li>Drivers operating heavy vehicles without appropriate licences and endorsements</li> <li>Inadequate verification of experience in heavy vehicle and prime mover operations</li> <li>Lack of training on company-specific vehicles, telematics systems and safety devices</li> <li>Insufficient training on safe cabin entry and exit, including for high cabs and prime movers</li> <li>Poor awareness of risks associated with parking brake use, vehicle roll-away and truck reversing</li> <li>No structured induction for new or labour-hire drivers</li> </ul>	4A	<p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p>	2M

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	<ul style="list-style-type: none"> <li>Failure to monitor driver performance and driving behaviours over time</li> </ul>		[REDACTED]	
5. Fatigue Management & Hours of Work	<ul style="list-style-type: none"> <li>Excessive driving hours and non-compliance with work and rest requirements under HVNL</li> <li>Inadequate rostering systems leading to long shifts, night work or insufficient breaks</li> <li>Drivers starting shifts already fatigued due to secondary employment or personal factors</li> <li>Poor management of cumulative fatigue over weeks and months</li> <li>Lack of education on fatigue signs, microsleeps and impaired performance</li> <li>Pressure to continue driving despite fatigue to meet schedules or customer expectations</li> </ul>	4A	[REDACTED]	2M
6. Journey Management, Route Planning & Scheduling	<ul style="list-style-type: none"> <li>Inadequate journey planning for long-distance, remote or rural/urban routes</li> <li>Selection of unsafe routes (steep descents, low bridges, rural roads, poor surfaces)</li> <li>Schedules that do not allow for realistic travel times, breaks, congestion or loading delays</li> <li>Limited consideration of weather, bushfire, flood or road closure risks</li> <li>Poor coordination of prime mover movements within depots, yards, customer sites and loading areas</li> <li>Reversing trucks in congested or poorly controlled work areas</li> </ul>	4A	[REDACTED]	2M

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7. Site Traffic Management & Yard Control	<ul style="list-style-type: none"> <li>• Uncontrolled interaction between heavy vehicles, light vehicles, forklifts and pedestrians in depots and customer sites</li> <li>• Complex manoeuvring and reversing of trucks and prime movers in confined areas</li> <li>• Inadequate control of entry and exit points, speed limits and parking arrangements</li> <li>• Poor signage, line marking and lighting in yards and loading areas</li> <li>• Parking brakes not engaged during coupling/decoupling, loading or when unattended, leading to vehicle roll-away</li> <li>• Lack of documented rules for reversing, including the use of spotters and exclusion zones</li> </ul>	4A	[REDACTED]	2M
8. Safe Cabin Entry, Exit & Alighting from Prime Movers	<ul style="list-style-type: none"> <li>• Falls from height when entering or exiting truck or prime mover cabins</li> <li>• Slips on contaminated or worn steps and grab handles</li> <li>• Drivers jumping from trucks or trailers instead of using three points of contact</li> <li>• Poor cab and step design contributing to awkward body postures and musculoskeletal strain</li> <li>• Insufficient lighting around cab entry points, especially during night operations</li> <li>• Lack of training on safe entry and exit techniques</li> </ul>	3H	[REDACTED]	2M
9. Parking Brake, Securing Vehicles & Unattended Truck Controls	<ul style="list-style-type: none"> <li>• Failure to apply parking brakes when vehicles are parked, being loaded/unloaded or left unattended</li> <li>• Misuse or misunderstanding of parking brake systems on different vehicle types</li> </ul>	4A	[REDACTED]	2M

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	<ul style="list-style-type: none"> <li>• Reliance on transmission or gears alone without parking brake engagement</li> <li>• Inadequate procedures for parking on slopes or uneven ground</li> <li>• Lack of monitoring and enforcement of correct parking practices across the fleet</li> <li>• Vehicle roll-away leading to collision, crush or run-over incidents</li> </ul>		[REDACTED]	
10. Driving Commercial Vehicles & On-Road Behaviour Management	<ul style="list-style-type: none"> <li>• Speeding and inappropriate speed for road, weather or traffic conditions</li> <li>• Harsh braking, acceleration and cornering increasing risk of rollover and loss of control</li> <li>• Driver distraction (mobile phone use, in-cab devices, paperwork)</li> <li>• Non-compliance with road rules, load limits and safe following distances</li> <li>• Aggressive driving, tailgating and poor lane discipline</li> <li>• Inadequate monitoring of on-road performance by manager</li> </ul>	4A	[REDACTED]	2M
11. Reversing, Manoeuvring & Blind Spot Management	<ul style="list-style-type: none"> <li>• Limited visibility and extensive blind spots around heavy vehicles and prime movers</li> <li>• Reversing trucks into loading docks, tight yards or public roads without adequate controls</li> <li>• Pedestrians and light vehicles entering exclusion zones during reversing operations</li> </ul>	4A	[REDACTED]	2M

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	<ul style="list-style-type: none"> <li>Over-reliance on technology (cameras, sensors) without appropriate procedures</li> <li>Insufficient training on safe reversing practices and spotter use</li> </ul>		[REDACTED]	
12. Loading, Load Restraint & Vehicle Stability Systems	<ul style="list-style-type: none"> <li>Incorrect load distribution leading to vehicle instability, rollover risk or steering/braking issues</li> <li>Inadequate load restraint systems not meeting the Load Restraint Guide and legal requirements</li> <li>Unclear responsibilities between consignor, loader, driver and operator under Chain of Responsibility</li> <li>Overloading vehicles beyond legal or design weight limits</li> <li>Movement of loads during transport affecting centre of gravity and handling</li> <li>Lack of documented plans for recurring contracts and routes</li> </ul>	4A	[REDACTED]	2M
13. Remote & Isolated Work, Communications & Emergency Response	<ul style="list-style-type: none"> <li>Heavy vehicle operations in remote sparsely populated areas with limited mobile coverage</li> <li>Delayed emergency response following crashes, rollovers or medical events</li> <li>Lack of effective communication systems for drivers working alone or at night</li> <li>Inadequate emergency procedures for breakdowns, rollovers, fire or dangerous goods incidents</li> <li>Insufficient driver training in first aid, emergency communication and scene management</li> </ul>	3H	[REDACTED]	2M

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14. Contractor, Labour-Hire & Third-Party Management	<ul style="list-style-type: none"> <li>Contractors and subcontractors operating heavy vehicles without alignment to company WHS standards</li> <li>Insufficient verification of contractor qualifications, licences and insurances</li> <li>Poor communication of site rules, traffic management plans and reversing protocols to visiting drivers</li> <li>Inconsistent incident reporting and investigation for contractor-related events</li> <li>Commercial arrangements incentivising unsafe practices (e.g. unrealistic delivery times, payment per load)</li> </ul>	3H	<p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p>	2M
15. Health, Fitness for Duty & Drug and Alcohol Management	<ul style="list-style-type: none"> <li>Drivers operating heavy vehicles while medically unfit (cardiac issues, sleep apnoea, vision impairment, musculoskeletal conditions)</li> <li>Alcohol or other drug use impairing driving performance and judgement</li> <li>Lack of regular health assessments specific to heavy vehicle driving requirements</li> <li>Undeclared prescription medication affecting alertness or reaction time</li> <li>Stigma or fear of reprisal preventing workers from reporting health issues</li> </ul>	3H	<p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p>	2M
16. Monitoring, Audit, Continuous Improvement & Consultation	<ul style="list-style-type: none"> <li>Risk controls for heavy vehicle operations not regularly reviewed or updated</li> <li>Data from incidents, near misses, telematics and inspections not systematically analysed</li> <li>Worker concerns about cabin entry, reversing, parking brakes and driving conditions not effectively escalated</li> </ul>	3H	<p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p>	1L

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	<ul style="list-style-type: none"> <li>Audit findings not linked to corrective action plans or tracked to closure</li> <li>Complacency and normalisation of deviance over time</li> </ul>		<div style="background-color: black; height: 15px; width: 100%;"></div> <div style="background-color: black; height: 15px; width: 100%;"></div> <div style="background-color: black; height: 15px; width: 100%;"></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 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.