

# Stay clear, stay safe

Cutting trees near powerlines can be deadly and dangerous.



When trees get too close to powerlines, the result can be costly power outages and fires. It is important to keep trees cut back a safe distance from the power lines.

This is work that should only be carried out by authorised vegetation management workers who, have been formally trained to work near low voltage and high voltage powerlines, and are being closely watched by formally trained safety observers. Where vegetation management workers are also qualified arborists, vegetation will be cut to maximise tree health and canopy cover while minimising regrowth towards the clearance zone limit.

## How close is too close?

In this industry, every near miss is a brush with death. Electricity is unforgiving. A life changing injury or fatality is only millimetres away. The danger zones and safe approach distances are laid out in the [Code of Practice for Personnel Electrical Safety for Vegetation Control Work Near Live Powerlines \(Code of Practice\)](#), as prescribed by the [Electricity Regulations 1947](#) – regulation 316A.

The first thing to understand is that the Code of Practice is not just a guideline or a book of suggestions. It is the law and it exists to keep workers and the public safe. The Electricity Regulations 1947 states that vegetation control work near live powerlines is to be carried out in accordance with the Code of Practice.

Any vegetation control work carried out in the defined danger zone must involve personnel who are properly trained and competent, and the work must be done in accordance with the Code of Practice.

## Danger zones

- 3 metres for overhead powerlines that are low voltage (LV) or high voltage (HV) up to 33,000 volts.
- 6 metres for overhead powerlines more than 33,000 volts.

Properly trained and authorised personnel working in the danger zone must also adhere to the safe approach distances listed in the Code of Practice. A safe approach distance is the 'no-go zone' of minimum separation distance between the powerline and personnel, elevated work platforms (EWP) or tools. These distances change depending on the voltage of the powerlines (HV can jump across air gaps), whether the mobile plant is insulated or uninsulated and whether the tools are insulated or uninsulated. There are different tables in Code of Practice that refer to work that is carried out from the ground, from inside a tree or from an EWP.

In most cases, vegetation work will be carried out near LV lines or HV lines under 33,000 volts, but be aware, there are some places where HV powerlines above 33,000 volts are adjacent to tree lined streets.

It is a requirement in the Code of Practice that vegetation management workers determine the voltage of the powerlines before starting work.

Safety observers and vegetation management workers who work near live powerlines are required to complete the Department of Energy, Mines, Industry Regulation and Safety [online assessment](#) to show that they are familiar with the Code of Practice.

There is a [guidebook](#) available to assist with understanding the Code of Practice.

## Insulation ratings

EWPs and tools can be insulated or uninsulated. Insulated tools and EWPs will only be rated for a maximum withstand voltage value. If the tool or EWP come near to or into contact with a voltage that exceeds their rating, it will become a conductor and allow current to flow through the equipment and worker.



## Personnel

There are four different types of vegetation control workers referred to in the Code of Practice.

### Ordinary person

A person with no knowledge or qualifications to work near live powerlines, who must not encroach the danger zone.

### Ground worker

Considered an ordinary person but must have a safety 'White Card' and complete any onsite inductions.

### Safety observer

Must have logged 150 hours as a ground worker, having worked with at least two LV vegetation management workers doing powerline vegetation control work, and be deemed competent by a registered training organisation in the units listed in 8.3.2 of the Code of Practice.

### LV vegetation management worker

Must be a competent safety observer and be deemed competent by a registered training organisation in the units listed in 8.3.3 in the Code of Practice.

### HV vegetation management worker

Must have logged 150 hours as an LV vegetation management worker and be deemed competent by a registered training organisation in the units listed in 8.3.4 in the Code of Practice.

## Message to arborists and vegetation management contractors

Service providers undertaking vegetation control work have an obligation to know and understand the requirements of the Electricity Regulations 1947 – regulation 316A, the mandated Code of Practice and all requirements of the *Work Health and Safety Act 2020* and associated regulations. Ensure that you are only using properly trained and competent personnel and the appropriate equipment. In addition, a qualified safety observer must be used for each LV or HV vegetation control operation.

## Message to local government

Local governments have a duty of care to ensure that all vegetation management service providers procured have properly trained and competent personnel and a safety management system that reflects the required work practices. Make it a condition of your tenders to have the bidding service providers offering vegetation management services provide evidence of compliance and safety before they are awarded a contract in accordance with the Code of Practice.

## Message to homeowners

If you receive a notice from your network operator that your trees need to be cut back from the powerlines, please use a vegetation management worker that specialises and is qualified to perform vegetation control work near powerlines.



# What does compliance look like?

Compliance check list	Complete
All personnel are authorised and have received all the required on the job and formal training, enabling them to undertake the required work. As per the Code of Practice.	
The service provider is able to demonstrate that each employee and sub-contractor is competent through an internal authorisation process with proof of authorisation to be made available upon request.	
All personnel have read the Code of Practice and completed the DEMIRS online assessment.	
A safety management system is in place with a zero-tolerance culture for unsafe work practices.	
The voltage of the powerlines is known. Find out if unsure.	
A worksite briefing will be carried out with all workers prior to each job, outlining the voltage of the powerlines, the required clearances and safe approach distances for personnel, tools and EWPs. All hazards are identified and risks are mitigated to an acceptable level.	
The insulated tools and EWPs are within valid testing periods and the insulation withstand voltage values are appropriate for the voltage of the powerlines. Uninsulated or low voltage tools and EWPs will not protect you from high voltage.	
Uninsulated tools and EWPs that could inadvertently extend into the safe approach "no-go zone" should not and will not be used.	
Work will not be carried out above the powerlines, unless in accordance with the Code of Practice.	
An emergency plan is in place.	
All personnel are prepared to stop work if conditions change, such as wind or traffic issues. Reassess as new hazards occur.	
Service providers and contract principals annually audit the compliance of vegetation management workers as described in 8.6 of the Code of Practice.	

**Disclaimer** – The information contained in this fact sheet is provided as general information and a guide only. It should not be relied upon as legal advice or as an accurate statement of the relevant legislation provisions. If you are uncertain as to your legal obligations, you should obtain independent legal advice.

## Building and Energy | Department of Energy, Mines, Industry Regulation and Safety

### (08) 6251 1900

8.30am – 4.30pm

Level 1 Mason Bird Building  
303 Sevenoaks Street (entrance Grose Avenue)  
Cannington Western Australia 6107  
M: **Locked Bag 100, East Perth WA 6892**  
W: [www.demirs.wa.gov.au/building-and-energy](http://www.demirs.wa.gov.au/building-and-energy)  
E: [be.energy@demirs.wa.gov.au](mailto:be.energy@demirs.wa.gov.au)

### Regional Offices

Goldfields/Esperance	(08) 9021 9494
Great Southern	(08) 9842 8366
Kimberley	(08) 9191 8400
Mid West	(08) 9920 9800
North West	(08) 9185 0900
South West	(08) 9722 2888

This publication is available on request in other formats.

National Relay Service: 13 36 77

Translating and Interpreting Service (TIS): 13 14 50