

Spotter Duties For Overhead Dangers

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 and Legal Compliance	<ul style="list-style-type: none"> • Failure of PCBU and officers to understand and discharge primary duties under WHS Act 2011 in relation to use of spotters for overhead dangers • Absence of a documented WHS risk management process specifically addressing spotter use near overhead powerlines and other overhead hazards • Inadequate integration of spotter requirements into the overall Safety Management System (SMS) and project WHS plans • Lack of clear accountability for approving work that requires a spotter and for verifying that appropriate controls are in place • Inadequate consultation with workers and Health and Safety Representatives (HSRs) about safe systems of work involving spotters 	High	<ul style="list-style-type: none"> • Develop and implement a documented WHS governance procedure that explicitly addresses work involving spotters for overhead hazards, aligned with WHS Act 2011 and relevant WHS Regulations and Codes of Practice (e.g. Managing Electrical Risks in the Workplace, Construction Work, Excavation, Mobile Plant) • Assign clear WHS responsibilities for senior management, supervisors, planners, and plant operators regarding when and how spotters must be used and imposed • Embed spotter-related controls into the organisation's SMS, project WHS plans, and contract WHS requirements so that spotter use is planned, not ad-hoc • Establish a formal approval process for high-risk work involving proximity to overhead services (including requirement for documented risk assessment and safe work procedures before work commences) • Ensure consultation mechanisms (toolbox talks, pre-starts, WHS committee meetings) routinely include review of spotter arrangements and feedback from workers • Schedule periodic management reviews and internal audits to verify compliance with enterprise procedures and WHS Act 2011 duties related to oversight of spotter activities 	Medium
2. Planning, Design and Job Set-Up	<ul style="list-style-type: none"> • Inadequate pre-planning of tasks in areas with overhead electrical lines, structures, or other overhead services leading to unassessed risks • Incomplete or inaccurate information about location and voltage of overhead powerlines and exclusion zones • Lack of formal requirement for early engagement with asset owners (e.g. electricity distributors) where overhead services are present • Poorly defined work zones that do not physically separate plant movements from overhead danger zones, increasing reliance on spotter alone • Failure to plan for alternative work methods that eliminate or minimise exposure to overhead hazards (e.g. de-energisation, relocation, or undergrounding of services) 	High	<ul style="list-style-type: none"> • Implement a formal planning procedure that mandates identification and documentation of all overhead hazards at the design and tender stages (including drawings, site inspections, and service locators) • Require a documented Overhead Services Risk Assessment for all works where plant, loads, or equipment could encroach on electrical approach distances or other overhead danger zones • Establish a mandatory process for contacting and consulting with relevant utility/asset owners to obtain accurate information and conditions of work near overhead lines • Incorporate hierarchy of control into planning so that elimination, substitution, or engineering controls (e.g. line relocation, isolation, physical barriers, height restrictors) are considered before reliance on a spotter as an administrative control • Define and document designated plant operating zones, no-go zones, and spotter observation points in site plans and traffic management plans • Require that Project Managers verify and sign off that spotter requirements, overhead hazard controls, and communication protocols are embedded in job set-up documentation before work starts 	Medium
3. Procurement and Selection of Plant,	<ul style="list-style-type: none"> • Procurement of plant that makes safe operation near overhead hazards 	High		Medium

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
Equipment and Technology	<p>difficult (e.g. excessive boom length without limiters, poor visibility from operator position)</p> <ul style="list-style-type: none"> Lack of integrated safety devices (e.g. height limiting systems, slew restrictors, proximity detection, load moment indicators) increasing reliance on spotter judgement alone Insufficient provision of dedicated communication equipment for spotter-operator interaction in noisy or visually obstructed environments Failure to select and maintain high-visibility PPE and signage that effectively distinguishes spotters from other workers Procurement of equipment from suppliers without verification that it meets relevant Australian Standards and manufacturer guidance for operation near electrical hazards 		<ul style="list-style-type: none"> Include requirements for overhead hazard management (e.g. height limiters, slew restrictors, cameras, audible alarms) in plant and equipment procurement specifications Adopt a procurement standard that prioritises plant with engineering controls that reduce the likelihood of encroaching on exclusion zones, thereby reducing dependence on spotter performance Specify and procure reliable communication systems (two-way radios, dedicated channels, noise-cancelling headsets) for exclusive use between spotter and operator where necessary Standardise procurement of high-visibility clothing, helmets, and identification (e.g. distinctive coloured vests or markings) that clearly identify authorised spotters on site Require suppliers to provide documentation confirming compliance with relevant Australian Standards and safe operating procedures, including limitations for work near overhead powerlines Implement a formal review process to ensure new plant introduced to the fleet is assessed for suitability and risk when working under or near overhead hazards 	
4. Competency, Training and Authorisation of Spotters and Operators	<ul style="list-style-type: none"> Spotters lacking adequate training in electrical hazards, exclusion zones, and organisational procedures for overhead risks Operators and supervisors not fully understanding the role, authority, and limitations of spotters No formal competency assessment or licensing requirements for spotters working near overhead powerlines or crane operations Inconsistent understanding of standard hand signals, radio protocols, and emergency stop commands Failure to provide refresher training, leading to skill fade, complacency, and normalisation of deviance 	High	<p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p>	Low
5. Role Definition, Supervision and	<ul style="list-style-type: none"> Ambiguous definition of spotter responsibilities leading to distraction with 	High		Medium

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
Communication Protocols	<p>other duties (e.g. labouring, traffic control) while spotting is required</p> <ul style="list-style-type: none"> Multiple spotters or informal assistants giving conflicting instructions to the operator Inadequate supervision of spotters and operators by site management, resulting in unsafe practices becoming accepted No formal escalation pathway when a spotter is concerned about unsafe conditions or pressured to continue work Failure to implement and enforce standardised communication protocols (e.g. call and response, closed-loop communication) between spotter and operator 		[REDACTED]	
6. Fatigue, Workload and Human Factors Management	<ul style="list-style-type: none"> Spotter fatigue and loss of concentration due to long periods of continuous high-vigilance work Cognitive overload where the spotter is expected to monitor multiple hazards, vehicles, or workers simultaneously Inappropriate rostering or shift patterns reducing alertness (e.g. night work, extended shifts, inadequate breaks) Exposure to environmental stressors (heat, cold, glare, noise) impairing the spotter's ability to detect hazards and communicate clearly Complacency arising from repetitive tasks without incident, leading to reduced vigilance and risk perception 	High	[REDACTED]	Medium
7. Documentation, Procedures and Work Instructions	<ul style="list-style-type: none"> Lack of clear, accessible written procedures describing safe systems of work for using a spotter near overhead dangers Procedures that do not reflect current site conditions, plant configurations, or 	Medium	[REDACTED]	Low

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
	<ul style="list-style-type: none"> regulatory requirements, leading to confusion or non-compliance • Overly complex or generic documentation that workers do not read, understand, or apply in practice • Failure to systematically use and maintain checklists and permits related to overhead hazards and spotter deployment • Inconsistent documentation between principal contractor and subcontractors, leading to gaps or conflicts in requirements 		[REDACTED]	
8. Site Layout, Traffic Management and Spotter Positioning Systems	<ul style="list-style-type: none"> • Poor site layout and traffic management planning creating blind spots and complex movements that increase reliance on spotter judgement • Inadequate systems to ensure spotters are positioned with clear line of sight to both overhead hazards and plant movements • Uncontrolled interaction between spotters, pedestrians, and vehicles leading to new risks (e.g. spotter struck by plant while monitoring overhead hazards) • Failure to use physical measures (e.g. barriers, bunting, clearance markers) that would simplify the spotter's task • No documented protocol for adjusting spotter position as work progresses, resulting in the spotter drifting into unsafe locations 	High	[REDACTED]	Medium
9. Communication Systems, Tools and Environmental Constraints	<ul style="list-style-type: none"> • Inadequate communication systems between spotter and operator in high-noise or low-visibility environments • Reliance on hand signals only where line of sight can be easily obstructed by plant, structures, or weather conditions 	High	[REDACTED]	Medium

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
	<ul style="list-style-type: none"> • Radio interference, cross-talk, or shared channels resulting in missed or misunderstood instructions • Lack of backup communication method if primary system fails (e.g. flat batteries, equipment damage) • No formal process for checking and testing communication devices before use 		[REDACTED]	
10. Contractor Management and Coordination of Multiple PCBUs	<ul style="list-style-type: none"> • Different PCBUs using inconsistent standards for spotter competency, communication, and overhead hazard controls on the same site • Assumptions between principal contractors and subcontractors about who is responsible for providing and managing spotters • Poor coordination of simultaneous operations (SIMOPS) where multiple cranes, EWPs, or vehicles share overhead risk areas • Inadequate induction of subcontractor spotters into site-specific procedures • Lack of clarity over who has authority to stop work when overhead risk becomes unacceptable 	High	[REDACTED]	Medium
11. Incident Reporting, Investigation and Continuous Improvement	<ul style="list-style-type: none"> • Under-reporting of near misses involving overhead clearances and spotter-assisted activities, leading to missed learning opportunities • Superficial investigations that focus on operator or spotter error rather than systemic root causes (planning, training, communication, design) • No centralised analysis of incident data to identify patterns in overhead hazard management failures 	Medium	[REDACTED]	Low

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
	<ul style="list-style-type: none"> Lack of feedback loop to update procedures, training, and engineering controls following incidents or regulatory changes 		[REDACTED]	
12. Emergency Preparedness and Response for Overhead Incidents	<ul style="list-style-type: none"> Absence of a specific emergency response plan for plant contact with overhead powerlines or other overhead structures while under spotter guidance Workers, including spotters and operators, unaware of safe response actions if electrical contact occurs (e.g. stay in cab, step-and-shuffle exit when instructed) No coordination with emergency services and asset owners regarding response protocols for electrical incidents Lack of drills or simulations to practise emergency response to overhead incidents, resulting in confusion and delay Emergency information and response equipment not readily available at the point of work 	High	[REDACTED]	Medium

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.