

Vehicle Loading Crane

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, Legal Compliance and PCBU Duties	<ul style="list-style-type: none"> Lack of clear allocation of WHS responsibilities for vehicle loading crane (VLC) operations, maintenance and supervision Failure to identify VLC operations as a high-risk activity under WHS Act 2011 and Regulations Absence of a documented WHS management system covering VLC plant and associated traffic / loading activities Poor consultation mechanisms with workers and health and safety representatives about VLC risks and controls Inadequate monitoring and review of VLC risk controls, incidents and near misses Failure to ensure contractors working with or around VLCs meet equivalent WHS standards 	High	<ul style="list-style-type: none"> Establish and document a WHS management system that explicitly includes vehicle loading cranes as high-risk plant, aligned with WHS Act 2011, WHS Regulation and relevant Codes of Practice and Australian Standards (e.g. AS 2550 series) Define and document roles, responsibilities and accountabilities for officers, managers, supervisors, VLC operators, doggers, and maintenance personnel, including due diligence duties for officers under WHS Act 2011 Implement a formal plant risk management procedure for VLCs, including commissioning, alteration, inspection, maintenance, decommissioning and disposal Develop and maintain a documented VLC risk register that covers system and management-level risks, reviewed at least annually or after significant changes or incidents Establish structured consultation arrangements (toolbox talks, safety committee, HSR engagement) specifically addressing VLC operations, traffic interfaces, and loading/unloading risks Set WHS performance indicators for VLC operations (e.g. pre-start completion, maintenance compliance, near-miss reporting, load restraint non-conformances) and review them at management meetings Develop and enforce contractor management procedures that require verification of contractor VLC competency, licences, maintenance records, insurances and WHS systems before engagement Ensure documented procedures require consideration of hierarchy of control for VLC risks and explicitly prohibit unsafe cost-driven shortcuts (e.g. operating without required exclusion zones or doggers) Schedule periodic internal audits of VLC compliance against WHS legislation, internal procedures, OEM requirements and applicable standards, with corrective actions tracked to completion 	Medium
2. Vehicle Loading Crane Procurement and Design Selection	<ul style="list-style-type: none"> Procurement decisions driven primarily by cost rather than safety features and suitability for the intended tasks and environments Selection of cranes or truck chassis that are not fit-for-purpose (e.g. inadequate capacity, reach, stability for typical loads and sites) Lack of consideration of load charts, stability, outrigger spread and ground bearing pressure requirements Procurement of VLCs without adequate safety systems (e.g. overload protection, emergency stop, rated capacity limiters, interlocks, load indicators, slew and height limiting devices) Incompatibility between the crane, truck body, load restraint systems and 	High	<ul style="list-style-type: none"> Implement a formal plant procurement policy requiring WHS and operational input into VLC selection, including review by a competent person (e.g. engineer or experienced crane specialist) Specify minimum safety and compliance requirements in procurement documentation, including compliance with WHS Regulation, relevant Australian Standards (e.g. AS 1418, AS 2550) and OEM installation requirements Require documented assessment of intended tasks, typical loads, load centres, site conditions, access constraints, operating environments (e.g. public roads, construction sites, depots) and interaction with other plant prior to VLC selection Mandate that all new VLCs include modern safety systems such as rated capacity limiters, load moment indicators, interlocks to prevent unsafe outrigger configurations, emergency stop devices, and where feasible, slew and height limiting systems Ensure that truck chassis, body design, sub-frame and tie-down points are engineered and certified to suit the VLC and typical loads, including stability calculations and centre-of-gravity considerations Require third-party verification or engineering certification for major modifications (e.g. addition of attachments, remounting of crane onto a different truck) prior to use 	Medium

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	<ul style="list-style-type: none"> typical load types leading to increased risk of rollover, dropped loads or shifting loads Introduction of second-hand or imported VLCs without adequate verification of design registration, compliance with Australian Standards and OEM documentation 		<ul style="list-style-type: none"> Include in procurement contracts the requirement for full OEM documentation, instruction manuals, load charts, maintenance schedules and training resources in English Prohibit purchase of VLCs that cannot be demonstrated to comply with Australian regulatory requirements and ensure design registration is obtained where required 	
3. Planning, Risk Management and Job Design	<ul style="list-style-type: none"> Absence of structured planning for VLC tasks leading to ad-hoc lifting and loading decisions on site Failure to identify high-risk aspects such as overhead powerlines, underground services, ground conditions and public interface prior to work Inadequate assessment of load characteristics (weight, shape, centre of gravity, containment, lift points) within organisational systems Poor integration between VLC operations and other site activities (e.g. forklifts, pedestrians, other cranes, traffic flows) Lack of management-level requirements for lift planning for complex, heavy, or on-route lifts Insufficient guidance for drivers and schedulers on where VLC loading/unloading is permitted or prohibited 	High	<ul style="list-style-type: none"> Establish a formal VLC planning and risk assessment procedure requiring pre-task risk assessment for all new tasks and sites, with higher-level planning for complex or critical lifts Develop standard planning tools (e.g. planning templates, site assessment checklists, route and site access assessments) that must be completed before commencing new VLC tasks Set clear criteria for when a documented lift plan and involvement of a competent person (e.g. lifting coordinator, engineer) required, such as near overhead services, heavy loads, complex rigging, or multi-crane lifts Integrate VLC planning into broader traffic management and site management plans, including designate loading/unloading zones and exclusion zones for pedestrians and other plant Implement a process for pre-job information exchange with clients or principal contractors to obtain site conditions, known hazards, and restrictions prior to sending VLC trucks Develop documented guidance for schedulers and drivers on suitable and unsuitable locations for roadside or on-site loading/unloading, including controls for public interface and traffic exposure Ensure planning procedures explicitly require verification of load weights and centres of gravity (e.g. from delivery dockets, engineering drawings, or previous lifts) before committing to a lift Require that any significant changes to planned lifts (e.g. different load, change of location, deteriorated ground) trigger a review of the planning documents and risk assessment 	Medium
4. Competency, Licensing and Training Systems	<ul style="list-style-type: none"> Appointment of VLC operators without formal competency assessment or verification of licences and tickets where required Reliance on informal, on-the-job training without structured program, assessment or records Inadequate training on specific crane models, load charts, emergency procedures and limitations of safety systems 	High	<p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p>	Medium

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	<ul style="list-style-type: none"> Lack of training for supervisors, dispatchers and planners on VLC capabilities and WHS obligations No refresher training or verification of ongoing competency, especially following incidents or near misses Failure to train workers in communication protocols, including use of standard hand signals, radios and documented lift authorisation processes 		[REDACTED]	
5. Procedures, Safe Systems of Work and Documentation	<ul style="list-style-type: none"> Lack of documented safe operating procedures (SOPs) or safe work method statements (SWMS) for VLC activities regarded as high-risk construction work Procedures that are overly generic, not specific to the organisation's equipment, loads, and work environment Out-of-date or inaccessible procedures leading to inconsistent practices between operators and sites Failure to incorporate OEM operating instructions and limitations into internal procedures Documentation overload resulting in workers not reading or following key requirements 	High	[REDACTED]	Medium
6. Maintenance, Inspection and Asset Management	<ul style="list-style-type: none"> Inadequate preventative maintenance leading to mechanical failure, hydraulic leaks, or malfunctioning safety devices 	High	[REDACTED]	Medium

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	<ul style="list-style-type: none"> Lack of systematic inspection regime for VLCs, including structural, mechanical and safety system checks Poor record-keeping of inspections, repairs and defects, limiting ability to identify recurring issues Use of VLCs with known but unrectified defects due to production pressure or poor defect escalation systems Uncontrolled modifications or attachment changes affecting rated capacity, stability or structural integrity Failure to comply with OEM or Australian Standard inspection intervals (e.g. major inspections) and load testing requirements 		[REDACTED]	
7. Load Restraint, Cargo Management and Vehicle Stability Systems	<ul style="list-style-type: none"> Systemic failure to plan for or evaluate load restraint methods and equipment for typical VLC loads Inconsistent or inadequate selection of chains, straps, anchor points and blocking methods across the fleet Lack of alignment between crane capabilities, truck body design and load restraint systems, increasing rollover or shifting load risk Insufficient organisational guidance for out-of-gauge, tall or unstable loads lifted and transported by VLC trucks Inadequate engineering assessment of high centre-of-gravity or offset loads that affect stability during lifting and transport 	High	[REDACTED]	Medium

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			[REDACTED]	
8. Traffic Management, Public Interface and Journey Management	<ul style="list-style-type: none"> • Systemic lack of integrated traffic management planning for VLC operations in yards, depots, customer sites and public areas • Inadequate segregation of VLC operating areas from pedestrians and other vehicles • Pressures from scheduling and delivery timeframes leading to unsafe roadside or kerbside lifting activities • Poor communication with clients or controllers regarding safe loading/unloading zones and traffic controls • Lack of journey management planning for remote or long distance VLC operations, increasing fatigue and distraction risk for controllers 	High	[REDACTED]	Medium
9. Contractor, Subcontractor and Client Management	<ul style="list-style-type: none"> • Use of VLC contractors or subcontractors without adequate verification of their WHS systems, licences and maintenance practices • Confusion over who controls the worksite and associated VLC risks when operating on client or principal contractor premises • Inconsistent standards between in-house and contractor VLC operations leading to gaps in controls • Poor coordination of VLC operations with other contractors using cranes, 	High	[REDACTED]	Medium

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	<ul style="list-style-type: none"> forklifts or mobile plant on shared worksites • Insufficient pre-start communication with clients regarding site hazards, access, traffic and load conditions 		[REDACTED]	
10. Emergency Preparedness, Incident Management and Recovery	<ul style="list-style-type: none"> • Insufficient planning for VLC-related emergencies such as crane collapse, rollover, entrapment, contact with overhead powerlines or dropped loads • Lack of clear organisational procedures for responding to VLC incidents both on-site and on public roads • Inadequate training and drills, resulting in confusion during emergencies and delayed response • Poor incident reporting culture leading to under-reporting of near misses, minor failures and defects • Failure to properly investigate incidents and implement system-level corrective actions 	High	[REDACTED]	Medium
11. Health, Fatigue, Psychosocial and Environmental Conditions	<ul style="list-style-type: none"> • Fatigue among operator-drivers due to combined driving, loading, customer interaction and paperwork demands • Exposure to heat, cold, rain, wind and noise without sufficient organisational controls, impacting concentration and decision-making • Psychosocial hazards such as time pressure, customer demands, lone work, and fear of reporting safety concerns 	Medium	[REDACTED]	Low

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	<ul style="list-style-type: none"> Inadequate systems to manage fitness for work, including the impacts of drugs, alcohol, medication and existing health conditions on VLC operation Failure to consider ergonomic and manual handling risks associated with rigging, setting up outriggers and handling load restraint equipment 		<p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p>	
12. Monitoring, Audit, Review and Continuous Improvement	<ul style="list-style-type: none"> Lack of systematic monitoring of VLC safety performance leading to unnoticed deterioration of controls Reliance on informal observations rather than structured inspections and audits Failure to learn from internal and external incidents, reports and industry guidance Data from pre-steps, maintenance incidents and training analysed to identify trends and systemic issues Infrequent management review of VLC-related WHS risks and control effectiveness 	Medium	<p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p>	Low

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/lit/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.