



South Australian Country Fire Service

Code of Practice

Mowing and Slashing



Government
of South Australia

APPROVED FOR PUBLIC COMMENT

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Title: COP Mowing and Slashing
Date: 19/01/2017

Status: DRAFT FOR COMMENT
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File:

Date: 23 May 2016
Version: 1.8

Foreword:

The practice of “mowing and slashing” is a very effective way to modify grassy fuels for fire protection and is a common practice to maintain manicured gardens. Mowing and slashing operations are not without risk, especially during the drier months of the year when grasses may be dry. SA fire services, on average, have responded to 25 fires each year for the past 5 years but the numbers of fires started are likely to be much higher as many fires are extinguished without any calls to emergency services for assistance.

This code has been developed to address the ambiguity of the undertaking of this activity during the fire danger season. This code only addresses the use of mowers and slashers and does not cover any harvesting operations as these activities are covered by other codes of practice.

The use of mowers and slashers during the declared Fire Danger Season, and on Total Fire Ban days (during the declared Fire Danger Season only), is regulated under the *Fire and Emergency services Act, 2005* under the following Section and Regulations:

As the activity of mowing or slashing is in itself not a prescribed activity, the *Fire and Emergency Services Act and Regulation 2005* only addresses the requirements for operating an internal combustion engine near flammable grass or undergrowth.

The *Fire and Emergency Services Act and Regulations 2005* does not draw any differences between mowing or slashing on a domestic block to a rural acreage nor does it draw any difference between the open country side and the Adelaide metropolitan area or rural townships. The legislated requirements remain the same. This means at present that most people that are mowing their lawns or undertaking slashing operations are non-compliant with the legislative requirements.

This code should be adhered to all year round to ensure the activity of mowing or slashing is conducted with the lowest possible risk of any fire from starting.

Consultation has occurred with Adelaide Lawn Mowers Association (ALMA) during the development of this Code of Practice (COP).

Code History

The first version of this Code was developed in 2017

1 General

1.1 Scope:

This code applies to all persons undertaking the activity known as mowing or slashing and it covers this activity for all vegetation types and classes. It does not apply to persons undertaking grain harvesting operations as grain harvesting is covered by a separate code of practice.

1.2 Terminology:

In this code standard terminology has been used to reduce any confusion.

Abbreviations:

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FES Act 2005 – Fire and Emergency Services Act 2005

1.3 Definitions

A portable water spray in good working order – Is a portable water spray device that is designed to be used for fire fighting operations and maintained to the appropriate Australian Standard. This may also include a Farm Fire Unit or suitable trailer mounted water tank, hose and pump.

At Hand – objects would be considered at hand if a person was to take less than 5 steps to reach the object. For a domestic block of less than 1000m² it would be considered that equipment was at hand if they were readily available and in sight during the operation. For a larger block it would be considered at hand if the equipment was attached to the cutting device.

Person who is able to control – A person who is not under the effect of any alcohol or drugs and of an age and physical ability that they can take reasonable steps to control the equipment or any fire that may result from the equipment being used.

Flammable materials – refers to all vegetation, bush or grasses that may be ignited by sparks and embers and includes undergrowth that is likely to become flammable. A green maintained lawn would not be considered to be “flammable” however dry materials on a lawn or adjacent to a lawn would be considered “flammable”. A large paddock or acreage would be considered “flammable” if it was 40% cured (assessed in accordance with the Country Fire Authority Grassland Fuel Curing Guide).

Portable water spray - means—

(a) a knapsack spray pump that—

(i) is fully charged; and

(ii) complies with Australian Standard 1687-1991: *Knapsack Spray Pumps for Fire Fighting*; or

(b) a water fire extinguisher that—

(i) is fully charged; and

(ii) has a tank capacity of at least 9 litres; and

(iii) complies with Australian Standard 1841.2-1997: *Portable Fire*

Extinguishers—Specific Requirements for Water Type Extinguishers; and

(iv) is maintained in accordance with Australian Standard 1851.1-1995: *Maintenance of Fire Protection Equipment—Portable Fire Extinguishers and Fire Blankets*.

Mowing – is the use of a small walk-behind or ride-on mower powered by an internal combustion engine to power blades for cutting grass.

Slasher – Is considered to be a cutting device attached to the front or rear of a machine or vehicle. This can be of any size.

1.4 References:

AS 1841.2-1997 – *Portable Fire Extinguishers – Specific requirements for Water Type Extinguishers*

AS 1851.1-1995 – *Maintenance of Fire Protection Equipment – Portable Fire Equipment – portable fire extinguishers and Fire Blankets*.

Fire and Emergency Service Act 2005

Fire and Emergency Services Regulations 2005

AS 3959 *Construction of Buildings in Bushfire Prone Areas*

Country Fire Authority Grassland Fuel Curing Guide 2014.

1.5 General legislative requirements:

Any person operating a mower or slasher that may come into contact with flammable material must comply with the legislation by having the following:

(A) *the land immediately around the place where the relevant activity is cleared of all flammable material to a distance of at least 4 metres; or*

(B) *a shovel or rake, and a portable water spray in good working order, are at hand; and*

(ii) the engine is fitted with an exhaust system that complies with this Division.

1.5.1 Days outside of the declared Fire Danger Season.

The *Fire and Emergency Services Act* allows for the practice of mowing or slashing without any restrictions outside of the declared Fire Danger Season.

1.5.2 Normal days during the Fire Danger Season:

Current legislation does not restrict the practice of mowing or slashing, however if the activity uses an internal combustion engine to drive any part of the machinery then there is a requirement to have a 4 metre break around the area being cut, or a portable water spray and a rake or shovel at hand while the internal combustion engine is being operated (if it will come into contact with flammable materials). The internal combustion engine must also have an exhaust system that is deemed to comply with the legislation. (this is under the assumption that there is someone present during the operation of the machinery)

As a general rule, while a domestic lawn is green or a pasture paddock is less than 40% cured then the requirements will not apply as the grass or pasture is not considered to be “flammable”. This does not mean that it will not burn but the likelihood of a fire starting from this activity is remote.

1.5.3 Total Fire Ban Days:

Total Fire Bans are declared on days of predicted Severe, Extreme and Catastrophic fire days (this equates to FDI’s at or above 50). The legislation does not differentiate between the use of slashers/mowers during the fire danger season or on a total fire ban day.

Where a Total Fire Ban is called outside of the declared Fire Danger Season, there is no restriction on the use of any mower/slasher or internal combustion engine.

While a person can use a mower or slasher on a Total Fire Ban day, during the declared Fire Danger Season provided they comply with the legislation by having a 4 metre cleared break of all flammable materials around the area being cut, or a portable water spray and a rake or shovel at hand, and the exhaust system is deemed to comply with legislation. On these days it is strongly recommended that the activity be postponed until a more suitable day.

2 Code of Practice:

2.1 Planning ahead

Mower and slasher fires are sadly often the result of efforts to reduce fire risk that are actually taken too late in a season, on grass that has already dried out or when cutting is undertaken during warm/hot and dry conditions, or a combination of these factors.

Landholders can reduce such risks by planning ahead each year to cut these areas when they are still green, before they significantly cure (dry out). This will also help the cut material to better decompose. It will keep areas greener for longer, and mean that any follow up mowing is less hazardous.

2.2 During the Fire Danger season

2.2.1 Choose cooler and damper times to mow and slash

The risk of igniting a fire from mowing and slashing can be significantly reduced by picking safer times for the activity. Avoid the hot and dry conditions for mowing and make the best use of the cooler damp mornings.

2.2.2 Check Equipment

- A portable water spray and a rake or shovel must be at hand at all times during the activity. This may mean that the mower or slasher is modified to carry these items.
- Check that fire fighting equipment is in full working order.
- Test all water spray equipment prior to every use
- Check the exhaust systems of the mower/slasher and of any firefighting equipment powered by an internal combustion engine
- Check all bearings on wheels and pulleys associated with the mower and slasher.
 - Check sealed bearings for signs of seal failure or excessive wear.
 - Ensure that greased type bearings are greased and wiped clean as necessary
- Ensure that the equipment is clean and free from built up flammable materials including trapped deposits of grass and oil.

2.2.3 Assess risks before start up

- Check the weather forecast prior to the activity to ensure a full understanding of the likely conditions on the day
- The area that is to be cut be inspected prior to cutting to ensure that all rocks and other solid objects are removed that could cause sparks if struck by the mower/slashed blades. In cases where there are significant numbers of rocks etc then the cutting height should be adjusted to prevent rock strikes.
- The cutting height of the blades should always be set to a reasonable height to reduce the risk of rock strikes etc.
- Consider whether there is an opportunity or need for an observer/assistant who can watch what happens behind the mower/slasher and can immediately help to extinguish any fire that starts.
- Make a final risk assessment, considering the weather conditions, equipment, condition of the vegetation and dry grass being cut and nearby vegetation and extent of rocks, stones and uneven ground. If there are any concerns remaining, particularly during hot and dry conditions, consider delaying the activity until there is a cooler, damper and safer window of opportunity.

2.2.4 During slashing and mowing

- Ensure that the operator has quick access to a phone or other method to alert the fire brigade in a timely manner.
- Cut the outer edges of the area to be cut first to create a reduced fuel area so that if a fire does start the reduced fuel around the edges will assist in minimising the fire spread.
- Prevent the build-up of flammable materials on and under the mower/slasher. Inspections should occur at regular intervals during mowing and slashing activities as appropriate.

2.2.5 After slashing and mowing

Fires often start underneath and on mowers and slashers after the activity is completed. This is because of trapped combustible material, smouldering materials and engine/exhaust heat. It is recommended that operators park equipment in safe open and clear area and thoroughly check the equipment and if possible, keep the equipment in line of sight for a minimum of 30 minutes.

After this time, wash down the machine (with a pressure hose if available) to remove any build-up of cut grass from all areas of the machine

3 Days Declared as Total Fire Ban Days

Total Fire Ban days are declared due to the increased risk of fire. These days may be declared outside of the official fire danger season. On these days it is strongly recommended that the activity be postponed until a more suitable day.

If the operation cannot be postponed then the operator should;

- Maintain awareness of the weather
- Make sure all aspects of the code are complied with,
- Cease this activity when the wind reaches or exceeds 19kph.

4 Review

This COP will be reviewed every 2 years from the implementation date.

5 Appendix

5.1 Appendix A – Legislation

Appendix A – Legislation

Section 89—Restriction on use of certain appliances etc

A person must not, during the fire danger season, operate an engine, vehicle or appliance of a prescribed kind in the open air, or use any flammable or explosive material of a prescribed kind, or carry out any prescribed activity, except in accordance with the relevant regulations.

Maximum penalty:

(a) for a first offence—\$5 000;

(b) for a second or subsequent offence—\$10 000.

Regulation 38—Internal combustion engines

(1) Pursuant to section 89 of the Act, an internal combustion engine is prescribed.

(2) A person must not, during the fire danger season, operate an internal combustion engine in connection with—

- (a) harvesting a flammable crop; or
- (b) moving a flammable crop on the land holding where it has been harvested; or
- (c) spreading lime or fertiliser, unless—
- (d) a shovel or rake, and a portable water spray in good working order, are at hand; and
- (e) the engine is fitted with an exhaust system that complies with this Division.

(3) A person must not, during the fire danger season, operate an internal combustion engine, other than in connection with an activity referred to in subregulation (2), in circumstances where the internal combustion engine comes into contact with, or is operated in the vicinity of, any flammable bush, grass, pasture or stubble, unless—

(a) in a case where a person is not present at all times while the internal combustion engine is in operation—

- (i) the land immediately around the place where the relevant activity is to be undertaken is cleared of all flammable material to a distance of at least 4 metres; and
- (ii) the engine is fitted with an exhaust system that complies with this Division; or

(b) in a case where a person is present at all times while the internal combustion engine is in operation—

(i) —

(A) the land immediately around the place where the relevant activity is cleared of all flammable material to a distance of at least 4 metres; or

(B) a shovel or rake, and a portable water spray in good working order, are at hand; and

(ii) the engine is fitted with an exhaust system that complies with this Division.

Exhaust system

(2) For the purposes of this Division, an engine or vehicle exhaust system complies with this Division if—

- (a) all engine exhaust emitted by the engine or vehicle exits through the system; And
- (b) the system, or a device or devices forming part of the system, is designed to prevent the escape of burning material from the system; and
- (c) the system, or a device or devices forming part of the system, is designed to prevent heated parts of the system from coming into contact with flammable material; and

(d) the system is in good working order.

(3) For the purposes of subregulation (2)(a), engine exhaust emitted by a turbocharged engine, or a vehicle fitted with a turbocharged engine, by means of a device of a kind commonly known as a waste gate will be taken to exit through the exhaust system of the engine or vehicle.