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30 January 2020

Mikaela Meggetto  
Coroner's Registrar  
Coroners Court of Victoria  
65 Kavanagh Street  
Southbank VIC 3006

*By email:*  
*cpuresponses@coronerscourt.vic.gov.au*

**COR Ref: 2017 005977**

Dear Ms Meggetto

**Finding without inquest into the death of Stephen Caruana**

I refer to Coroner Jamieson's recommendations regarding the above fatality and enclose the guidance developed by WorkSafe in response to these recommendations, which is now available on the WorkSafe website.

Yours sincerely

A handwritten signature in black ink, appearing to read "Alexis Hurwitz".

**Alexis Hurwitz**

Coronial Lawyer - Administrative Review, Advice and Coronial Support  
Enforcement Group  
Victorian WorkCover Authority  
Phone: 03 4243 7223  
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*Enc. Information about working safely with trees  
Basic safety checklists for the amenity tree and gardening services industry*

# Working safely with trees

Edition 1 – November 2019

Each year workers in the amenity tree industry are killed or seriously injured. It is important to control the risks when doing tree trimming, pruning or removal.

On this page

- Preparation and planning
- Working near overhead powerlines
- Working at height
- Working with chainsaws
- Falling objects
- Working with wood chippers
- Emergency procedures

## Preparation and planning

To ensure a working environment that is safe for your workers and contractors, it is important to provide safe systems of work, and to prepare and plan according to each job. To reduce the risks of injury, every tree must be inspected before work begins to determine the safest way to undertake the work.

If your inspection suggests methods such as mechanical access, e.g. truck mounted elevating work platforms (EWP) or cherry picker are not suitable, consider whether the work can be safely undertaken by climbing the tree.

- Ensure a skilled and experienced person carries out a visual assessment of the tree, considering hazards, condition, wind loading, structural integrity and location prior to commencing works.
- Ensure all workers have received information, instruction and training and are deemed by the employer to be able to safely undertake the work.

- Make sure workers are informed and trained in emergency procedures for each work site, as well as in the use of equipment working near overhead powerlines, work tasks and on-site communication.
- Induct all workers onto each job site, explain tasks, clearly allocate roles and discuss hazards.
- Ensure appropriate PPE are worn for the task such as helmets, boots, cut resistant trousers, eye and ear protection, and sun protection.

## Working near overhead powerlines

Serious incidents have occurred when workers have been trimming trees near powerlines. Incidents have resulted in:

- serious injury or death
- damage to overhead powerlines
- disruption to electricity supply

### Planning

- Before starting tree work near overhead powerlines, hazard identification must be carried out. A risk assessment should also be undertaken to ensure adequate control measures are in place to protect the health and safety of all workers.
- Check that foliage is far enough away from powerlines for safe work to commence.
- Always plan where the arc of the cut branch will fall, or cut branches into smaller sections to maintain clearance from powerlines.

# Working safely with trees

## Trees touching powerlines

- If a tree is touching overhead powerlines, don't touch any part of it even if you are earthed. The entire tree—including branches and leaves—may be energised.
- Talk to the local electricity supply authority and observe their recommendations before starting work near powerlines.
- Never assume a tree branch can safely rest on or against overhead electric lines—they can conduct electricity even in dry conditions.

## Training and No Go Zones

- Consult with the asset owners (electricity supply authority) to determine work requirements, permits, and guidelines for the site.
- Induct all workers onto each job site, explain tasks, and discuss hazards and controls.
- Ensure all workers know the [No Go Zone guidelines](#) and risks associated with working near powerlines (consider underground powerlines, if relevant).

[Using powered mobile plant near overhead assets - Guidebook](#)

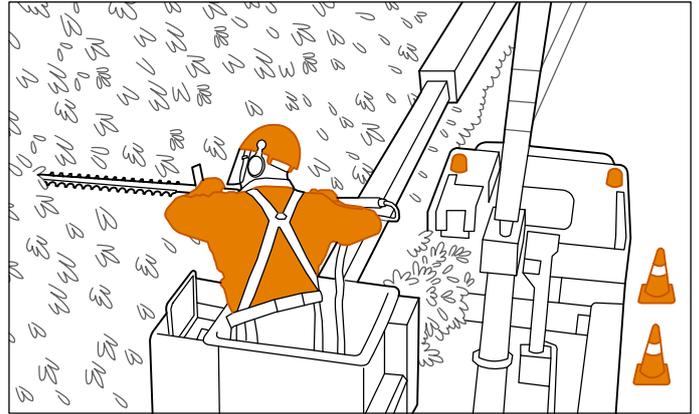
[Energy Safe Victoria – Rules for vegetation management work near overhead powerlines by non-electrical workers](#)

[Energy Safe Victoria – Don't put your life on the line brochure](#)

## Working at height

### Eliminate the need to climb the tree

- Always consider whether there is a safer method of doing the work without climbing, such as using a EWP.



### Training and supervision

- Ensure all climbers are physically fit, competent, and experienced in the work required. Climbers must not be under the influence of drugs or alcohol.
- If a trainee is doing the work, they should be supervised at all times.
- Have a secondary climber who is skilled in aerial rescue, in case the primary climber gets into difficulty and can't self-rescue.
- Ensure a designated person is on the ground to monitor climbers (e.g. the person controlling the lowering rope).

### Equipment

- Use equipment rated and/or assembled by rated agencies.

Ensure a second set of climbing gear has been checked and is available for rescue purposes.

# Working safely with trees



## Working with chainsaws

A tree climber was seriously injured when the pruning saw he was using kicked back. As the saw was being used singlehanded, it was not possible for the wrist chain brake or the inertial chain brake to activate.

- Always hold the chainsaw with both hands. If the chainsaw kicks back or the branch being cut moves unexpectedly you should have both hands on the chainsaw or risk being seriously injured or even killed.
- Use EWP's and pole saws as appropriate.
- Reposition the climber to remove the need to overreach and do not cut anything above shoulder height with a chainsaw.
- Stabilise your position before cutting.
- Have a second point of attachment (in case you accidentally sever the primary rope).

## Falling objects

Each year vegetation workers are killed or seriously injured when hit by falling objects.

Risks increase following severe weather or fire events when a tree's structural integrity can be compromised or fallen branches can be hung up.

A ground worker was struck by a falling tree branch when he entered the drop zone before the all clear was communicated. He sustained head and spinal injuries.

A worker was seriously injured when a branch being lowered from a tree swung out and hit him in the head and shoulder. The lowering rope had been incorrectly positioned causing the weight of the branch to swing out of control.

## Drop zone

- Assign a clearly designated drop zone for the lowering or dropping of branches or the tree.
- Check the drop zone to identify hazards. Logs and branches can bounce in unexpected directions for considerable distances.
- Ensure no one enters the drop zone until the climber and person lowering branches and logs indicates all clear.

## Communication

- Ensure there is a clear method of communication between the climber and the ground crew. This may include two-way devices, hand signals, whistles, or mobile telephones.

## Working with wood chippers

A worker was struck in the head by metal ejected from a wood chipper. The anvil bolts were loose, causing the knives to strike. Fragments of the blade, anvil and chipper fan were ejected from the wood chipper through the inspection hatch.

## Maintenance

Chippers should be regularly serviced and maintained according to the manufacturer's instructions. This includes:

- tensioning all bolts and nuts using a calibrated torque wrench
- checking tolerances between the knives and anvil
- maintaining disk/drum bearings.

# Working safely with trees

## Training and supervision

- Ensure all operators have received training and supervision before operating the chipper unsupervised.

## Chipper use

- Keep in mind that the disc or drum of a chipper can take several minutes to stop moving.
- Ensure controls are readily accessible so the chipper can be shut down instantly if a problem occurs.
- Ensure the chipper has a working emergency stop button.
- Always feed the chipper from left kerb side.
- Use a wooden push stick when feeding in smaller branches (never hands or feet).
- Provide appropriate PPE to operators.

## Emergency procedures

Lack of appropriate emergency procedures increases exposure to health and safety risks. For example:

When a climber is in a tree, there should be a second climber present who is skilled in aerial rescue. The second climber's gear must be readily accessible and include a first aid kit. It is not appropriate to rely on emergency services to conduct an aerial or high angle rescue.

## Check emergency preparedness

- Are first aid arrangements in place (trained first aider, first aid kit)?
- Is the aerial rescue procedure known and practiced?
- Are emergency communications and contacts available?
- Is the work location address known to all workers?

## More information

Guidance and checklists for the amenity tree and gardening services industry, Worksafe Victoria 2019.

Guide to managing risk of tree trimming and removal work, July 2016, Safe Work Australia.

Tree and vegetation management near overhead electric lines, July 2014, Safe Work Australia.

# Basic safety checklists for the amenity tree and gardening services industry

Work in the amenity tree and gardening services industry involves risks that need to be managed carefully. Severe or fatal injuries are not uncommon. Please use these checklists to inspect your workplace so that you can identify and manage risks. Anything that you have ticked 'No' should be fixed so far as is reasonably practicable.

These checklists provide a general outline of some hazards and risks to consider in this industry, but every workplace and worksite is different and may have additional hazards and risks. These checklists should therefore be used in conjunction with other guidance and technical advice.

General safety checklist for tree and gardening services	Yes	No	N/A
A visual tree assessment has been conducted to assess the condition of the tree and determine the appropriate equipment and safest method to remove.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A hazard identification and risk assessment of the site has been conducted to identify known/common* hazards and risks.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Appropriate control measures (such as tree felling exclusion areas) address any identified on-site risks.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Workers are provided with site specific information relating to management control, workplace amenities, hazards, potential risks, and the control measures that are in place.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
All workers have received information and instruction and understand their roles.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Workers are trained and/or licensed and competent to perform all the tasks required of them.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Workers are fit for work e.g. not fatigued or under the influence of drugs or alcohol.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Personal protective equipment (PPE) is used such as eye protection, hearing protection, safety helmets, safety boots, gloves, hi-vis clothing, cut resistant pants, etc. PPE should be suitable for specialised tasks such as machine operations or climbing.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Workers are provided with OHS information about reporting incidents, injuries, or near misses, as well the location of first aid kits and fire extinguishers.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Adequate sun protection measures/policies are in place, e.g. hats, sunscreen, long-sleeve shirts.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

# Basic safety checklists for the amenity tree and gardening services industry

<b>Systems of work checklist for tree and gardening services</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>
A safe system of work has been developed to limit the risks to the health and safety of workers undertaking tree felling activities.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Where there are exclusion or drop zones, they are identified and made clearly visible (with markers, flags, cones, etc.).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Clean, smoke-free areas clear of flammable vegetation are designated for tools and refueling.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A system is in place to ensure no unauthorised people or animals can enter the work area	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
For work conducted near live overhead power lines, a risk assessment has been carried out and control measures have been put in place.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Worksite communication methods, such as handheld radios, are agreed before the start of work.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Emergency procedures are in place, including aerial rescue procedures, and all workers understand site emergency procedures. The site is accessible to emergency vehicles.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

<b>Chainsaw safety checklist</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>
The operator has been briefed on the task and undertaken a visual inspection of the tree.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The operator is trained and competent to use a chainsaw.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The chosen chainsaw is appropriate for the job.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A chainsaw inspection has been undertaken and the pre-start check indicates that bar, chain, and sprockets are in good condition, bar oil is flowing, the chain brake is working, and the chain is sharp.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The operator agrees not to cut anything above shoulder height with the chainsaw.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The chainsaw is carried with the engine off, muffler away from the operator's body, and the saw blade pointing to the rear.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
After refueling, the chainsaw is moved away from the fuel source before starting the engine.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The chainsaw is operated with two hands, unless it is designed for one hand use.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
There is a second person within calling distance. Never operate a chainsaw alone.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

# Basic safety checklists for the amenity tree and gardening services industry

Wood chipper safety checklist	Yes	No	N/A
Two workers will be operating the chipper at all times.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The operators have been briefed on the task and understand their roles.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The operators are trained and competent to use a wood chipper.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A wood chipper inspection has been undertaken and the pre-start check indicates that: 1) emergency stops are working and correct for the size of machine; 2) chipper blades do not have cracks or chips; 3) securing bolts on the top hatch are the correct grade and torque; 4) a drop down table is fitted at the rear; 5) a bump bar is fitted and working, and; 6) engine, hot parts, and nip points are working.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The chipper is never left unattended while operating.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The chipper is fed off the centre line from the kerb side (where practical).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Operators do not wear loose clothing, jewellery, rings, or watches and are correctly fitted with PPE, including eye protection.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Material for chipping is checked for entanglements before it is fed into the chipper.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A wooden push stick is available to push in smaller branches to prevent reaching in to the infeed chute.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Stump grinder safety checklist	Yes	No	N/A
The stump grinder is adequately maintained and inspected in accordance with the manufacturer's instructions or the recommendations of a competent person.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A pre-start safety check is conducted to ensure guards, safety cut-offs, or e-stops are functioning correctly.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Debris is removed from the immediate area to ensure pedestrian and public safety around the work zone. Use shields and barriers if necessary.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The stump grinder is stopped, moved away from the work area, and the cutting wheel is not moving when excess debris is cleared away from the grinding area.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Operators do not wear loose clothing, jewellery, rings, or watches and are correctly fitted with PPE, including eye protection.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The location of underground services is identified and control measures put in place, if needed, prior to commencing work.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

# Basic safety checklists for the amenity tree and gardening services industry

Tree climbing safety checklist	Yes	No	N/A
The tree is inspected to determine suitability for climbing, extra precautions needed, or special techniques required.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The weather conditions are assessed to determine if it is safe to climb.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A minimum of two persons should be present; one climber and one ground person who is also able to climb (in the event of the first climber being injured and unable to descend the tree). Communication methods between the two workers are determined prior to any works.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
All climbing equipment is checked for safety and is in good condition prior to use and throughout the day.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ropes used for lowering branches have a contrasting colour to the vegetation to make them easily visible. Excess rope is secured in a rope bag or by a retractable system.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A figure eight knot or eye splice is tied to the end of the climbing rope to prevent the rope from accidentally running through the Prusik knot.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
All points of attachment are correctly set and visually inspected before placing weight on them (i.e. knots correctly tied, checked, carabiners closed and locked). A minimum of two points of attachment should be maintained when cutting a branch or limb.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Anchor points are healthy, sound, and suitably strong. They are positioned in such way that a slip or fall would swing the worker away from power lines or other potential hazards.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
No more than one climber is working in a tree (in most situations this is the safest method to perform the task).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

# Basic safety checklists for the amenity tree and gardening services industry

Elevating Work Platform (EWP) safety checklist for tree and gardening services*	Yes	No	N/A
The correct EWP is selected for the task. Consider height and reach, insulation requirements (if working near overhead power lines), ground conditions, weather conditions, location of overhead services and the type of work to be done.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A hazard identification and risk assessment specific to the EWP being operated is undertaken and control measures (i.e. safe systems of work) are put in place. Traffic hazards should be included.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The EWP is adequately maintained and inspected in accordance with the manufacturer's instructions or the recommendations of a competent person. Information about its operation and maintenance are readily accessible.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pre-start safety checks are conducted in accordance with the manufacturer's instructions prior to commencing work.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The EWP emergency lowering and bucket descent device are operational and both operators and safety observers know how they are activated.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Operators using a EWP at or over 11 metres hold a current and valid high risk work licence.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
EWP operators (and anyone in the basket) have a fall arrest harness with a shock absorber that is anchored correctly, in date, in good condition, and fits correctly.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
EWP operators comply with safety basics and manufacturer instructions such as lowering a boom for travelling and not driving the EWP with baskets elevated or over changes in ground level. The latter could cause the EWP to tip.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Overhead power lines have been identified and work within 'no go zones' is conducted in accordance with EnergySafe Victoria (ESV) guidelines, including requiring ESV training for certified spotters.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A trained safety observer is in place for works not requiring certified electrical spotters (whenever reasonably practicable).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

\*This checklist is to be used in conjunction with further comprehensive guidance on the safe operation and use of plant and EWPs on WorkSafe Victoria's web site.

# Basic safety checklists for the amenity tree and gardening services industry

In addition to these checklists, employers should reference the following WorkSafe Victoria guidance:

1. Working safely with trees – guidance update and addition (in progress)
2. [Plant compliance code and guidance](#)
3. Guidance on [elevating work platforms \(EWPs\)](#)
4. [Plant hazard checklist](#)
5. [No go zones for overhead electrical power lines](#)
6. [A guide to falls prevention](#)
7. [Workplace amenities and work environment compliance code](#)
8. [Sun protection](#)
9. [Hazardous substances compliance code and guidance](#)
10. [Hazardous manual handling compliance code and guidance](#)

This guidance has been developed using:

[Checklists for tree loppers and gardening services](#), WorkSafe WA.

[Guide to managing risks of tree trimming and removal work](#), Safe Work Australia.

[Tree work self-assessment checklist](#), Safework NSW.

*These Checklists are intended for general use only and may not be applicable in every circumstance. You should always check any applicable legislation and make your own judgement about what action you may need to take to ensure you have complied with the law. Accordingly, WorkSafe Victoria cannot be held responsible and extends no warranties as to the suitability of the information for any particular purpose; or actions taken by third parties as a result of information contained in the Checklists.*

*For information about WorkSafe in your own language, call TIS National on 13 14 50*