

**Vegetation Management Near Power Lines**

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			<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, Legal Compliance & Duty of Care	<ul style="list-style-type: none"> <li>Failure to identify and comply with WHS Act 2011, WHS Regulation and relevant electrical safety legislation for work near power lines</li> <li>Lack of clear WHS policy framework for vegetation management around electrical assets</li> <li>Unclear allocation of PCBUs, officers and workers' duties where multiple organisations (principal contractor, network operator, subcontractors) are involved</li> <li>Inadequate due diligence by officers in monitoring WHS performance and ensuring resources for safe work near live electrical installations</li> <li>No formal process to review changes in legislation, standards, Codes of Practice or network operator requirements</li> <li>Failure to define and document exclusion zones and 'no-go' areas in line with jurisdictional electrical safety rules</li> </ul>	4A	<ul style="list-style-type: none"> <li>Establish and maintain a WHS management system that explicitly references WHS Act 2011, WHS Regulation and applicable Electrical Safety Legislation and Codes of Practice for work near overhead and underground power lines</li> <li>Develop a corporate Vegetation Management or Power Lines Policy endorsed by officers, outlining commitment to elimination or minimisation of electrical and related risks so far as is reasonably practicable</li> <li>Define and document roles, responsibilities and accountabilities for PCBUs, officers, managers, supervisors, HSR and workers, including consultation arrangements with the electricity network operator</li> <li>Implement legal and standards register that is periodically reviewed to capture updates to WHS legislation, electrical safety rules, vegetation management standards (e.g. AS 4373 for tree work), and network operator requirements</li> <li>Require formal written agreements (contracts, service level agreements) that specify WHS expectations, including compliance with network operator access permits, isolation rules, and vegetation clearance standards</li> <li>Undertake periodic officer due diligence reviews (e.g. annual WHS governance audits) to confirm adequate resources, competence and WHS performance monitoring are in place for power line vegetation work</li> <li>Integrate exclusion zone and approach distance requirements into organisational procedures, training materials, mapping tools and job planning templates</li> </ul>	3H
2. Strategic Planning & Scope Definition for Vegetation Programs	<ul style="list-style-type: none"> <li>Poorly defined scope leading to work being undertaken in high voltage complex network areas without adequate controls</li> <li>Inadequate program-level risk assessment for seasonal conditions (e.g. bushfire season, storms, high winds) affecting vegetation and electrical risk</li> <li>Failure to prioritise high-risk locations (e.g. near schools, hospitals, major roads, high-voltage transmission lines) in maintenance cycles</li> <li>Insufficient coordination between asset owner, vegetation contractor and other PCBUs leading to overlapping works and conflicting controls</li> </ul>	4A	<ul style="list-style-type: none"> <li>Implement a structured program planning process that includes a documented WHS risk assessment for vegetation work near power lines at the program and project levels</li> <li>Define clear scope categories (e.g. low voltage distribution lines, high voltage distribution, sub-transmission, transmission corridors) with corresponding minimum competency, equipment and control requirements</li> <li>Use GIS and asset data from the network operator to identify and prioritise higher risk sites (e.g. high voltage spans, known clearance issues, historical incidents) within vegetation programs</li> <li>Incorporate seasonal and environmental considerations (fire danger, storm season, prevailing winds) into annual vegetation management plans and scheduling</li> <li>Establish program governance meetings between the network operator and contractors to review risk profile, upcoming high-risk works, and resource adequacy</li> <li>Include WHS performance, competence requirements and time allowances in tender evaluation and contract award criteria to prevent under-resourcing of safe work</li> <li>Require pre-mobilisation project WHS plans that address location-specific risks, including line voltages, access constraints, and adjacent public or traffic interfaces</li> </ul>	3H

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	<ul style="list-style-type: none"> <li>Inadequate budget or time allocation driving unsafe shortcuts or rushed work near live power lines</li> </ul>			
3. Electrical Hazard Identification, Mapping & Access Authority	<ul style="list-style-type: none"> <li>Incomplete or outdated information about line voltages, circuit configurations and earthing systems</li> <li>Failure to identify all overhead and underground electrical assets, including service lines, stays and low-visibility conductors</li> <li>No standardised process for obtaining and complying with network access permits, isolations, or switching schedules where required</li> <li>Inaccurate or absent plans showing exclusion zones and minimum approach distances for tree workers and equipment</li> <li>Assumption that lines are de-energised without written confirmation from the network operator</li> <li>Insufficient communication of electrical hazard information to crew prior to mobilisation</li> </ul>	4A	<ul style="list-style-type: none"> <li>Implement a formal pre-work electrical hazard identification process that uses up-to-date network operator plans, GIS layers and site verification for both overhead and underground assets</li> <li>Adopt a documented Access Authority and Permit-to-Work system aligned with the network operator's electrical safety rules, including requirements for isolation, earthing and confirmation of de-energised status</li> <li>Require written confirmation from the network operator before treating any power line as de-energised, and prohibit assumptions based on visual inspection alone</li> <li>Develop standard mapping and job pack templates that clearly display line routes, voltages, spans, stay wires, and underground cable markers and required exclusion zones</li> <li>Ensure pre-start briefings include review of job-specific electrical hazard maps, permits and minimum approach distances for all personnel and plant operators</li> <li>Conduct periodic audits of permits, hazard plans and compliance with electrical safety rules across representative jobs</li> <li>Maintain registers of authorised persons and electrical permit holders, with competency verification and re-authorisation schedules</li> </ul>	2M
4. Vegetation Risk Assessment, Clearance Standards & Arboricultural Practices	<ul style="list-style-type: none"> <li>Inconsistent assessment of tree species, growth rates, habits and characteristics near power lines</li> <li>Absence of standard clearance distances for different voltages and vegetation types, leading to inadequate or excessive trimming</li> <li>Use of unsuitable arboricultural techniques creating dropped limbs, regrowth issues and increased likelihood of future contact with conductors</li> <li>Lack of structured decision-making for prune versus remove, particularly for high-risk trees near critical electrical assets</li> <li>Failure to consider how wind, snow, storm events or tree failure could</li> </ul>	4A	<p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p>	2M

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	compromise power line clearances between maintenance cycles		[REDACTED]	
5. Competency, Licensing & Authorisation of Workers and Supervisors	<ul style="list-style-type: none"> <li>Workers performing vegetation work near power lines without adequate electrical awareness or line clearance training</li> <li>Supervisors lacking specific competence to assess electrical, arboricultural and plant interaction risks</li> <li>Expired or invalid licences, authorisations or refresher training for EWP operators, chainsaw users and line-clearance personnel</li> <li>Inadequate verification of subcontractor competence and currency of high risk work licences</li> <li>No system to confirm only authorised persons work within defined approach distances to live conductors</li> </ul>	4A	[REDACTED]	2M
6. Plant, Equipment & Tooling Management (Including EWPs, Chippers & Saws)	<ul style="list-style-type: none"> <li>Uncontrolled use of non-insulated unsuitable EWPs and plant near overhead conductors</li> <li>Inadequate inspection, maintenance and testing of insulated booms, insulated poles, line-clearance tools and electrical PPE</li> <li>Failure of mechanical systems (e.g. EWP, cranes, winches) causing contact with live lines or uncontrolled limb movement</li> <li>Use of incorrect or poorly maintained chainsaws, pole saws, rigging gear and chippers leading to kickback, dropped loads or projectile risks</li> </ul>	4A	[REDACTED]	2M

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	<ul style="list-style-type: none"> <li>Lack of systems to prevent plant encroaching into exclusion zones (e.g. slewing, boom articulation, crane jibs)</li> </ul>		[REDACTED]	
7. Work Planning, Job Hazard Analysis & Change Management	<ul style="list-style-type: none"> <li>Ad-hoc decision-making on site without structured assessment of site-specific risks (terrain, access, nearby structures, public interface)</li> <li>Failure to reassess risks when scope, weather or network operating conditions change during the job</li> <li>Inadequate consideration of limb size, direction of fall, potential for swing into conductors or induced contact</li> <li>No formal mechanism to pause or stop work when unexpected high risk conditions arise (e.g. unrecorded services, unplanned switching)</li> <li>Inconsistent documentation and communication of job plans across multiple crews and contractors</li> </ul>	4A	[REDACTED]	2M
8. Fatigue, Workload, Supervision & Competent Oversight	<ul style="list-style-type: none"> <li>Extended hours, high physical workload and repetitive trimming leading to fatigue-related errors near live conductors</li> <li>Insufficient ratio of competent supervisors to work crews conducting complex limb removal around power lines</li> <li>Pressure to meet productivity targets resulting in shortcutting of safety systems and planning steps</li> <li>Inadequate monitoring of new or less experienced workers when undertaking</li> </ul>	3H	[REDACTED]	2M

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	<p>high-risk trimming and dismantling near conductors</p> <ul style="list-style-type: none"> <li>Lack of structured handover between day and night crews or between contractors and network staff</li> </ul>		[REDACTED]	
9. Public Safety, Traffic Management & Third-Party Interface	<ul style="list-style-type: none"> <li>Uncontrolled public access to work zones beneath or adjacent to trimming operations near power lines</li> <li>Inadequate traffic management around roadside vegetation work, creating collision risks with plant or workers</li> <li>Falling limbs or debris entering public areas, roads, rail corridors or private property and striking persons or vehicles</li> <li>Poor coordination with other utilities contractors working in the same corridor (telecommunications, rail, road maintenance)</li> <li>Insufficient notification to affected property owners or community members about planned vegetation works and temporary power disruptions</li> </ul>	4A	[REDACTED]	2M
10. Environmental Conditions, Weather & Emergency Preparedness	<ul style="list-style-type: none"> <li>Adverse weather (high winds, lightning, heavy rain, extreme heat) increasing likelihood of limb failure, plant instability or contact with conductors</li> <li>Bushfire risk exacerbated by vegetation work activities (e.g. chainsaw sparks, fuel spills, chipper exhausts) near electrical assets</li> <li>Inadequate emergency response planning for electrical contact, electric shock, arc flash, entrapment in EWPs or falls from height</li> </ul>	4A	[REDACTED]	2M

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	<ul style="list-style-type: none"> <li>Failure to monitor and respond to rapidly changing environmental conditions during trimming near live lines</li> <li>Poorly planned work in remote or difficult-to-access locations leading to delayed emergency response</li> </ul>		[REDACTED]	
11. Contractor, Subcontractor & Supply Chain Management	<ul style="list-style-type: none"> <li>Engagement of contractors or subcontractors without adequate WHS systems for high-risk electrical vegetation work</li> <li>Inconsistent safety standards and procedures across multiple contracting entities working under the same program</li> <li>Commercial pressures in the supply chain resulting in under-resourced jobs and non-compliance with safe work requirements</li> <li>Lack of oversight of labour hire workers performing trimming near power lines under inadequate induction or supervision</li> <li>Poor communication between work operator and principal contractor requirements down the subcontracting chain</li> </ul>	3H	[REDACTED]	2M
12. Information, Instruction, Training & Consultation with Workers	<ul style="list-style-type: none"> <li>Workers not receiving clear, consistent information about electrical hazard exclusion zones and safe work practices for limb trimming near power lines</li> <li>Procedures and safe work guidelines being complex, inaccessible or not adapted to the literacy and language needs of the workforce</li> <li>Limited formal consultation with workers and Health and Safety Representatives (HSRs) regarding practical risks and effectiveness of controls</li> <li>Failure to learn from incidents, near misses and worker feedback, resulting in repeated systemic issues</li> </ul>	3H	[REDACTED]	1L

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			[REDACTED]	
13. Incident Reporting, Investigation & Continuous Improvement	<ul style="list-style-type: none"> <li>• Under-reporting of electrical near misses, contact incidents, dropped limbs and plant strikes</li> <li>• Superficial investigations that focus on worker behaviour rather than systemic causes (planning, training, equipment, supervision)</li> <li>• No structured process to track corrective actions and verify that improvements have been implemented and are effective</li> <li>• Failure to share lessons learned across different crews, regions and contracting organisations</li> <li>• Lack of trend analysis to identify recurring hazards or control weaknesses in vegetation management near power lines</li> </ul>	3H	[REDACTED]	1L
14. Documentation, Records, Auditing & Assurance	<ul style="list-style-type: none"> <li>• Inadequate documentation of risk assessments, permits, training inspections and maintenance for vegetation work near power lines</li> <li>• Loss or inaccessibility of critical records when needed for decision-making, auditing or incident investigation</li> <li>• Lack of systematic internal auditing to verify that WHS procedures and electrical safety requirements are implemented in the field</li> <li>• Inconsistent record-keeping across different contractors and regions, hampering oversight and continuous improvement</li> </ul>	3H	[REDACTED]	1L

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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.