

FARM FIRE UNIT OPERATIONAL GUIDE



NSW RURAL FIRE SERVICE



CONTENTS	
PURPOSE OF THIS GUIDE	3
SHARED EXPECTATIONS	3
STAYING SAFE	4
Preparation	4
Protecting yourself	5
Being aware of hazards and assessing risk	6
Increasing your knowledge	6
RESPONSIBILITY AND COMMUNICATIONS	7
Working cooperatively	7
Occupiers of land	7
Making your presence known and logging on and off	8
Communicating on the fireground	8
Responsibility for your vehicle	9
ADVICE FOR NSW RFS MEMBERS	10
NSW RFS equipment on private land	10
COVER FOR INJURIES AND PROPERTY DAMAGE	11
Who is covered by the scheme?	11
What is covered by the scheme?	11
Injuries while fighting a fire	12
Vehicle and property damage while fighting a fire	12
What about other claims?	12
APPENDIX	13
1.1 IMSAFER	13
1.2 LACES	13
1.3 Emergency drills	14
1.4 Fireground communications	15

PURPOSE OF THIS GUIDE

The NSW RFS recognises and values that in many parts of the state our NSW RFS resources are supported by the use of private equipment, including Farm Fire Units (FFUs), to fight and contain fires.

Safety at fires is everyone's responsibility, and the NSW RFS is committed to working with property owners and community members to ensure we can manage fire together in a safe and coordinated way.

This document provides operational advice and guidance to FFU operators and NSW RFS members before, during and after fires in order to:

- promote the safe, efficient and cooperative involvement of private equipment to control fires
- give FFU operators the necessary information to help them make informed decisions
- establish a consistent approach to cooperation and communication between FFU operators and NSW RFS crews on the fireground.

For the purpose of this guide, Farm Fire Units are defined as vehicles and equipment or machinery (including tankers) owned or operated by landowners or community members that may be used to help contain, suppress or reduce the effects of a fire.

Read this guide and speak to your local rural fire brigade about any further questions or issues you have. This discussion will help develop cooperative working relationships and allow for the exchange of local knowledge and information between FFU operators and NSW RFS crews.

SHARED EXPECTATIONS

These shared expectations are a common-sense approach to how FFU operators and the NSW RFS can engage and operate safely within the existing command and control arrangements on the fireground.

FFU operators and NSW RFS members should:

- keep safety paramount
- always maintain communication
- be responsible and accountable for individual and team decisions and actions
- ensure the NSW RFS Officer in Charge is aware of your presence
- work within the established chain of command and not work on the fireground alone
- ensure taskings for FFU operators are coordinated
- consult and engage on local assets and items of value that matter most to farmers, where possible
- work collaboratively and share relevant information and local knowledge to ensure the chain of command is aware of local issues
- be aware of your surrounds and the hazards that may cause harm (e.g. falling trees)
- focus on tasking lower risk activities to FFU operators, given the absence of burn over protection
- wear appropriate Personal Protective Equipment (PPE), in accordance with Australian standards (see page 5 for more information)
- apply IMSAFER and LACES when preparing and operating on the fireground (see appendices 1.1 and 1.2 for more information)
- maintain equipment in a serviceable condition that complies with any relevant legislation, such as the *Road Transport Act 2013 (NSW)*.

STAYING SAFE

Safety at fires is the number one priority of the NSW RFS, and must also be yours. If you are preparing to fight fire or attend the fireground, you need to take responsibility for your own safety and the safety of any persons for whom you have responsibility under the WHS legislation. This responsibility doesn't just cover your activity while physically fighting a fire, but extends well before it to your preparation and planning.

Preparation

The decision to engage in firefighting should be carefully considered and planned well before an actual outbreak of fire. It is essential that FFU operators are adequately prepared by:

- having the appropriate skills and knowledge
- being mentally and physically prepared
- understanding the risks involved
- accepting responsibility for decisions and actions
- having suitable PPE
- liaising with their local NSW RFS brigade

You can use the **IMSAFER** checklist (see [appendix 1.1](#) for more information) to consider if you are physically prepared to fight a fire.

You will also need to prepare your equipment and vehicle/s to make sure they will operate as intended. The best time to do this is prior to the bush fire danger period beginning in your area. Equipment preparation includes:

- compliance with any relevant legislation, including not driving unregistered vehicles on public roads
- ensuring your vehicle is not overloaded
- ensuring load and fittings are properly secured
- ensuring your vehicle and equipment is mechanically sound and reliable
- ensuring your vehicle has precautions in case of fire overrun
- equipping your vehicle with UHF communications, a portable handheld UHF radio and amber beacon

It is also the duty of an owner or occupier of land to prepare their property for fire. There are many practical steps you can take to prevent the occurrence of bush fires and minimise the spread and associated dangers of bush fires on your land.

To find out about the bush fire risks in your area and the prescribed strategies for dealing with them, you should read your local Bush Fire Risk Management Plan.

You can find a copy of the plan at www.rfs.nsw.gov.au/plan-and-prepare/managing-bush-fire-risk/bush-fire-management-committees or by contacting your local Fire Control Centre.

You can also download the NSW RFS Farm Fire Plan at www.rfs.nsw.gov.au/plan-and-prepare/farm-fire-safety to help manage fire risks on your land.



Protecting yourself

On the fireground, it is imperative that FFU operators, just like NSW RFS crews, are suitably equipped and dressed for fires.

The design and fabric of the clothing you wear is particularly important because unsuitable or ill-fitting clothing can create heat stress, which can cause impaired performance, illness, collapse or even death. It can also restrict performance by adding weight and limiting movement. Protective clothing should cover the main part of the body, while allowing a reasonably good airflow to aid cooling.

The NSW RFS recommends your PPE comply with the AS/NZS 4824:2006 standard (available on the Standards Australia website) for protective clothing worn during bush fires. At a minimum, those working in FFUs need to wear:

- cotton or natural fibre overalls with long sleeves, or a cotton or natural fibre work shirt with long sleeves and trouser ensemble
- sturdy leather boots
- work gloves
- industrial-type helmet with chin strap
- industrial-type goggles
- P2 face masks as a minimum level of respiratory protection and hearing protection (ear muffs or ear plugs) for some tasks
- high-visibility vest or preferably bright-coloured natural fibre clothing.



Being aware of hazards and assessing risk

In some cases, FFU operators will arrive at a fire prior to the NSW RFS. Early intervention may bring fires under control before the arrival of the NSW RFS or other agencies. In this situation, and at all times on the fireground, FFU operators need to be aware of hazards, assess the risks and act responsibly.

You should exercise your knowledge and life experience on the land, and your common sense, to identify hazards and assess risk. You should also share this local knowledge with NSW RFS crews, who may not necessarily be from your local area.

Hazards you may encounter while operating on the fireground can be obvious things such as smoke, high levels of radiant heat, erratic fire behaviour and poor visibility. Other hazards to watch out for may include:

- heat related illness (e.g. dehydration, heat stress and heat stroke)
- danger from falling objects (especially trees and tree limbs), sharp objects and hot surfaces
- high noise levels for prolonged periods of time
- mines and mine shafts
- live power lines being down
- operating equipment in rough terrain or dense vegetation
- close proximity to firefighting vehicles, heavy machinery and emergency vehicle traffic
- asbestos
- aerial operations.

Your knowledge and experience should help you answer the question: “What is the likelihood of this hazard causing me or others harm?”

You should withdraw if there is risk of harm to you or others.

You can use the LACES checklist ([see appendix 1.2](#)) to remind yourself of the essential safety actions you need to take on the fireground.

Increasing your knowledge

No matter how long you have been using fire as a land management practice or actively firefighting, there are a number of specific fire hazards you need to recognise to operate safely on the fireground. Some of these hazards are listed above, but this guide should not be considered comprehensive.

To supplement this guide, the NSW RFS offers an online fire awareness course that can be accessed via the Fuel training portal: www.fuel.rfs.nsw.gov.au. We strongly encourage FFU operators to familiarise themselves with the online content available via the Fuel portal.

It is important when operating on any fireground that you know what to do in the event you get caught by a fire front and need to take shelter. In [appendix 1.3](#) of this guide you can find practical tips for bush fire survival on foot or in a vehicle. These tips can help save lives in an emergency.



RESPONSIBILITY AND COMMUNICATIONS

The central theme of this guide is one of mutual respect and cooperation between FFU operators and the NSW RFS – everyone at the fire has a shared responsibility for the safety of each other. Just like NSW RFS members, FFU operators accept responsibility for their actions when they engage in firefighting. This means working with the NSW RFS and other firefighting agencies, rather than acting in isolation.

Working cooperatively

Successful firefighting heavily depends on everyone working cooperatively. As the fire grows in size and complexity, so too does the number of personnel attending and the range of equipment needed. While formal organisational structures and resources are put in place to manage the incident and emergency services, cooperation between agencies and FFU operators is still essential.

To oversee and manage incidents, the NSW RFS forms Incident Management Teams (IMTs) and appoints Incident Controllers. Depending on the type, size and complexity of the incident, the Incident Controller may be the local Brigade Officer, local Group Officer or District Manager.

For larger campaign fires, specialist trained officers of the Service may be appointed to oversee and manage the fire and associated operations. **Rural Liaison Officers (RLOs)** are there to listen to knowledge and input from local landholders and brigade officers in the decision-making process. These arrangements are intended to ensure a coordinated approach to the management of all resources across firegrounds.

As such, it is important that any actions you undertake on the fireground are in keeping with the action plan and firefighting strategies and tactics developed by the Incident Controller and IMT. Activity on the fireground can be dangerous and it is important everyone is aware of the overall fire containment strategy and each other's movements. NSW RFS Officers need to ensure FFU operators are made aware of activities such as the use of aircraft or the implementation of backburns.

The NSW RFS expects attending brigade officers will, where possible, keep FFU operators informed on operational and safety issues so that you can make decisions about your actions. If a NSW RFS Officer asks you to conduct particular tasks, they will give you a briefing about the incident situation and the tasks involved.

If you are unsure on any point, seek clarification by asking questions of the attending NSW RFS Officers.

Occupiers of land

Occupiers of land have obligations under the *Rural Fires Act 1997* in relation to fires burning on the land they occupy during a Bush Fire Danger Period.

Immediately on becoming aware of a fire, the occupier must:

- take all possible steps to extinguish the fire
- AND, if the fire cannot be extinguished without assistance, ensure that the fire is reported immediately to Triple Zero (if any practicable means of communication are available).

Compliance with this obligation is critical to the timely response to bush fires before they escalate. It is critical that Triple Zero is called immediately if there is any doubt as to whether the fire can be extinguished without assistance.



Making your presence known and logging on and off

On the fireground it is essential for FFU operators and the NSW RFS to start communicating with each other as soon as possible. If you arrive on scene before the fire brigade, team up with others and work within your capabilities. When the NSW RFS arrives, make yourself known so that you can operate in a coordinated and safe manner. Acting without coordination can be dangerous and is therefore discouraged.

To log your attendance at an incident on and off, use the UHF radio or the local arrangements for the fire or the sector in which you are operating. Logging on to an incident is important and will allow for:

- operational coordination and safety
- access to local knowledge and the opportunity for you to inform the NSW RFS of any local or known property hazards
- inclusion in welfare arrangements such as catering
- easier arrangements for any first aid/medical reporting and treatments
- coverage for personal injury protection under any applicable Workers Compensation scheme (see page 9).

For safety reasons it is essential for FFU operators to log off before leaving an incident, so that NSW RFS field commanders can account for personnel on the fireground in the event of special safety hazard warnings or adverse weather events.

Please check the local arrangements in your area for logging on and off a fireground, as they may utilise a variety of methods such as UHF, paging, SMS or phone calls.

Please note that the processes for logging on and off are separate from the obligation of the occupier of land on which there is a fire to call Triple Zero.

Communicating on the fireground

It is common for rural fire brigades to have agreed local UHF channels to assist in the alert and response to incidents. We encourage FFU operators to become acquainted with your local brigade and any local UHF fire channel.

It is important to keep in mind that, during larger scale fires, the NSW RFS may send units to assist from all across NSW. It is unlikely that all attending NSW RFS units will know local UHF fire channels. Where possible, the NSW RFS will try to ensure attending units are made aware of local UHF fire channels.

Additional UHF channels may be allocated and used by the NSW RFS Divisional or Sector Commanders as the fire becomes larger and more complex. If the fire develops in size, it is not practicable for all units to be operating on a single UHF channel as this will lead to channel congestion and confusion. The diagram in appendix 1.4 shows how more than one UHF channel may be used to communicate with FFU operators across a fireground.



Responsibility for your vehicle

Just like firefighters from the NSW RFS or other emergency services, FFU operators need to comply with the legal obligations and WHS legislation when engaged in firefighting. This includes laws concerning vehicle safety and traffic regulations.

The following requirements must be observed when preparing your vehicle to ensure its suitability for firefighting activities:

- Avoid overloading vehicles. An overloaded vehicle will be less stable, harder to steer and has reduced braking capacity.
- The load, including tank, pump and fittings, is to be properly secured and stable. Objects falling from the vehicle can be lethal.
- You need to ensure your vehicle is roadworthy and meets requirements if operating on public roads.
- The vehicle and pump must be in sound mechanical condition, be regularly serviced and easily started. Ideally, equipment maintenance is undertaken before the fire season.

In addition, it is recommended that you observe the following requirements:

- Equip the vehicle with a first aid kit and a woollen blanket for each operator to use for personal protection at fires. Also consider installing burn over protection such as tanker protection sprays.
- Equip the vehicle with an amber rotating beacon. At fires you have a responsibility to “see and be seen”. Turn on the amber rotating beacons, along with the vehicle’s headlights, to make your vehicle more visible, particularly in smoky environments.
- Trucks used for grass firefighting should have hand railings and heat shields when personnel operate from the tray while the vehicle is moving. These features minimise the risk of radiant heat exposure and the risk of personnel being thrown from the vehicle.
- Consider the layout of the tray – you want to minimise obstacles between the operator and driver for communications.



ADVICE FOR NSW RFS MEMBERS

There are several actions that should be taken by NSW RFS members and brigades with a view to ensuring a safe, efficient and cooperative relationship with FFU operators. This relationship isn't limited to actions on the fireground – it extends to actions taken before and after the fire.

NSW RFS members and brigades should:

- Engage with FFU operators in your area prior to a fire to gain a better understanding of their equipment, preparedness and capability to fight fires.
- Make FFU operators aware of the requirements to log on and off the fireground and make sure you record their attendance at incidents.
- Communicate with FFU operators and keep them informed on:
 - operational and safety issues; and
 - the steps they need to take to be covered for personal injury and/or property damage incurred while fighting a fire (see next page).
- Seek input and listen to knowledge from FFU operators and local landholders.
- Make use of FFUs on the fireground in a safe and effective manner. Focus on tasking lower risk activities to FFU operators, given that they are unlikely to have burn over protection.

- Take steps to ensure FFU operators on the fireground are aware of the NSW RFS command and control structure and who they need to be communicating with.
- When tasking FFUs to perform specific roles or actions on the fireground, brief them about the incident situation and the tasks involved.

NSW RFS equipment on private land

It is common in some parts of NSW, especially in remote areas, for NSW RFS equipment (such as slip-ons) to be positioned on private property for ease of access in a fire emergency.

For the purpose of this section, NSW RFS equipment is that which has been purchased through a NSW RFS brigade or via the Rural Fire Fighting Fund.

Where NSW RFS equipment is positioned on private property, it must be inspected at least annually by NSW RFS members and its location assessed given current fire risks in the area. This must be reported to the District Manager to meet the requirements under Section 38 of the *Rural Fires Act 1997*.

This will help to ensure NSW RFS equipment is strategically placed to help firefighting efforts and protect areas most at risk of fire.



COVER FOR INJURIES AND PROPERTY DAMAGE

When an FFU operator engages in firefighting as a private individual they accept responsibility for their own decisions, actions and safety. FFU operators are also responsible for the safety of people working for them in accordance with WHS laws.

In certain circumstances, FFU operators may, however, be entitled to cover under the *Workers Compensation (Bush Fire, Emergency and Rescue Services) Act 1987*.

This is an important piece of legislation that extends parts of the workers compensation scheme to people who suffer a personal injury and/or damage to personal property (including private motor vehicles) in the course of voluntarily fighting a bush fire.

Who is covered by the scheme?

The scheme covers:

- NSW RFS members; and
- non-members (including FFU operators) engaged in fighting a bush fire with the consent of, or under the authority and supervision of, a NSW RFS officer.

What does it mean to fight a fire with the consent of, or under the authority and supervision of, a NSW RFS officer?

It depends on the circumstances, but it requires more than just logging on.

There must be active engagement with a NSW RFS officer and, in most cases, the FFU operator will need to work within the NSW RFS command and control structure to be covered by the scheme.

This requirement exists in respect of each incident. NSW RFS cannot provide a standing consent to a FFU operator.

At a minimum, you should do the following to maximise the prospects of being covered:

- liaise with the local NSW RFS officer in charge as soon as possible in relation to the work you will be undertaking and obtain their consent to conduct that work
- act reasonably and follow directions and guidance given by NSW RFS on the scene or over the phone or radio, as well as following this guide and any training you may have received
- comply with any legal requirements – including not driving an unregistered vehicle on a public road

For non-members (including FFU operators), the scheme only applies when you are engaged in fighting a fire without remuneration or reward, voluntarily and without obligation. This means that cover generally won't be available when fighting a fire on land you own or occupy, or in the course of your employment.

Note: The scheme recognises that there may be circumstances in which injuries or damage are suffered before it is possible or practical to liaise with NSW RFS in the way described above. For this reason, cover may, in certain circumstances, be extended to cover non-members where, having regard to all of the circumstances, the scheme administrator determines coverage to be appropriate. This is, however, purely discretionary and cannot be relied upon – every effort should be made to liaise with NSW RFS to maximise the prospect of cover.

What is covered by the scheme?

Importantly, the legislative scheme only covers injuries and property damage suffered by people fighting fires and not any damage they may cause to others. See the separate section below in relation to other claims.

Cover is limited to firefighting scenarios. It does not extend to bush fire prevention work (including hazard reduction burning) conducted by FFU operators.

Injuries while fighting a fire

For people who are covered, the scheme will generally cover injuries arising out of or in the course of:

- fighting a bush fire – this includes reasonable acts directed towards the control or suppression of a bush fire or prevention of the spread of a bush fire
- travelling to or from a fireground – provided the trip is made exclusively and genuinely for the purposes of fighting a bush fire

All injuries/illnesses sustained must be reported to a NSW RFS officer as soon as possible.

Vehicle and property damage while fighting a fire

For people who are covered, the scheme will generally cover damage to certain types of property owned by the FFU operator that occurs while fighting a bush fire.

This includes private motor vehicles, equipment and other things owned by, or in the possession of, the FFU operator that are:

- used in connection with firefighting at or near the scene of a bush fire
- used for travelling to or from a fireground – provided the trip is made exclusively and genuinely for the purposes of fighting a bush fire

Cover also extends to other forms of personal property such as clothing, artificial limbs/eyes/teeth or other artificial aids such as spectacles that are damaged while fighting a fire.

To make a claim in respect of property damage, contact your local Fire Control Centre as soon as practicable.

What about other claims?

Coverage under the scheme is limited to the injuries and damage referred to above. It does not cover claims for other types of damage, such as damage suffered by other people.

NSW RFS members generally have protection from third party claims when they have acted in good faith in performing their duties (but not necessarily when acting privately). This protection may, in certain circumstances, extend to non-members – but only when non-members are:

- engaged in fighting a bush fire with the consent of, or under the authority or supervision of, a NSW RFS officer; and
- acting without remuneration or reward, voluntarily and without obligation.

You need to ensure your vehicle is roadworthy and meets requirements if operating on public roads.



APPENDIX

1.1 - IMSAFER

The IMSAFER checklist is a self-assessment technique designed to help ensure your health and safety well before you attend an incident. You should always run through this before you engage in firefighting.

The questions below will help you determine if you are fit to attend the fire. If you're not fit to go, it's OK to say 'no'.

I	Illness/injury	Am I sufficiently recovered?
M	Medication	Am I under the effects of any medication?
S	Stress	Am I under severe stress from work or personal worries?
A	Alcohol/drugs	Am I under the influence, or badly hungover?
F	Fatigue	Am I tired and not adequately rested?
E	Expertise	Am I currently competent? Do I have the necessary skills?
R	Review	Have I recently reviewed my ongoing suitability for firefighting?

1.2 - LACES

The LACES checklist helps you to remember the key safety actions you need to take on the fireground. For all firefighters, LACES means:

L	Lookout	Everybody looks out for everybody else.
A	Awareness	Everybody is aware of the fire's current and anticipated behaviour, and of other fire ground hazards and precautions.
C	Communications	Everybody speaks up and everybody listens about what is happening and about their concerns at the fire.
E	Escape route/s	Everybody always has planned and agreed on an "out" strategy, just in case things go wrong.
S	Safety refuge/s	Everybody helps everybody to survive. Everybody supports the decision to get clear of a hazard.

1.3 - Emergency drills

Bush fire survival:

- Cover as much of your body with clothing or your PPE as possible (natural fibres only)
- Be aware of your surroundings, note areas of little vegetation, natural shelter places, escape routes and refuge areas
- Be aware of current weather conditions and fire behaviour
- Assess the risk of fire overrun
- Don't put yourself in this position in the first place - anticipate and avoid hazardous locations and use the LACES checklist
- Don't panic or cause others to panic - warn others who may be in immediate danger
- Remember, the air closest to the ground is the freshest.

If you're in a vehicle:

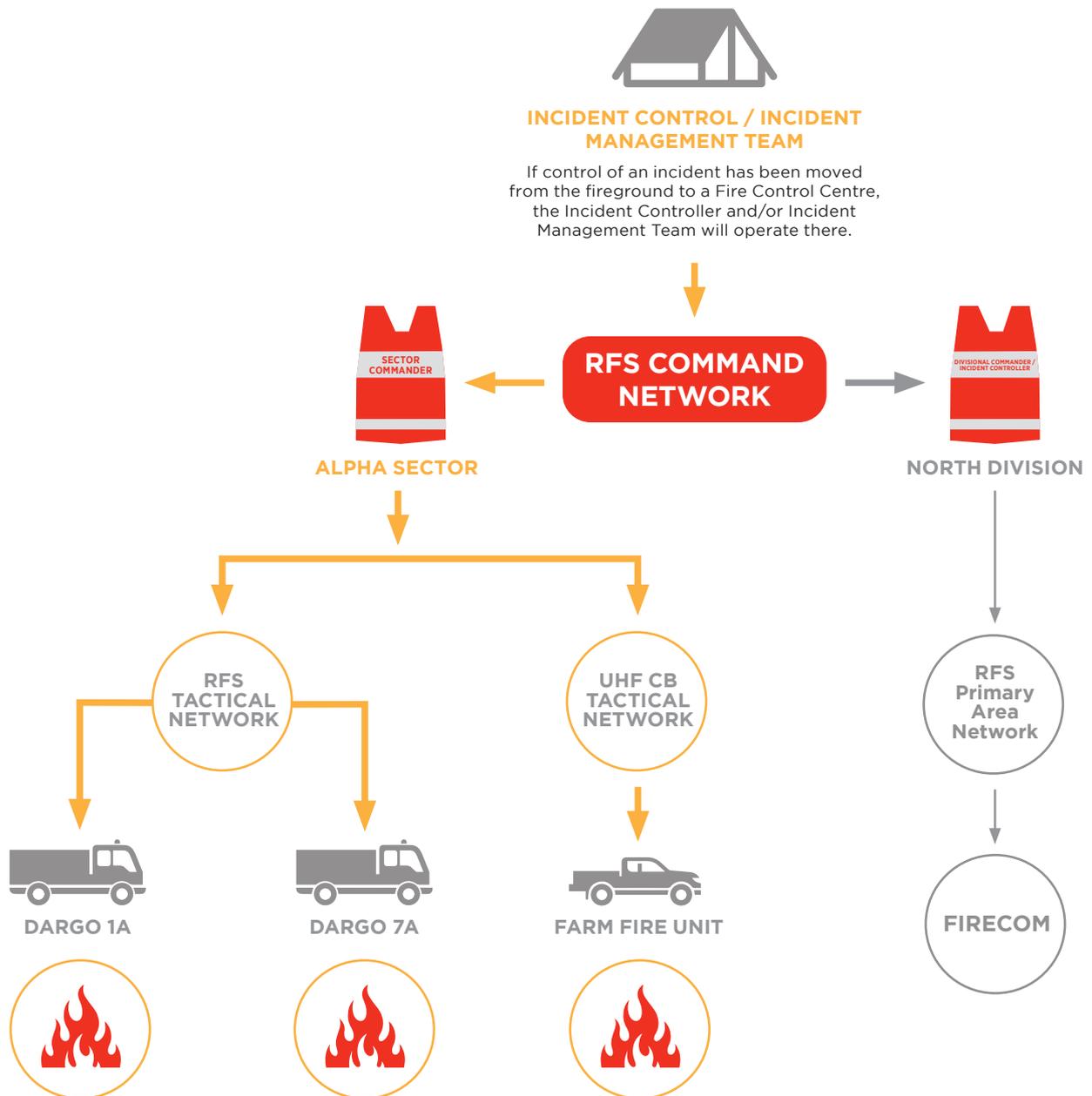
- Alert your crew with three blasts of your horn/siren
- Send an emergency radio call on the UHF channel giving your details and location (keep repeating to ensure you are heard)
- Avoid driving through dense smoke - you may have an accident or drive off the road
- Park in open space, bare or burnt ground or in an area of least vegetation, furthest from the path of the fire
- Stay in your vehicle and operate protective equipment (spray system) if fitted
- Turn on the headlights, hazard warning lights and leave the engine running
- Petrol motors may stop working due to vapour lock
- Close windows and air vents and turn on air conditioning to recycle
- Shelter under a coat or blanket to protect your body from the radiant heat and lie down as close as possible to the floor, below the window

- When the fire has passed and if the vehicle is still safe, remain in it; however, if the vehicle is hazardous, seek refuge in a safer location until conditions cool
- Coats or blankets should be taken and worn to provide supplementary protection against radiated heat from the burnt out ground
- Don't touch the interior or exterior parts (particularly metal) of the vehicle, it will be very hot and may still be burning.

If you're on foot:

- Don't run through dense smoke - you may run into something, fall down or stumble over a cliff
- Don't run through a fire which exceeds 1.5m in height or 1.5m in depth
- Don't try to outrun a fire uphill - for each 10 degrees of slope, the fire roughly doubles in the rate of forward spread. If possible, move across the slope out of the path of the fire
- Seek bare or burnt ground or an area of little vegetation
- Seek shelter by using a track, culvert, drain, wheel rut, cave, rock ledge, large rock or fallen tree
- Check that there are no air spaces under rocks, fallen trees, etc. which would allow the fire to be channelled underneath
- Shelter may be sought in large dams, rivers and streams, though you should avoid elevated water tanks
- If time permits, clear away or burn as much flammable material as possible
- Shelter on the side furthest from the path of the fire
- Lie face down, dig into the ground if possible and cover your body as much as possible to protect against the radiant heat
- Place a cloth or handkerchief over your mouth and nose to give you further protection and limit breathing as much as possible.

1.4 - Fireground communications



For more information on what you can do to prepare for bush fire this season:



NSW Rural Fire Service Website

www.rfs.nsw.gov.au
www.myfireplan.com.au



**Your nearest NSW RFS
Fire Control Centre:**



Bush Fire Information Line

1800 NSW RFS (1800 679 737)