

This Guide includes information on the potential hazards of infield processing of forest products and practical examples of ways you can control the risks associated with them. It is part of a series of forestry industry material and should be read and used together with the *General guide for managing risks in forestry operations* and specific guidance material on:

- [growing and managing forests](#)
- [cable logging](#)
- [coupe and harvesting site access and preparation](#)
- [timber harvesting operations](#)
- [log landings](#)
- [log extraction](#)
- [loading, transporting and unloading logs](#)
- [plant and equipment for forestry operations](#), and
- [general hazards in forestry operations](#).

These guides are available on the Safe Work Australia website.



Processing site

The site for infield processing needs to be well-planned. The factors identified on landing design in the *Guide to managing risks of log landings* are also relevant.

There should also be space and amenities for:

- delivering and storing logs
- machine refuelling, repairs and servicing, and
- crew rest breaks.

The processing site should be separated from other workers as material can be thrown long distances, for example if machinery disintegrates, logs are fed through incorrectly or foreign matter hits the spinning blades. It is important to identify a potential line of throw if equipment or products were to break down and ensure this area is clearly identified using signs and kept clear of people.

The hazards from log handling and operating machinery during onsite processing are significant. Only trained, competent workers should carry out these activities.

Useful information about the hazards from onsite processing activities is available from the manufacturers and suppliers of the equipment. Section 25 of the WHS Act requires a person who supplies plant to provide information about the plant's intended purposes for use and conditions for its safe use to anyone they supply plant to.



Infield chipping

Infield chipping involves moving large volumes of logs to a dedicated location, removing branches and bark and processing the logs into chips. Careful planning is important to help ensure the site is big enough and products are removed from the processing site as it is generated to prevent the site becoming cluttered. Machine operators, truck drivers and site visitors should be able to communicate by radio or other effective means. Many issues associated with site design and the interactions with machinery are covered elsewhere in this Guide.

Table 1 Common hazards and risks associated with infield chipping

Hazards and risks
<ul style="list-style-type: none"> ■ mobile plant and static machines working in close proximity ■ slips, strains and falls getting in and out of machinery ■ being hit by: <ul style="list-style-type: none"> ■ material ejected from processing machinery ■ falling metal cowls and guards ■ plant ■ contact with rotating chipper disc or flails ■ falling from height, and ■ noise.

Table 2 Recommended control measures for infield chipping

Control measures
<ul style="list-style-type: none"> ■ maintaining a separation distance of at least two tree lengths from ground workers. A longer distance should be considered in front of a debris chute ■ operators should be trained in the working limits of the machine ■ establishing radio communication or other effective means of contact with other forest workers ■ using: <ul style="list-style-type: none"> ■ specifically designed work platforms for changing chipper blades, routine maintenance and repairs ■ suitable placed handrails and steps ■ suitable and correctly maintained personal protective equipment (PPE) for the work e.g. high visibility clothing, safety footwear, hearing protection, safety helmet when outside cabin and protective gloves when handling fuels or chipper blades ■ having interlocks on chipper hoods to ensure they cannot be opened while the chipper disc is running down ■ following tag out and isolation procedures when changing chipper blades and during maintenance and repairs, and ■ cowls and guards designed to control the risk of the cowl or guard falling while replacing chipper blades and doing maintenance.



Firewood, post or sleeper cutting and portable sawmilling

Firewood, post or sleeper cutting should be carried out using the risk management process as described in the *General guide for managing risks in forestry operations*.

When a tree is resting on its roots or is under tension the chainsaw operator should ensure a cut to the tree is made so neither the operator nor other workers or people are endangered by the stump or the log moving suddenly.

Cut firewood should be secured to the transporting vehicle according to the Load Restraint Guide.

Information on mechanised firewood splitters is in AS/NZS 2153-1997-1998 (Series): *Tractors and machinery for agriculture and forestry – Technical means for ensuring safety*.

Table 3 Specific hazards, risks and control measures associated with portable sawmilling

High risk activity or hazard	Reduced risk solution	Preferred solution
<ul style="list-style-type: none"> material from saw blade flying towards operator 	<ul style="list-style-type: none"> PPE e.g. eye protection 	<ul style="list-style-type: none"> operator does not stand in the cutting line of the saw
<ul style="list-style-type: none"> operator's fingers or limbs coming into contact with saw blade 	<ul style="list-style-type: none"> use a mechanical device to feed logs through saw bench 	<ul style="list-style-type: none"> saw blades guarded machine cannot be operated while hands are still in contact with the material being cut
<ul style="list-style-type: none"> moving and locating logs manually 	<ul style="list-style-type: none"> no interim solution 	<ul style="list-style-type: none"> logs moved and lifted by machine fitted with roll over protective structures (ROPS) and falling object protective structures (FOPS) canopy
<ul style="list-style-type: none"> manually lifting and stacking firewood, boards, posts or sleepers 	<ul style="list-style-type: none"> regular housekeeping to minimise effects of sap and reduce force 	<ul style="list-style-type: none"> mechanical aid to lift boards, posts or sleepers

Further information

Codes of practice, guidance material and other resources are on the [Safe Work Australia](http://www.swa.gov.au) website (www.swa.gov.au).