



City of Albany Volunteer Bush Fire Brigade Operating Procedures

Executive Summary

The City of Albany Volunteer Bush Fire Brigade Operating Procedures aim to provide guidance that will ensure that bush fire response operations are managed consistently across all brigades with fire ground safety as the number one priority.

These procedures have been developed based on Department of Fire and Emergency Services (DFES) standard operating procedures and doctrine, WA emergency management legislation and state emergency management plans.

Valuable input was also provided by VBFB members.

Feedback

The City welcomes your comments on any matters that may assist it to make informed and responsible decisions for the benefit of the people of the City of Albany.

All Volunteer Bushfire Brigade members are invited to provide feedback to ensure the operating procedures remain relevant.

IMPORTANT: Before making a submission, it is recommended that you talk it over with your Brigade Fire Control Officer.

How to make a submission:

There are several ways to submit your input which are detailed below.

- You can mail feedback to City of Albany PO Box 484 Albany WA 6330;
- email to staff@albany.wa.gov.au; or
- submit it in person at North Road.

Distribution

Chief Bush Fire Control Officer	1 сору
Deputy Chief Bush Fire Control Officer	1 сору
Senior Fire Control Officer/s	1 copy each
Brigade FCOs	1 copy
Brigades (x16)	1 copy
City of Albany Ranger & Emergency Services	1 copy
CESM	1 сору
CoA Forward Control Van	1 copy

Contents

Exec	utive Summary	.1
Feed	back	1
Distri	bution	1
1 F	ire Prevention & Mitigation	5
1.1	BOP 1.01 Hazard Reduction Burns	7
1.2	BOP 1.02 Issuing Burning Permits	9
1.3	BOP 1.03 Fire Management Requirements	11
1.4	BOP 1.04 Harvest and Vehicle Movement Bans	13
2 C	Call-Out and Mobilisation	15
2.1	BOP 2.01 Bush Fire Mobilisation	17
2.2	BOP 2.02 Crewing Fire Appliances	19
2.3	BOP 2.03 Driving Emergency Vehicle Guidelines	21
2.4	BOP 2.04 Out of Area Deployment	25
3 Ir	ncident Control and Response	31
3.1	BOP 3.01 Incident Control & Management	33
3.2	BOP 3.02 Incident Escalation	39
3.3	BOP 3.03 Situation Reporting	43
3.4	BOP 3.04 Incident Communications	49
3.5	BOP 3.05 Red Flag Warnings	55
3.6	BOP 3.06 T Cards	57
3.7	BOP 3.07 Spot Weather Forecasts	59
3.8	BOP 3.08 Public Information During Incidents	63
3.9	BOP 3.09 Incident Records	67
3.10	BOP 3.10 Bush Fire Response	69
3.11	BOP 3.11 Bush Fire Tactics	73
3.12	BOP 3.12 Briefings	77
3.13	BOP 3.13 Declaring an Incident Safe	83
3.14	BOP 3.14 Use of "Class A" Foam	85
3.15	BOP 3.15 Use of Heavy Machinery	87
3.16	BOP 3.16 Callouts Involving Western Power Infrastructure	89
3.17	BOP 3.17 Tree Removal at Bush Fires	91
3.18	BOP 3.18 Traffic Management at Bush Fires	93
3.19	BOP 3.19 Transfer of Incident Control - Interagency	97
3.20	BOP 3.20 Complex Fires	101
4 S	Safety	103
4.1	BOP 4.01 Bush Fire Crew Safety	105
4.2	BOP 4.02 Personal Protective Equipment (PPE)	111
4.3	BOP 4.03 Fatique Management	117

4.4	BOP 4.04 Personal Protective Fire Blanket	119
4.5	BOP 4.05 Using Drip Torches Safely	121
4.6	BOP 4.06 Refuelling Motors at Incidents	123
4.7	BOP 4.07 Entrapment at Bush Fires	125
4.8	BOP 4.08 Drug & Alcohol Consumption	128
4.9	BOP 4.09 Bush Fire Smoke Exposure	131
4.10	BOP 4.10 Electrical Hazards	133
4.11	BOP 4.11 Use of Chainsaws	135
5	Equipment Management	137
5.1	BOP 5.01 Vehicle Maintenance	139
6	Emergency Management Policies	141
6.1	BOP 6.01 Public Information & Communications	143
6.2	BOP 6.02 Incident Control Policy	149
6.3	BOP 6.03 Fire Reports	153
6.4	BOP 6.04 Minimum Training Requirements	155
7	Glossary of Terms	157
8	Attachments	159
8.1	MATERIAL SAFETY DATASHEET – Class A Foam	161
9	Document Approval/Revision History	166

1 Fire Prevention & Mitigation

- BOP 1.01 Hazard Reduction Burns
- BOP 1.02 Issuing Burning Permits
- BOP 1.03 Fire Management Requirements
- BOP 1.04 Harvest and Vehicle Movement Bans

1.1 BOP 1.01 Hazard Reduction Burns

Policy Statement

Bushfire brigades play a key role in bush fire management, including risk reduction within their local area. Successfully carried out hazard reduction burns (HRB) increases the level of protection provided to the local community during fire season.

Bushfire Volunteers are provided with legal protection when operating within the confines of the Bush Fires Act 1954. This protection is extended to hazard reduction burns when they are considered normal brigade activities and approved by the City of Albany.

Brigades are not permitted to charge a fee for service.

Objective

This policy addresses aims to provide clear direction to bush fire brigades, the local community and City of Albany staff in relation to hazard reduction burns on property irrespective of tenure.

Pre-Burning Preparations

Private Property

Private landowners who request a hazard reduction burn are required to complete a 'Hazard Reduction Burning Form (Non Public Land)' and return it to the City of Albany – Emergency Management Team for approval.

City of Albany Property

Requests to conduct a hazard reduction burn on City of Albany land can be generated by the City of Albany Reserves team and/or the relevant bush fire brigade. Once a request has been approved, Reserves will conduct a burn prescription and provide the relevant brigade with approval to burn.

A prescription may take up to six months before it is completed and brigades need to factor this into their planning.

Road Verges

Approval to burn Main Roads controlled roadways are to be obtained from Main Roads WA. Approval to burn City of Albany managed road reserves are to be obtained from the City of Albany Reserves team.

Considerations

- A HRB co-ordinator must be appointed for all hazard reduction burns.
- When planning and/or undertaking hazard reduction burns brigade leaders shall consider;
- Breaking the property in to cells for a rotational burning program to reduce the impact on the environment.
- The lighting pattern to be employed with a distinct preference towards cooler burns.
- Notifying the owners of adjoining properties including land owned by the City of Albany, private landowners, Parks & Wildlife, plantation owners and/or utility companies.
- Assets, including those in adjacent areas, considered at risk from fire.

- Prevailing winds and their effect on the fire and the direction the smoke plume will travel. Particular care needs to be taken when smoke will blow over the road and cause a traffic hazard. See also 3.18 Traffic Management at Bush Fires
- Plans to burn on road verges or where smoke and/or fire must include a plan for traffic management.
- Neighbouring brigades should be encourage to assist with hazard reduction burns.

Before Commencing a Burn

Hazard Reduction Burn Coordinators are required to ensure they have undertaken a risk assessment for every planned burn.

Immediately prior to commencing the burn advise the CBFCO, City Base, Comcen, and, where applicable, Fire and Rescue Service and/or Parks and Wildlife of the burn address and expected duration.

Concluding a Hazard Reduction Burn

The Hazard Reduction Burn Coordinator will declare the burn safe when they are satisfied the perimeter of the fire is fully extinguished. In some cases it will be necessary to set up patrol or monitoring arrangements for a period of time following the departure from the fire site.

Comcen and City of Albany base shall be notified when the hazard reduction burn has concluded.

Version Control

Version	Date	Status	Author	Details of Change
1.00	12/02/2015	Final	D Jones	
1.01	27/7/2016	Update	D Jones	Required advisory details (Sec 6) added. Also added steps required to conclude a HRB.
1.02	7/2/2016	Update	S Lees, B Gordon	Added requirement to notify CBFCO & City Base under section 5.

1.2 BOP 1.02 Issuing Burning Permits

Policy Statement

The Bush Fires Act Bushfire (1954) provides facility for local governments through their FCOs to control burning activities within their gazetted area at different times of the year.

This equates to open burning in late autumn through to early spring; restricted burning in early autumn and late spring and early summer and prohibited burning in summer.

Permits to burn can only be issued by a gazetted Fire Control Officer.

Notifying Residents of Restricted and Prohibited Burning Times

The City of Albany advises local residents of restricted and prohibited burning times through an annual fire management notice issued in conjunction with annual rates notices.

Public notices are also placed in local newspapers and on City of Albany website advising residents of dates. Notices are also published if there is any adjustment to previously advised times.

As a service to local residents some brigades also display appropriate message boards prominently out the front of their fire stations.

Restricted and prohibited times may be varied according to weather conditions.

Issuing Permits

Persons seeking permission to burn are required to contact their local Bush Fire Brigade's Fire Control Officer for a permit.

- FCOs are not obliged to issue a permit if, in their opinion, there are circumstances which make the proposed burn undesirable.
- FCOs should only issue a permit when satisfied the fire can be managed safely and required conditions will be complied with.
- FCOs may adjust/add/delete conditions contained in a permit to suit the circumstances. FCOs should err on the side of caution when modifying conditions.
- FCOs should ensure all conditions are explicit and not open to interpretation.
 Ambiguous conditions may result in infringement notices being successfully challenged and/or withdrawn.
- Any permit issued may be revoked by a FCO if, in their opinion, the fire may become a danger.
- All previously issued permits issued are cancelled on days when a very high, severe, extreme or catastrophic fire danger is forecast.
- Escaped permit burns or those that are, in the opinion of the FCO, out of control may result in fire fighting costs being recouped from the permit holder.
- Penalties may be imposed on permit holders who do not comply with conditions included on a permit.
- FCOs requiring a personal permit shall request permit from the CBFCO or another suitably gazette FCO.
- Brigades undertaking HRBs for landowners during restricted season should ensure the permit is made out to the landowner.

Considerations

In certain circumstances the FES Commissioner has authority to vary restricted burning times.

Version Control

Version	Date	Status	Author	Details of Change
1.00	16/02/2015	Draft	D Jones	Initial write
1.01	27/2/2015	Final	D Jones	FCO & HRB permit

1.3 BOP 1.03 Fire Management Requirements

Policy Statement

The Bush Fires Act Bushfire (1954) allows local governments to place requirements on landowners and occupiers to help prevent the spread of fires in the local area. This is largely achieved by requiring residents to install and maintain fire mitigation measures.

Unless a variation has been approved, residents must comply with the requirements outlined in the Fire Management Notice. Fire management measures must be installed and maintained as follows:

Residents living in NE Sector – 1st November and 30th April (inclusive).

Residents living in the SW Sector - 1st December and 30th April (inclusive).

The correct installation of fire mitigation measures is a preventative strategy. The inspection and infringement process is the responsibility of City of Albany Rangers.

NOTIFYING RESIDENTS OF FIRE MANAGEMENT REQUIREMENTS

The City of Albany produces an annual Fire Management Notice which outlines the fire mitigation measures relating to different types of property and risks. This notice is distributed to all rate-payers in the municipality. This information is available on the City of Albany website.

FIRE MANAGEMENT VARIATIONS

Where landowners determine they are unable to comply with any of the Fire Management Notice requirements they can apply for a Fire Management variation.

Variation forms are available on the City of Albany website. The applicant is responsible for ensuring variation applications are submitted in accordance with the guidelines.

Variations will only be approved where the applicant can demonstrate their proposed alternative mitigation strategies must afford at least the same level of protection to the remainder of the community. The approval of a variation occurs in consultation between the Brigade FCO and the City of Albany.

COMPLIANCE INSPECTIONS

City of Albany Rangers conduct compliance inspections as soon as practicable commencing from 1st December (SW Sector) or 1st November (NE Sector).

Brigade FCOs are invited to assist this process either by flagging non-compliant properties to Rangers and/or joining Rangers on initial and subsequent inspections.

Where a property is identified as non-compliant Rangers will either issue an infringement notice, a warning letter, or engage contractors depending upon the circumstances.

City of Albany Rangers conduct follow-up periodic inspections throughout the required period and will take appropriate action.

CONSIDERATIONS

From time to time FCOs may be approached by local residents expressing concerns about the fire hazards on properties. These enquiries should be redirected to City of Albany Rangers.

RELATED DOCUMENTS

City of Albany Fire Management Notice

VERSION CONTROL

Version	Date	Status	Author	Details of Change
1.00	26/02/2015	Draft	D Jones	Initial write
1.01	27/02/2015	Update	D Jones	Included process map.
1.02	27/7/16	Update	D Jones	Amended to include variation. Further detail added.

1.4 BOP 1.04 Harvest and Vehicle Movement Bans

Policy Statement

As a fire prevention strategy Section 38 of Bush Fire Regulations (1954) allows for Harvest and Vehicle Movement Bans to be put in place.

The Bush Fires Act Bushfire (1954) provides facility for local governments through their FCOs to control burning activities within their gazetted area at different times of the year.

Imposing a Harvest and Vehicle Movement Bans

Fire weather officers in each of the respective sectors

South West Sector 34

North East Sector 32

Notifying the Public of Harvest and Vehicle Movement Bans

Members of the public are responsible for checking to see if there is a harvest and vehicle and movement ban is in place before they commence actions that may contravene such bans.

The ABC is the recognised means by which The City of Albany advises the community that bans have been imposed.

Advice that bans have been imposed must reach the ABC by 0945 (broadcast 1005), 1045 (broadcast 1045), 1145 broadcast (1235) and 1345 (broadcast 1405)

Advice is emailed to harvestbans@abc.net.au with the subject "Harvest/movement ban in (Brigade area/section of City of Albany/whole of City of Albany): ABC Albany

Considerations

Harvest and Vehicle Movement Bans <u>must</u> be imposed when Total Fire bans are in place and the Fire Danger Index reaches 35.

Version Control

Version	Date	Status	Author	Details of Change
1.00	17/02/2015	Final	D Jones	Initial write
1.01	25/08/15		D Jones EMTO	Section 3 added. Refer DFES SAP 3.5.A Total Fire Bans
1.02	28/10/15		D Jones CESM	Updated to include FDI indicators and ABC process.

2 Call-Out and Mobilisation

- BOP 2.01 Bushfire Mobilisation
- BOP 2.02 Crewing Fire Appliances
- BOP 2.03 Driving Emergency Vehicles
- BOP 2.04 Out of Area Deployment

2.1 BOP 2.01 Bush Fire Mobilisation

Introduction

Notification of fires can take place at any time during the year. Fires can quickly create life threatening situations so it is imperative all call outs are directed to the relevant brigade as quickly and accurately as possible.

The City of Albany has a 'Triple 0' agreement with Department of Fire and Emergency Service which identifies the process to be used when calls to 000 are received by DFES Comcen.

Comcen has access to City of Albany brigade boundaries. This enables accurate identification of the brigade area in which the fire is located.

Initial Notification

When notified of a fire incident in the City of Albany, base will notify the relevant brigade of the fire and request their attendance. At times it may be necessary for additional and/or alternative brigades to be mobilised to fires within the municipality of Albany.

If the initial notification is made directly to a brigade by a member of the public, the receiving brigade member will advise the relevant City of Albany base for the ongoing management of the mobilisation.

City of Albany base will ensure DPaW are informed when fire incidents occur within or in close proximity to DPaW vested land.

Internal Brigade Call Out Procedures

Bushfire brigades will develop their own process to manage the mobilisation of brigade personnel to an incident. Any process will need to be approved by the CBFCO. Internal brigade procedures can utilise pagers, selcall radio calls, VHF/UHF systems, SMS messaging and landline telephone.

When developing their own call out processes brigades should balance the need for a rapid response with ensuring crews have suitable levels of training and experience. Consideration also needs to be given to appropriately including newer members into brigades.

Brigades are to ensure their call out lists only include those people who are registered brigade members and who have completed the City of Albany minimum training requirements.

Call out lists need to be checked annually to ensure all details are accurate.

Where brigades have registered for DFES SMS call out process these lists should be updated annually (minimum) and forwarded through to Comcen via City of Albany.

Version Control

Version	Date	Status	Author/Position	Details of Change
1.0	7/1/2015	Final	D Jones	Rewrite of old policy. Included SMS option,

2.2 BOP 2.02 Crewing Fire Appliances

Introduction

Firefighting crew members are potentially exposed to physical, physiological and other fireground hazards. Correctly crewing appliances increases the likelihood that appropriate mitigation strategies are put in place, thereby reducing the potential for accidents.

Standard Crew Levels for Appliances

- All Fast Attack/Light Tanker appliances must be crewed by two people.
- Under no circumstances will three crew be permitted in these appliances as this will exceed the GVM.
- In <u>exceptional</u> circumstances City of Albany Emergency Management Team or the Chief Bush Fire Control Officer (or delegate) may approve reduced crew numbers. Approval must be obtained prior to departure from the shed and the reason for the reduced crew levels, and authorisation must be noted in the Incident Log.
- Crew levels must not exceed the number of available seat belts under any circumstances.
- Crew Protection seats at the rear of some older heavy duty appliances are not to be used to carry passengers on the road.

Version Control

Version	Date	Status	Author/Position	Details of Change
1.0	9/1/2015	Final	D Jones	Updating original City of Albany BOP B6
1.01	27/7/2016	Update	D Jones	Highlighted crew limit in FA Appliances
1.02	13/02/2017	Update	S Lees	Added CBFCO or delegate to approve a crew of less than 3.

2.3 BOP 2.03 Driving Emergency Vehicle Guidelines

Introduction

Driving City of Albany (CoA) appliances imposes additional responsibility upon the Officer in Charge (OIC) and driver. Drivers and OIC are accountable for the use, operation, security, and maintenance of their appliances.

When responding to an incident OIC and drivers are to firstly consider, and ensure, the safety of the crew and public. No risk is justified if it is likely to endanger anyone.

Bush Fire Brigade members must, at all times, drive with due care and attention and show consideration to other road users.

General

The following conditions apply at all times:

Driver Licence	All drivers must hold a current and appropriate class of driving licence.
Alcohol and Drugs	Drivers are not to operate any CoA vehicle whilst under the influence of alcohol or non-prescribed drugs. This includes fire appliances.
No Smoking	Smoking is not permitted in any CoA vehicle.
Mobile Phones/VHF Radios	Drivers are not to use mobile phones or operate a two-way radio whilst driving.
Traffic Infringements	Drivers will be personally responsible for any parking or traffic fines.
Lights On	OIC are to ensure appliances are driven with headlights on.
Seat Belts	Personnel are to wear seat belts when travelling to, and from, a fire.
Travelling on the Outside of Vehicles	Personnel are only to ride on the outside of an appliance when the appliance is specifically designed to do so and only when on a fire ground.
Fire Hazards	Crews are to check the undercarriage of appliances to ensure it is free of leaves and other debris.
Driver	Crew Leaders should refrain from driving under emergency conditions if there are other suitably qualified persons on available.

Emergency Response

Crews on their way to an incident should respond with appropriately when life or property is in immediate danger.

The following conditions should be followed:

- Priority 1 headlights, emergency beacons and siren all switched on.
- Priority 2 headlights and emergency beacons switched on.
- Normal road conditions headlights on, all regulations of the WA Road Traffic Code 2000 are to be complied with.
- Rail crossing signals, boom gates and traffic management officers are to be obeyed at ALL times.

Non-Emergency Driving

During non-emergency driving (i.e. when not responding to an incident), drivers and OIC of CoA fire appliances and vehicles are subject to all regulations and laws detailed in the WA Road Traffic Code 2000.

Emergency warning lights must not be used when returning to fire station, attending training or exercises and general operations except for the purposes of testing same.

Exemption from Traffic Code

City of Albany Bush Fire Brigade members are advised to obey all traffic rules and regulations when driving a City of Albany vehicle or appliance.

While it is recognised that the *WA Road Traffic Code 2000, Regulation 281* gives drivers of **emergency vehicles** certain exemptions to certain provisions under the *Code* the safety of crew and the public remains of paramount importance.

It is the <u>function</u>, not the type of vehicle that, under the *WA Road Traffic Code 2000*, defines what an emergency vehicle is:

A motor vehicle of a fire brigade on official duty in consequence of a fire or an alarm of fire or of an emergency or rescue operation, where **human life is reasonably considered to be in danger**.

All the above conditions must be met for an appliance to be considered an emergency vehicle under the *Code*.

Under *Regulation 281*, the exemptions apply as long as the driver of an emergency vehicle is undertaking the following:

- the driver is demonstrating reasonable care; and
- the emergency vehicle is moving and the vehicle is displaying a blue or red flashing light or sounding an alarm.

Reasonable care is a legal concept based on a reasonable person being able to foresee the risk associated with the action taken.

"In determining whether the defendant has breached the duty to take reasonable care, a court must first decide whether a reasonable person in the defendant's position would have foreseen that his or her conduct might pose a risk to the plaintiff or to a class of persons including the plaintiff.

Drivers may be held liable for errors of judgement if deemed not to be demonstrating reasonable care.

Driving Off Road

Before taking a vehicle off road all drivers should consider the following:

- Do you need to go there?
- Is the vehicle capable of going there?
- Are you capable of going there?

Deflating Tyres:

Any tyre deflation should be done before entering sandy areas and using supplied deflators. The following deflation/reinflation guidelines should be followed:

Vehicle Type	Recommended Tyre Pressure		Minimum Pressure	
	Front	Rear		
4.4 Broadacre	675 kpa	575 kpa	250 kpa	
3.4 Broadacre	675 kpa	575 kpa	250 kpa	
2.4 Broadacre	675 kpa	575 kpa	250 kpa	
1.4 Broadacre	500 kpa	500 kpa	250 kpa*	
Light Tanker	300 kpa	450 kpa	Deflation NOT Recommend	

^{*}Initially deflate the outer rear tyre to 250 kpa, then deflate both rear tyres to 200 kpa if further deflation required.

All tyres should be re-inflated to recommended tyre pressures before resuming normal road driving.

Debris under Vehicle:

Leaves, sticks and other debris caught in the undercarriage of appliances can be a fire hazard, especially when travelling over burning or recently burnt ground.

Crews should frequently and diligently check the vehicle undercarriage areas for flammable debris. Any debris found should be flushed out or removed before proceeding further.

Provisional Driver's Licence Holders ('P' Plates)

Provisional Licence Holders MAY drive the following:

• Any vehicle/appliance under GVM 4.5 tonnes (they must display the appropriate 'P' plate on the rear and front of the vehicle)

Provisional Licence Holders *MAY NOT* drive the following:

- Any type of emergency vehicle/appliance responding to an incident.
- Any motor vehicle/appliance that has a Gross Vehicle Mass (GVM) of 4.5 tonnes or more (all dual rear wheel fire appliances)
- Any motor vehicle/appliance that is equipped to seat 12 or more adults including the driver (personnel carrier)

Reversing Operational Appliances

Where practicable, drivers are to be assisted by ground-based crew members when reversing. Having ascertained that all is clear at the rear of the appliance, the assisting crew member is to be safely positioned in full sight of the driver, and direct the reversing movements.

Moving From Rest Area

Drivers must check around the vehicle before moving off from rest to ensure no-one is in a position where they could possibly be injured.

Related Documents

BOP 5.01 Vehicle Maintenance

Version Control:

Version	Date	Status	Author/Position	Details of Change
1.0	22/01/2014	Draft	S Lees Project	New procedure based on:
			Officer	DFES SOP 3 V1.4
1.01	7/04/2014	Draft	D Jones EMTO	Section 6 added in response to DFES Safety Circulars 01/2013, 03/2013 and 05/2014
1.02	22/12/14	Final	D Jones EMTO	Further edits.
1.03	20/05/15		D Jones EMTO	Section 2. Crew Leaders should not drive under emergency conditions.
1.04	22/04/16	Final	D Jones CESM	Updated recommended tyre inflation on Light Tanker. Op Circ 34/2016
1.04	28/11/16	Final	S Lees ACRES	Minor formatting changes.
1.05	13/02/17	Update	S Lees	Update to section 3 Emergency Response. Change heading of section 5 to "Road Traffic Code 2000"

2.4 BOP 2.04 Out of Area Deployment

Introduction

While City of Albany VBFB resources will primarily be dedicated to the protection of life and property within the municipality of the City of Albany there will be occasions when requests to supply assistance to our immediate neighbours and beyond will be made.

In the interests of neighbourly assistance The City of Albany supports, and encourages, out of area deployment.

Crews will be primarily involved in black-out/mop up operations with some time spent being idle. Shifts, over consecutive days, may exceed 12hrs duration. It is possible the deployment may be cancelled or curtailed, depending upon a range of factors.

The accommodation provided can vary from swags through to hotel/motel, depending upon the situation. In some cases 'hot-bedding' may occur. On some occasions crews may need to carry personal belongings with them daily.

Deployees are responsible for expenses associated with their own alcohol, video hire, personal phone calls, mini-bar and other personal items. The controlling agency will generally meet all food, accommodation and operational costs.

Potential deployees need to consider all of these aspects before registering for deployment.

Preparation for Out of Area Mobilisation

Personnel

Each October the City of Albany will call for expressions of interest (EOI) from those brigade members interested in participating in an out of area deployment for the following fire season. Brigade Fire Control Officers will endorse applications for deployment. (See appendix 1)

Potential deployees will be considered on the following basis;

- Training
- Experience
- MR license (minimum)
- General health

Familiarity with a local area is a primary risk mitigating factor: for this reason the composition of crews deployed need to be well balanced and not solely comprised of people with little or no experience.

Copies of endorsed EOI forms for deployment will be retained at the brigade and the City of Albany. This will ensure identifying crews, when requested, will be relatively guick.

Appliances

The City of Albany will identify vehicles considered suitable for long range deployments. To minimise the likelihood of appliance repairs being required, appliances deployed will be more recent additions to the fleet. In some cases it may be necessary to temporarily re-locate appliances to ensure an even distribution.

FCOs will be advised if brigade appliances have been identified for deployment.

The City of Albany will normally limit all deployments to a maximum of three heavy duty appliances and one fast attack at a time. Where a maximum deployment occurs a City of Albany vehicle and personnel will accompany the deployment to provide assistance as required.

Request for Out of Area Mobilisation

Requests for deployment of City of Albany appliances outside the municipality will be directed through the CBFCO in consultation with the MRES (or delegate/s).

Consideration will be given to the local current and forecast situation when making a decision to deploy appliances. If current and/or forecast situation is considered adverse the request for deployment may be refused.

Requests for the deployment of additional resources will include details relating to; destination, departure time, expected deployment time, identity of strike team leader and identity of other resources being deployed.

Mobilisation

In the interests of volunteer welfare and safety, the City of Albany will only permit a departure from Albany after 1400hrs if the deployment does not involve significant travel time or where exceptional circumstances exist. This is designed to provide sufficient rest prior to undertaking fire-ground deployment.

Prior to departure a register of names and addresses and contact details of all deployees will be collected and distributed to DFES, City of Albany and other personnel on deployment.

Mobilisation and the Media

Deployments often attract a deal of media interest. Personnel will not provide incident information to the media without the prior approval of their liaison officer and the City of Albany.

Demobilisation

In the interests of the welfare and safety of volunteers, the City of Albany will only permit a return to Albany after 1200hrs if this will not involve significant travel time or exceptional circumstances exist. This is designed to provide for sufficient rest prior to commencing a return journey.

Post Deployment Debrief

A post deployment debrief will be held after every deployment. Each debrief will seek to find ways deployments can be better managed and will include discussion on the premobilisation, deployment and de-mobilisation.

Debrief findings will be shared with the relevant agencies.

Suggested Deployment Kit Bag

The extent of protective clothing a volunteer deploys with will depend on the nature and duration of the deployment as well as expected weather conditions.

Administrative

- Photo ID (Mandatory) DFES ID, Drivers License
- All personal items must be packed into personal luggage
- Mark and tag all bags and items of equipment.

PPE

- FF Trousers and/or over pants
- Level 1 Bushfire Jacket
- Bushfire helmet
- Bushfire gloves
- Particle mask

Personal

- Money and personal banking cards
- Mobile phone (Recommended)
- Mobile phone charger (Recommended)
- Spare socks and underwear for duration
- Sufficient Jeans (Smart Casual)
- Sufficient Shirts (Smart Casual)
- Sufficient T Shirts
- Jumper or jacket x 1 (Smart Casual)
- Shorts (Smart Casual)
- Shoes (Joggers)

- Goggles
- Water Bottle
- Cotton Polo/T Shirts
- Level 2 or Wildland boots
- Kit Bag
- Toiletries
- Medication
- Towel
- Insect Repellent
- Wide Brimmed Hat
- Sunglasses
- Sunscreen Lotion
- · Note book and writing material
- Reading material (optional)

Out of Area Deployment - Expression of Interest - 2017/18

Volunteers interested in making themselves available for out of area deployment, of up to 5 days duration, are required to complete the information below.

Out of Area Deployment – Expression of Interest Complete this form and forward it to your Fire Control Officer for his or her consideration. If you need permission to be absent from work from your employer, we recommend you discuss this matter before submitting an EOI. FCOs are to endorse this EOI and forward the form to the City of Albany FCOs/Call Out Officers are to retain a copy of this form to assist with future deployments. Personal Details: Name: Date of Birth: ____/____ Address: Driver's License (MR Preferred): Next of Kin: Name: Address: Phone: Mob: Email: Fire Fighting Details: Brigade Name: Current Role: ☐ D/CBFCO ☐ FCO ☐ Lieutenant ☐ Crew Leader ☐ Fire Fighter Maximum Deployment Length: \square 5 days \square 4 days \square 3 days \square 2 days Applicant's Signature: _____ Date: ____/___ The personal information supplied is correct and I do not have an existing medical condition that may impair my ability to volunteer for deployment. I understand that signing this form does not guarantee deployment. FCO's Recommendation: FCO Name: ☐ Deployment Recommended ☐ Deployment Not Recommended FCO Signature: _____ Date: ___/___/ City of Albany Receipt:

Officer's Signature: ______ Date: ___/____

Synergy Ref: _____

Version Control:

Version	Date	Status	Author/Position	Details of Change
1.0	14/1/2015	Draft	D Jones	Extension of BOP following deployment experiences in Jan 2015.
1.01	11/2/2015	Final	D Jones	Included EOI form in document
1.02	27/7/2016	Update	D Jones	Requirement for pre- departure contact register added.

3 Incident Control and Response

- BOP 3.01 Incident Control & Management
- BOP 3.02 Incident Escalation
- BOP 3.03 Situation Reporting
- BOP 3.04 Incident Communications
- BOP 3.05 Red Flag Warnings
- BOP 3.06 T Cards
- BOP 3.07 Spot Weather Forecasts
- BOP 3.08 Public Information During Incidents
- BOP 3.09 Incident Records
- BOP 3.10 Bush Fire Response
- BOP 3.11 Bush Fire Tactics
- BOP 3.12 Briefings
- BOP 3.13 Declaring an Incident Safe
- BOP 3.14 Use Of Class A Foam
- BOP 3.15 Use of Heavy Machinery
- BOP 3.16 Callouts Involving Western Power Infrastructure
- BOP 3.17 Tree Removal at Bush Fires
- BOP 3.18 Traffic Management at Bush Fires
- BOP 3.19 Transfer of Incident Control Interagency
- BOP 3.20 Complex Fires

3.1 BOP 3.01 Incident Control & Management

Safety

Safety is the first consideration at all fires. Safety considerations are detailed in <u>BOP</u> 4.01 Bush Fire Crew Safety.

While the Incident Controller (IC) sets the standard for safety at the incident every individual is also responsible for their own safety.

Incident Control

- A designated IC shall be in place for every fire, regardless of its size.
- The CBFCO will ensure the IC is competent for the size and nature of the incident.
- In the first instance the first arriving Crew Leader assumes the role and responsibilities of the IC. This role can be passed on to more senior personnel when they arrive on scene.
- The identity of the IC must be declared to all personnel involved in the incident and recorded in the incident log. They must be readily identifiable.
- When fires occur on property either directly owned by the IC, or when the IC has a
 close interest in the property, these incidents should be managed by an independent
 person. If this is not possible the IC needs to obtain approval from the CBFCO to
 continue in that role.

(Refer City of Albany Policy - Incident Control)

Incident Controller's Responsibilities

State Emergency Management Policy 4.1 defines Incident Controller as 'the person designated by the relevant Controlling Agency, responsible for the overall management and control of an incident within an incident area and the tasking of agencies in accordance with the needs of the situation'.

A prime responsibility of an IC is to consider the need for public information, including emergency alerts and warnings. The community's need for timely and accurate information and direction must be considered throughout all phases of a bush fire.

Refer BOP 3.08 Public Information During Incidents

On Turnout

- Initiate and maintain an incident log. (Refer BOP 3.09 Incident Records)
- Report the identity of the appliance, crew and crew leader to base.

On Arrival at the Fire

- Transmit arrival message to base.
- Confirm the identity of the IC.
- Confirm sufficient resources or request additional resources.
- Confirm location of the fire, providing latitude and longitude readings to enable a spot weather forecast to be requested.
- Conduct initial size up and transmit PAFTACS message to base.
- Assume control and brief incoming crews.
- Identify and preserve the point of ignition.

Planning

- Set incident objectives and prepare to brief incoming crew(s) (*Refer BOP 3.12 Briefing*).
- Set up communications plan (Refer to BOP 3.04 Incident Communications).
- Establish Incident Action Plan (IAP).
- Prepare and forward Situation Reports, including AIIMS Situation Summary (Form 1) within 1 hour.

During the Fire

- · Monitor the safety of crew.
- Request additional resources if/as required.
- Establish Forward Control Point
- Brief incoming crews.
- Collect T Cards and set up battle board. (Refer to <u>BOP 3.06 T Cards</u>)
- Appoint Sector Commanders if/as required (Refer BOP 3.11 Bush Fire Tactics)
- Request Spot Weather Forecast if required (Refer <u>BOP 3.07 Spot Weather Forecasts</u>)
- Determine if the Incident Control Van (ICV) is required. When the ICV is deployed, the City of Albany's Emergency Operations Centre will be activated. (Refer <u>BOP 3.03 Situation Reporting</u>)
- Monitor IAP objectives against elapsed time
- Monitor communications
- Issue and monitor Red Flag Warnings if required (Refer <u>BOP 3.05 Red Flag Warnings</u>)
- Scale up, or down, as required.

Handover to Incoming IC

- Prepare SMEACS briefing for incoming IC (Refer BOP 3.12 Briefings)
- Record any handover in incident log and advise fire crew and all other stake holders.

When Fire Controlled

- Advise that the fire is under control and send control message including the time fire was controlled.
- Ensure mop up meets standard (20/100)
- · Record in incident log.

Debrief and Departure

- Conduct crew debrief check for injuries, near-misses or damaged equipment.
- Conduct informal Post Incident Analysis (PIA)
- Send departure message and record in incident log

Back at Fire Shed

- Send 'Back at Station' message
- Conduct more extensive PIA appropriate to the size of the incident (if required).
- Complete and file fire reports
- Report any damage and arrange repair.

Sector Commanders' Responsibilities

The Sector Commander's role is to implement the strategies of the IAP relevant to their sector. This includes:

- Maintain a log of activities and events. (Refer <u>BOP 3.09 Incident Records</u>)
- Receive a briefing from the IC which should include:
 - o initial instructions;
 - o Incident Action Plan (if available);
 - o map displaying sectors; and
 - o communication plan.
- Establish sector command point.
- Brief crew leaders working in the sector based on the IAP (using SMEACS format).
- Implement and monitor the IAP for the sector.
- Provide regular situation reports (Refer <u>BOP 3.03 Situation Reports</u>).
- Debrief sector crew following incident/shift.

Crew Leaders' Responsibilities

- Effectively manage their crew members.
- Liaise with their Sector Commander
- Report to Sector Commander as required
- Task crews appropriately
- Maintain incident log
- Implement required aspects of the IAP

Crew Leaders' responsibilities to their crews include:

- Apply the use of anchor points.
- Identify and communicate safe areas.
- Ensure suitable escape routes are known and accessible.
- Monitor the general welfare of the crew with an emphasis on safety.

Extended Incidents

Planning for Extended Incidents

Extended incidents will require logistic support. The IC must plan ahead as additional resources and support can take time to arrange and deliver. Irrespective of the incident size/level, the IC should resource the following:

- water
- fuel
- catering
- toilets
- maintenance
- medical supplies
- relief crews and appliances

Forward Control Point

Upon requesting additional resources, the IC is to identify a suitable Forward Control Point (FCP) from where all resources will be despatched. Incoming crews and contractors must report to the FCP for briefing.

FCPs should meet the following requirements:

REQUIREMENT	NOTES
Size/Space	Must be capable of accepting and staging the requested resources
Safety	Cannot be in the path of the fire, nor create a hazard to traffic/the general public
Communications	Must be able to maintain radio communications using the WAERN network and have suitable mobile coverage.

Incident Site Management

To minimise the risk the IC must endeavour to control entry of all personnel to the fire ground.

The IC is to define the *Incident Area* as soon as possible and ensure access is restricted to operational and support personnel and equipment.

Once an incident area is secure, it is easier to account for all personnel, thus reducing the risk of exposure to the hazard.

Document History:

Version	Date	Status	Author/ Approved By	Details of Change
1.0	17/10/13	Draft	S. Lees	New procedure based on DFES Directive OD 3.2 Incident Control V1.5
1.01	23/12/14	Final	D Jones	Final edit and proof. Included need for mobile coverage at forward control point.

Appendix 1 – Incident Controller's Checklist

IC Name	Incident Number	Incident Name	Date	Time

LEVEL 1 - INCIDENT CONTROLLER CHECKLIST

Before Arrival At Fire	Done Y/N	Time
Initiate & Maintain Fire Diary/Log Book		
Confirm Fire Location		
Confirm Sufficient Resources for First Call		
Upon Arrival At Fire		
Give Arrival Message (44 or 66 or 88)		
Assume Control and Advise Crews/City		
Conduct Initial Size Up		
Send PAFTACS & Request Spot Forecast		
Identify & Preserve Point of Ignition		
Establish Suppression Objectives		
Order Additional Appliances If Required		
Communicate Objectives To Crews On Ground		
Set Up Comms Plan		
Order Additional Resources if Required		
Sectorise? Appoint Sector Commanders		
Set Up Battle Board		
During Fire		
Collect & Forward SitReps		
Prepare SMEACS for Incoming Crew/s		
Prepare Form 1 After One Hour		
Monitor IAP Objectives Against Elapsed Time		
Monitor Communications		
Monitor Safety of F/Ground Crews LACES		
Monitor Welfare – Order Refreshments		
Scale Up/Down As Required		
Handover If Required		
Prepare Maps for Incoming Resources		

Control Message	
Advise Fire Under Control & Time	
Set Mop Up Standard 20/100	
Debrief	
Check For Injuries/Near Misses/HAZMAT	
Mini PIA Fire & Operations & Command	
Departure	
Send Departure Message	
Back At Station	
Back At Station Message	
Reports Completed & Filed	
Report any damage & arrange repair	
Review PIA	

Incident Levels

The State Emergency Management Committee (SEMC) has defined three operational levels that are to be used to classify the severity of incidents. These are defined in SEMP 4.1 and in WESTPLAN – FIRE Section 4.3.3 and must be used when classifying an incident.

Assessing the Incident Level

The Incident Controller (IC) is to use WESTPLAN – FIRE guidelines to determine the incident level classification as soon as practicable.

An incident is initially defined as a Level 1 incident unless:

- a) the Incident Controller determines otherwise; and
- b) an incident level declaration is made.

The majority of fires attended by the City of Albany Bush Fire Brigades are Level 1 incidents. As Level 1 is the default incident level, it is not necessary to fill in an Incident Level Declaration.

Level 1 classifications cover a range of incident sizes and complexities and which can require different skill levels to manage. ICs can access additional resources or expertise as required. These are described in <u>City of Albany Policy – Incident Control</u>.

Larger, slightly more complex, Level 1 incidents may require the appointment of a qualified Level 1 Incident Controller. This can be initiated at the request of the current IC, as an offer by the CBFCO or, in some cases, at the direction of the CBFCO.

Monitoring the Incident

The incident is to be continually monitored, and assessed, by the IC to ensure changes are identified and the incident level escalated or de-escalated, as necessary. **The escalation of an incident is at the discretion of the Incident Controller.**

The IC will note the declared incident level in the IC's incident log and all Situation Reports sent through the command line.

If it is possible an incident may escalate to Level 2 the DFES Duty Officer must be notified to alert them to this possibility.

Incident Level Escalation

If the bush fire conditions warrant an escalation to Level 2 the Department of Fire and Emergency Services (DFES), as the Hazard Management Agency for fire, **must** be advised.

At the declaration of a Level 2 Incident, the IC will:

- a) complete an Incident Level Declaration form (See Appendix 1);
- b) communicate the Level 2 declaration to the CBFCO (or delegate) and to the CEOC.

Incident Handover

Under the Bush Fires Act 1954 the IC can request control of the incident be handed over to DFES or Department of Parks and Wildlife. This should be done in consultation with the Chief Bush Fire Control Officer (or delegate). (Refer to BOP 3.19 Transfer of Incident Control - Interagency)

Level 3 Incident

City of Albany Bush Fire Brigade units will only be providing combat resources or AIIMS IMT support to DFES for Level 3 incidents.

Appendix 1 - Example Incident Level Declaration

This declaration is to be completed by the Incident Controller as an incident escalates/deescalates; this form must be sent to the Controlling Agency's Operations Centre immediately upon the changing of the level as stipulated by SEMP 4.1.

Inc	cident name:	Date Prepared	: Time Prepared:	Prepared by:									
1.	Initial Incident	assessment? (tick b	ox)										
2.	Yes □	N	o □										
3.	The Incident ha	as been assessed a	s a (tick box)										
4.	Level Two Level Three												
5.	This decision is	s based on the follow	wing information about the i	incident:									
6.	Level 2		wing information about the i	moldone,									
7.			typical conditions, a Level	2 incident has been	declared by								
8.	(Check the following conditions, as appropriate, for the Incident)												
9.													
10.	. □ has a protra	cted duration;											
11.	. □ requires cod	ordination of multi-ag	gency resources;										
12.	. there is som	e impact on critical	infrastructure;										
13.	. □ there is a m	edium level of comp	elexity;										
14.	. □ there is a moother);	edium impact on the	e community (health, safety	, economic, technolo	gical or								
15.	. □ there is pote	ential for the incident	t to be declared an 'Emerge	ency Situation'; and/o	or								
16.	. □ the incident	involves multiple ha	zards.										
	Level 3												
18.	After considera the Incident Co		typical conditions, a Level	3 incident has been	declared by								
19.	. (Check the follow)	owing conditions, as	s appropriate, for the Incide	nt)									
20.	. 🗆 requires sigi	nificant multi agency	/ response;										
21.	. □ there is a pr	otracted response d	luration;										
22.	. \square there is sign	ificant impact on cri	tical infrastructure;										
23.	. \square there is sign	ificant coordination	of multi-agency resources;										
		gh level of complexi	•										
25.	_	ificant impact on the nnological or other);	e routine functioning of the o	community (health, s	safety,								
		ultiple incident areas											
			community is required;										
		·	of life or multiple, serious in										
29.	. a declaration	n of an 'Emergency	Situation' or 'State of Emer	gency' is required;									
Ap	proved by Inci	dent Controller	Name	Date	Time (24h								

Approved by Incident Controller	Name	Date	Time (24hr)
Sent to			
Actioned By	Name	Date	Time (24hr)
Received			

Version	Date	Status	Author/ Approved By	Details of Change
1.0	28/01/2014	Draft	S. Lees	New procedure based on: SEMP Policy 41 V5 SEMP OP-23
				WESTPLAN-FIRE (3/9/2013)
1.01	23/12/14	Final	D. Jones	Edit and update – possible escalation level to 2. Sec 3

3.3 BOP 3.03 Situation Reporting

Turn Out Message

The Incident Controller (IC) is to transmit a message upon turn out to confirm:

- 1 The identity of the responding appliance and crew
- 2 The type of incident
- 3 Location of the incident

Arrival Message

The IC shall notify the Chief Bush Fire Control Officer (CBFCO) or delegate upon arrival at the fire incident.

The arrival message confirms the arrival of the first appliance and communicates an immediate assessment of the incident. The arrival message should also confirm the location of the incident.

This information alerts the CBFCO (or delegate) of the need to mobilise additional resources.

Situation Reports

On Arrival - Initial Incident (PAFTACS) Report

After arriving at the incident and after completing an initial size-up the IC is to provide a PAFTACS to the CBFCO (or delegate). This should occur within 5 minutes of arrival at the incident. (See Appendix 1)

Ongoing Verbal Situation Reports

At 15 minute intervals ongoing situation reports must be provided to the CBFCO (or delegate).

Important details to be reported include:

- control point location
- current fire status, potential spread and losses
- best access to fire for further resources
- fire size and perimeter
- fire behaviour (rate of spread, flame height, spotting)
- factors contributing to fire behaviour (fuel, local weather, topography)
- resources present, resources required
- control problems or exposures
- water point locations
- fire cause, if known.

Any significant change in fire behaviour or significant event must be reported immediately.

Written Situation Reports – Within the First Hour

If the Incident Control Van (ICV) has been deployed and is operational, the IC should (as soon as practical) prepare the following AIIMS reports and fax them to the CEOC:

- AIIMS Form 1 (See Appendix 2)
- AIIMS Incident Map (See Appendix 3)

Regular, ongoing written situation reports must be provided when the incident changes. Subsequent situation summary reports from the fire ground can be requested by the CBFCO (or delegate) or the CEOC.

The CBFCO will relay the available situation summary reports to the DFES Great Southern Regional Headquarters for information purposes.

Subsequent Situation Reports

Subsequent messages should be sent from the fire ground to the CBFCO or CEOC providing information about the progress of operations so the IC is kept informed about what is happening on the fire ground.

Situation Reports to Fire Ground Crew

All personnel must be kept informed of relevant and accurate information regarding the incident through the provision of timely briefings (*Refer BOP 3.12 Briefings*)

Situation Reports to DFES

DFES is to be kept informed of changes to the incident status throughout the duration of the incident.

The following information is to be sent to DFES:

- Incident start report
- AIIMS Situation Summary (Form 1)
- Change in status and/or scaling up reports

Under Control Message

OIC is to transmit an 'under control' message to the CBFCO (or delegate) to confirm when the incident is under control and the resources at the scene or en-route are sufficient.

Incident Closure Message

The incident closure message is sent to ComCen via the CBFCO or delegate. Incidents should not be closed if there are plans in place for further patrols/mop up.

Bushfire Status

The reportable status of bushfires reflects the graded stages of bushfire suppression from *going* through to *safe*. Bushfire status is defined as follows.

STATUS	DEFINITION/MEANING
Going	The fire is spreading/expanding at its perimeter
Contained	The spread/expansion of the fire has been halted
	Suppression activities are continuing
	Note: A contained fire may still be burning freely within control lines
Controlled/	The complete perimeter of the fire is secured and no breakaway is expected
Under Control	Continued patrolling of control lines is required
	Mop-up and blackout are continuing
Safe	The fire requires no further suppression action or patrols - Resources will be
	stood down. Only the IC may declare a bushfire 'safe'.

Document History:

Version	Date	Status	Author/ Approved By	Details of Change
1.0	17/10/13	Draft	S. Lees	New procedure based on: DFES Directive 3.2 Incident Control V1.5
1.01	23/12/14	Final	D Jones	Repositioned SITREP inclusions under initial SITREP. Also added incident closure message.

Appendices

Appendix 1 PAFTACS Report

Appendix 2 AIIMS Situation Summary Report (Form 1)

Appendix 3 AIIMS Situation Map

OPERATIONAL CONSIDERATIONS

(Checklist for first arriving Firefighters)

The checklist below is a list of operational **considerations** for the first arriving fire crew when giving the first SITREP to COMCEN or your normal reporting lines.

	POSITION AND PROPERTY THREATENED
P	 Assess the situation
	 Exposures/assets at risk/critical infrastructure
Λ	AREA
	Size of fire
	FUEL DENSITY AND TYPE
	 Estimate rate of spread (ROS)
	TIME TO CONTROL
	Establish IMT
	 Decide on objectives, strategies and tactics
	Consider delegating key functions
	ASSISTANCE REQUIRED
A	Traffic Management
A	Road closures
	Additional resources
-	
	COMMUNICATIONS AND CONTROL POINT
	 Radio frequencies/Communications plan
C	Location of control point
	 Consider media and public advice/warnings
	SURFACE WIND STRENGTH AND DIRECTION
S	
3	Send SITREP
	Safety is first priority

NOTE: The above checklist should only be utilized for the first arriving Incident Controller.

124			INFOR	MATIVE	- FORM 1		AIIMS - 2.1 / V1.0							
Opera Date:	tion Period	Incident I	Name:	ln	c / OCN #:	Date Pr	epared:	Tim		Prepared by:	No:			
Fm:	To:							Prepared:			Of:	_		
Controlling Ag			Command Cha	nnel:			$\overline{}$		AIIMS	evel:				
Cond onling Ag		- B							-			eva.		
Control / Operations Point Location:					Мар Ке	ference:		elephone	e No:	<u>'</u>	Fax No:			
I.C.:					Deputy K	2								
Contact No.	(Emergency Use (Only):			Contact N	lo.	(Emergen	cy Use Or	nly):					
PO:				00:					LO:					
Contact No:					Contact No:				Cor	itact No:				
(Emer	gency Use Only)				(Emergency Us	se Only)			(Em	ergency Use (Only)			
Control Objective:	Objective 1													
	Objective 2													
	Objective 3													
Incident Statu	s Uncontrol	ed	На		Cont	tained	Ha			Safe	Ha			
Anticipated Ti	me of Control:	Date:			Time:									
Saves:														
Losses:														
At Risk: (critical														
infrastructure)													
Number of Re	sources			In Attendance										
	Appliances	Personne	el	Water	Bombers		Police	:						
FESA			_	Helitac	s		Salv A	Salv Army						
FRS				Air Atta	ack		SES							
SES				Air Ree	ce		FLO		_			-		
BFS				Ambul			ARFF		+			-		
Private				Chapla			—	Centre	+			-		
Machinery	_		—	First Ai			W/Po		+			-		
DEC			—	Local G	iovt		USAR		+			\dashv		
LGA TOTAL			-	MLO			ISG			l				
	DI 1 P2 47													
Management Communication	Plans in Place (V)		0	w Chang			$\overline{}$	RuchE	e Respons			\dashv		
Traffic			-	Change			+	Recover				$\dashv \dashv$		
Welfare			-	dical			+					$\dashv \dashv$		
Community W	/arminar:	P.I.O					Cont	oct No:	$\overline{}$					
Community M Community Al		F.1.0	\vdash	State A	lert			a Release	. +	SEWS	Т			
Other														
Approved By:					C	At Date:								
жругочей бу:					Sent									



INCIDENT MAP

GOTTENSION OF SECULOR SECU																			
Ope	peration Period																		
Fm:	Em·		Incident Name:			Inc / OCN #: Date Pre			te Prepared: Time Prepared:			Prepared by:							
· · · · ·	····					I										No:	_		
To:	To:											of:							
=								<u></u>			_		_						
Provide a	map or	copy if a	vailable, e	else prep	are a det	ailed sket	tch using	this grid.	[Grid is	approx.	icm x i c	m]							
											1 1								
\vdash											-				_		_		\vdash
											1 1								
\blacksquare																			_
											1 1								
																			\vdash
ldot																			\perp
											1 1								
\vdash											-	_			_		_	 	
$ldsymbol{ld}}}}}}}}}$																			
\vdash										 	\vdash	-	_		_		-		\vdash
																			Г
\vdash										<u> </u>	\vdash								\vdash
											1 1								
																			\vdash
ш																			$oxed{oxed}$
											1 1								
\vdash											-				\vdash		\vdash		\vdash
\vdash											-								\vdash
											1 1								
\vdash											\vdash								\vdash
											1 1								
																			T
ldot											\vdash				<u> </u>				╙
											1 1								
																			\vdash
ldot											\sqcup								$oxed{oxed}$
$\vdash \vdash$										\vdash		\vdash							
Scale	1:																		
⊗		-Corpor		-		Division	Bounca	rý.	\mathfrak{Q}		elipad								
•		-Hol Sign	4	-	-	Sectors	lev metary		Θ	9 11	diface								
*		e Lite		-		Evansa	tion (cont	ls:	⊕((a) h	irbswy/Air	atrip							
		v:Directio			()	Caintrol	Paint		€	8	ase Camp								
Million.		e strape/L	Jurnit Are	J	Õ		Centre		(2)	, v	Cater Poin								
-	_	ellinger Contained			©		nal Comm	and	0	, ,	Sato Poin								
		Active Predicted			$\widecheck{\odot}$		Commune		⊚	, v	Gelor Poin								
шш	. н.	digue			$\widetilde{\odot}$		tion Cent		(%)	10	nad Cicsure on		10						
11111		Completed Planned			(B)	Roruge			9	r	olice Locar								
		arhine Cu	Lines		000 0 00	Medica	I.		\odot		mbat were	Location							
		at times of atrol Lines			\odot		Ny Arca			1.	upl:								
XXXXX		Completed			(<u>©</u>)	Staging			TA		replened	Asset							
X-X-X-X-X		Somet			$(\underline{\omega})$	Access	fornt												
Approve	d By:																		

3.4 BOP 3.04 Incident Communications

General

All incidents require efficient communication plans and usage to ensure effective incident management.

Radio Communications

Command Channels

The City of Albany (CoA) Bush Fire Brigades use WA Emergency Radio Network (WAERN) command channels.

As VHF duplex channels are transmitted over an extended range via repeaters these channels will be used for command purposes. The preferred duplex channels in the City of Albany are, Channel 101 (SW Sector) and Channel 204 (NE Sector).

Hand held radios do not have the power to communicate over long distances and should not be used for communications on duplex repeater channels.

Command Channel	Туре	Use
101	Duplex (high-band)	Command channel - South West sector
204	Duplex (high-band)	Command channel - North East sector
354 - 369	Simplex (high- band)	Sector communications

In order to release command channels for other incidents fire ground communications should be taken off command channels as soon as possible. The incident controller should look to doing this as soon as a second appliance arrives on scene. If this is achieved the IC must continue to maintain communications with base via the relevant command channel.

Repeater Failure Response

If the command channel repeater fails command communications will revert to the following channels. Approval from the relevant DFES/DPaW Duty Officer must first be obtained prior to using the alternative channel/s.

Command Channel	Alternative Channel	Use
101	Opt 1 - 267 (DFES)	Alternative Command channel -
	Opt 2 - 546 (DPaW)	South West sector
204	Opt 1 - 203 (DFES)	Alternative Command channel - North
	Opt 2 - 546 (DPaW)	East sector
354 - 369	Simplex (high-band)	Sector communications

Any change of command channel could be confusing unless managed carefully. For this reason the initial message to 'change channels' will be managed by the CBFCO (or delegate).

Incident Sector Channels

As simplex channels, Hi-band Simplex or UHF, are suitable for transmitting over shorter distances they can be used for smaller incidents or for sector communications. Hand held radios are ideal for these purposes.

Communications Protocols

Operational networks can carry heavy traffic loads, particularly at the early stages of an incident. This can result in misunderstandings, missed and simultaneous transmissions and/or unnecessary traffic. For these reasons all operators should adhere to DFES standard communication protocols. This will help maximise communication effectiveness:

- 1. Observe and acknowledge all command/safety messages and priority calls.
- 2. Listen before commencing transmitting in order not to transmit over other users.
- 3. Radio messages are to be:
 - Short, concise and focussed on operational matters
 - Utilise radio call signs, not names
- 4. The radio network is not to be used for private purposes.
- 5. All fire ground communications are to be via the IC (or delegate).

Red Flag Warnings

Red Flag Warnings provide a means of ensuring critical information (such as fire weather changes) is transmitted, and confirmed as being received and understood, by all personnel at an incident. Red Flag Warnings are precise messages that convey information regarding hazards, or possible hazards, to all personnel at an incident.

All personnel must be familiar with the Red Flag Warnings process. (*Refer to BOP 3.05 Red Flag Warnings*)

Emergency Message

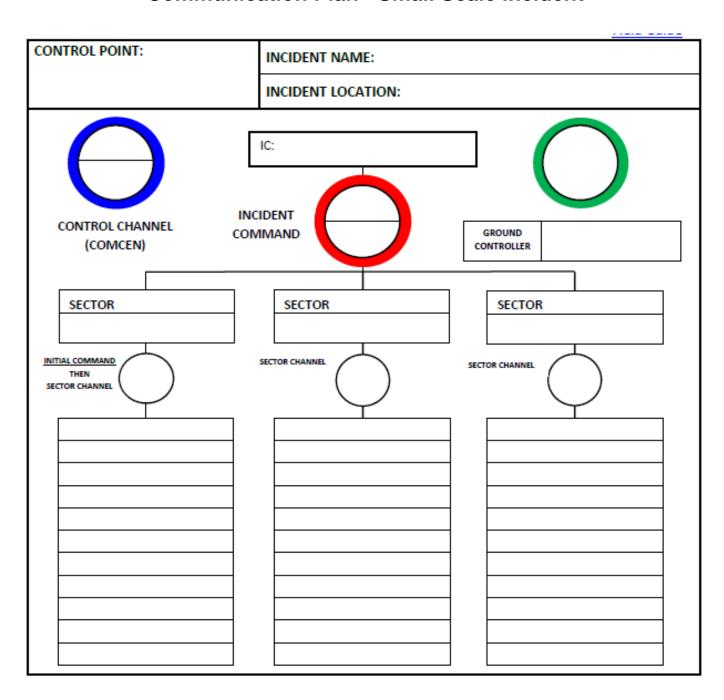
An emergency message must only be transmitted when personnel are in grave and imminent danger and require immediate assistance.

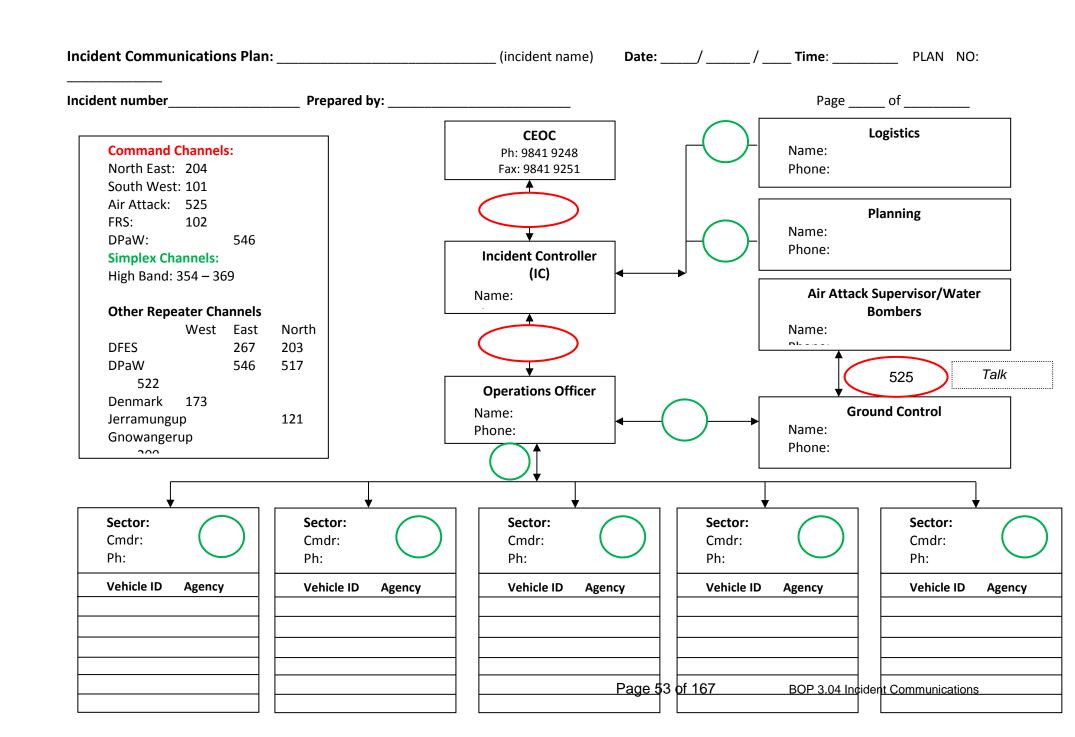
An emergency message commences with the pro-word, 'emergency, emergency, emergency' followed by the name and call sign of sender.

- All stations hearing the emergency message are to immediately cease all transmissions and listen for the message and log the initial, and subsequent, messages.
- The base station/Incident Controller will deal with all traffic and issues related to the emergency call.

Version	Date	Status	Author/Position	Details of Change
1.0	22/01/2014	Draft	S Lees Project Officer	New procedure based on: DFES SOP 3.2.4 V1.1 DFES SOP 3.2.5 DFES SOP 3.5.2
1.01	21/3/2014	Update	D Jones	Update procedure based on DFES Safety Circulars 03/2014 and 100/2013.
1.02	23/12/14	Update	D Jones	Included repeater failure response and reference to UHF use.
1.03	7/1/2015	Final	D Jones	Inclusion of small incident communications plan and intent to get fire ground communications off command channels

Communication Plan - Small Scale Incident





3.5 BOP 3.05 Red Flag Warnings

Introduction

Experience during major bush fires has shown that a lack of timely and critical information by personnel at an incident has led to injuries and fatalities.

Purpose

Red Flag Warnings are used to communicate actual or impending hazards to all personnel at an incident. Changes such as weather changes, hazardous materials, significant changes to fire behaviour or equipment failure can have significant effect on fire-ground operations. For this reason the Red Flag Warning system was adopted to ensure critical communications are received and receipt is acknowledged.

Red Flag Warning - Standard Format

Red Flag Warnings must use a standard text format:

'Red Flag Warning. Personnel are advised of *<actual/forecast where appropriate>* conditions that may present a hazard to personnel as follows: *<actual/forecast conditions>*. Personnel are to *<describe specific actions to be taken>*. This message is to be passed to all personnel under your command.

Acknowledgement is required."

Example Red Flag Warning:

'Red Flag Warning. Personnel are advised of a forecast wind change that may present a hazard to personnel as follows: wind speed is forecast to increase to 50kph by 1500 hours. Wind direction remains unchanged. Personnel are to <describe specific actions to be taken>. This message is to be passed to all personnel under your command. Acknowledgement is required."

Issuing a Red Flag Warning

The **trigger** (critical information) for a Red Flag Warning may be **identified** by anyone within the control structure, including the Operations Officer, Division or Sector Commander, Chief Bush Fire Control Officer, Deputy Bushfire Control Officer, City of Albany Emergency Operations Centre or DFES Staff.

The critical information should be passed to the Incident Controller who is responsible for **issuing** the Red Flag Warning.

When a Red Flag Warning is issued the following information must be entered in the incident diary:

Initiator Actions	Incident Diary
Record text	Decision to send
	Red Flag Warning text
Detail recipients	List recipients
Send message	Time message sent
Record acknowledgement	List confirmed recipients individually
Record message passage	Record the confirmation that the message has been passed on
Record confirmation	

Receiving and Passing on a Red Flag Warning

Recipients must clearly acknowledge the receipt of the message and log the receipt of the message.

When a Red Flag Warning is received the following information must be entered in the incident diary:

Recipient Actions	Incident Diary	
Record text	Red Flag Warning text	
Detail recipients	List recipients	
Send message	Time message sent	
Record acknowledgement	List confirmed recipients individually	
Record message passage	Record the confirmation that the message has been passed on	
Record confirmation	Confirmation of group receipt and report up the chain of command	

Failure to Acknowledge

If at any point an intended recipient fails to acknowledge the receipt of the message, the sender must keep trying to contact them by any means available until acknowledgement is received.

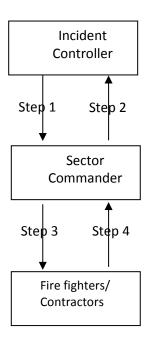
Example:

Step 1: Red flag warning message sent by Incident Controller (IC). Time sent and text logged.

Step 2. Sector Commander (SC) acknowledges receipt and understanding of message and logs time received. Acknowledgement of receipt by SC is logged by IC.

Step 3 SC forwards message to crew members and any other personnel under his or her control.

Step 4. Acknowledgement of receipt of the warning by personnel under his or her control is logged by SC.



Version	Date	Status	Author/Position	Details of Change
1.0	17/10/2013	Draft	S Lees Project Officer	New procedure based on: DFES SOP 3.2.7 – Red Flag Warnings V1.2
1.01	23/12/14	Final	D Jones	Final edit and update

Introduction

T Cards provide a standard method of identification of brigade appliances and crews at incidents. T Cards help the Incident Management Team keep accurate records of personnel and vehicles on the fire ground and their location.

Description

T Cards use a colour system to easily identify different appliance types and the different roles held by various personnel. Each appliance must have a supply of correct T Cards:

Light Yellow: Fast Attack (Light Tanker)

Lime Green: 2.4 TankerBlue: 3.4 Tanker

Orange: Incident Controller and IMT Roles

• Buff: Machinery – all types

• Red: Fire and Rescue Vehicles – all types

• Dark Green: DPaW Vehicles – all types

As from July 2016 AIIMS standard T-Cards use is:

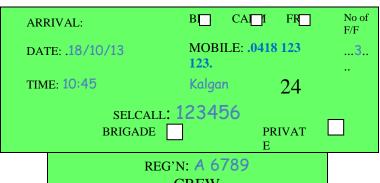
Yellow BFB
Dark Green DPaW
Red FRS/VFRS
Light Blue Air Operations
White IMT Roles.
Beige Machinery.

The City of Albany will transition to this standard when existing supplies are exhausted.

Use

All incoming Crews are to complete and present their completed T Cards to Incident Controller or Control Point. The Crew Leader must complete the following details as shown below:

- The date and time of arrival.
- Contact mobile phone number.
- Number of personnel in the crew.
- The unit name
- The unit's Selcall number.
- Appliance's registration number.
- The full name of the Crew Leader
- The full names of the other crew members.



REG'N: A 6789 CREW
LDR: Bill Smith
Greg Jones
Mike Green
DEPARTUR E:
DATE: TIME:

Use in Incident Control

T-cards are to be handed to the Incident Controller (or delegate) upon arrival at the Control Point.

The T Card is then placed in the Incident Management Board (Battle Board).

Departure

When the Crew are released from the incident, they must log off via the Incident Controller/Control Point with the departure date and time noted on the T Card. The T Card is filed for future reference.

When the appliance remains and a relief crew attends the incident a new T-Card shall be completed.

Record Keeping

T Cards are to be collected and filed against the incident number at the conclusion of the incident. These records will be retained by the City of Albany.

Related Document:

DFES SOP 3.2.6 – T Cards and Incident Management Boards

Version	Date	Status	Author/Position	Details of Change
1.0		Draft	S. Lees	New procedure based on:
				DFES SOP 3.2.6 V1
1.01	23/12/2014	Update	D. Jones	Change of word from team to crew.
1.02	27/2/2015	Final	D. Jones	New DFES SOP 3.2.6 (Jul 2016).

3.7 BOP 3.07 Spot Weather Forecasts

Introduction

Spot Weather Forecasts are site-specific forecasts issued by the Bureau of Meteorology (BOM). They contain information that can assist with decision making at fires.

Where a spot weather forecast has been requested, the Incident Controller must ensure spot forecast details are provided to all crews at an incident.

The spot forecast content may trigger a Red Flag Warning. (Refer <u>BOP 3.05 Red Flag Warnings</u>) by the Incident Controller.

Requesting a Spot Weather Forecast

The Incident Controller (IC) can request a Spot Weather Forecast through the CBFCO (or delegate). To assist this, the IC is to provide latitude and longitude details.

The following procedure is required when ordering a Spot Weather Forecast:

- Before ordering a spot forecast check access the BOM registered user's portal to see if a forecast already exists for a nearby location.
- Complete the Spot Weather Request Form (<u>See Appendix 1</u>)
- Convert latitude and longitude (d,m,s) to decimal degrees to 2 decimal places. (A conversion calculator is at http://transition.fcc.gov/mb/audio/bickel/DDDMMSS-decimal.html)
- Provide observed weather conditions at the nearest locality including time, temperature, dewpoint, relative humidity and wind direction and speed.
- Email the request to <u>wa spotfire@bom.gov.au</u>. The subject of the email should read "Spot Fire Forecast Request". The body of the email is to include the following: "To the BOM Duty Forecaster, please find attached a Spot Fire Forecast for _____ (location)." Ensure your name and contact details, and fax number are included in the email.
- If email is unavailable the form may be faxed to BOM on 9263 2261. To ensure guicker response contact BOM on 9263 2260 to alert forecasters to the request.
- Short term spot forecasts are closely monitored to ensure accuracy. Forecasters will issue an update (without being requested to) if they determine that observed or expected conditions are significantly different from those forecast.
- Incident Controllers should request a 4 Day Outlook when planning patrol and mop up operations. This information complements a Spot Forecast.

Interpreting a Spot Weather Forecast

It is vital the Incident Controller read and understand all the information contained in the Spot Weather Forecast.

The section headed weather forecast and significant wind change and uncertainties section of the forecast is extremely important.

This section contains information which may not appear in the table of forecast weather elements.

Action to be Taken

The information contained in the 'significant wind change and uncertainties associated with the forecast' is to be:

- Repeated back to the sender to indicate that the receiver understands and acknowledges the information;
- Be recorded in the incident diary;
- Confirmed to all members of the IMT;
- If within the timeframe of the current shift, communicated through a RED FLAG WARNING (refer <u>BOP 3.05 Red Flag Warnings</u>).
- If the timeframe falls within the next shift period, the information must be included in the SMEACS handover (*refer BOP 3.12 Briefings*)

Appendices:

Appendix 1 - Spot Weather Request Form

Appendix 2 – Sample Spot Weather Forecast

Version	Date	Status	Author/Position	Details of Change
1.0		Draft	S Lees	New procedure based on DFES Operational Circular 00479 Feb 2013
1.01	23/12/2014	Final	D Jones	Edit for accuracy and added 4 Day Outlook Requirement
1.02	13/02/2017	Update	S Lees	Corrected link to decimal conversion website, updated instructions for accessing existing spot forecasts on BOM website, added link to Elders Weather.



Spot Fire Forecast Request Form

A 12 hour Spot Fire Forecast will be provided unless requested otherwise. Fields marked with an asterisk are required, others are optional.

Incident Lo	cation and Deta	ils	•	·	
*Current Dat	te:/	*Current ti	me V	/ST.	
Forecast Da (default foreca	te & Start Time: ast start time is the	hour following t	@ he current time.)	WST	
*Incident / Lo	ocation:				
*Location (de	ecimal degrees)	S	°E	<u> </u>	
*Type:	Prescribed B	urn Bush	nfire St	uctural I	Hazmat
Elevation (al	oove sea level) _	(metres).	. Curing:%	defaults to subdistri	ict value).
Comments:	(including reque	st for an 18 hou	ır / 24 hour / 4 da	y Spot Fire Forecas	st).
Current obs	served weather	conditions at	(or near) spot fo	recast location	
Location:		D	ate/time:/	/	
Site Exposure:	Well Expo		Some obstruction	Under o	canopy
Air Temp (°C)	Dew Point (°C)	Relative Humidity (%)	Wind Direction (eg S/SW)	Mean wind speed (km/h)	Wind gust (km/h)
		, ,			
Wind moasu	red using:		at a baigh	of (m):	
Weather	Cle	ar	Rain in area	Lightning	or thunder
*Contact De	etails				
Contact na	me:	·	DI	ES DEC	Other
Phone:		Fax 1:		 _ Fax 2:	

Please email Spot Fire Forecast Request to wa_spotfire@bom.gov.au. An alerting phone call to the Fire Weather Forecaster on 9263 2260 will facilitate a faster response time.

© Bureau of Meteorology, WA Regional Office, February 2013 Z:\FIRE\NexGenFWS\spot_forecasts\request_forms

Appendix 2 – Sample Spot Weather Forecast



IDW30500 Australian Government Bureau of Meteorology Western Australia

Spot Fire Weather Forecast for DPaW Pearce

Issued at 7:51 am WST on Monday 27 October 2014.

Incident Type: Prescribed burn Website Form No: 001

Spot Forecast Location: Pearce Request No: 743

Latitude/Longitude: -31.67 116.02 Fax Number: 93679913

Elevation (metres ASL): 40 Contact Ph: 92199108

Fuel Type: Not required Contact Name: DPaW

Observed Conditions at Pearce RAAF Base				Wind (km/h)		
Local Time	Temp (C)	Dewpt (C)	RH (%)	Dir	Speed	Gust
0700	15.4	11	75	E	9	19

Weather Forecast starting 0900 hours Monday 27 October 2014

Significant wind changes and uncertainties associated with the forecast

Winds becoming light and possibly variable prior to onset of sea breeze expected between 1230 - 1430WST. E/SE'ly change expected around 2300WST.

18 Hour Forecast									
Curing value (%): 30									
Local Temp	Temp (C)	COMMAND CONTRACTOR CONTRACTOR	RH (%)	10m Wind (km/h)			1000m AGL Wind (km/h)		GFDI
				Dir	Speed	Gust	Dir	Speed	
0900	21	10	49	E	10	15	NE	5	0
1200	26	9	34	SSE	5	10	E	5	0
1500	28	10	32	SSW	15	30	SE	5	0
1800	23	12	50	SSW	25	35	SE	20	0
2100	18	10	59	S	10	15	ESE	25	0
0000	16	8	59	E	15	25	E	20	0
0300	14	6	58	E	15	25	ENE	20	0

AGL - Above Ground Level, RH - Relative Humidity, Dir - Direction, Dewpt - Dew Point

3.8 BOP 3.08 Public Information During Incidents

Introduction

There is an identified need for communities threatened, or impacted, by emergencies to have timely and accurate information so they can make informed decisions.

The need for public information, including the issue of emergency alerts and warnings, is to be considered during all phases of a bush fire.

(Refer City of Albany Policy – Public Information & Communications)

Responsibilities

The Incident Controller (IC) is responsible for using available facts to provide accurate, and timely, information to the public. It is critical information provided to the media and the community is accurate, consistent and should be approved by the IC. A process of one source, one message ensures this.

The IC may delegate the role of Public Information Officer (PIO) who is responsible for sourcing the necessary information from the IC and disseminating it in accordance with DFES guidelines.

Emergency Alerts and Warnings

Alert Levels

The nationally agreed system of bushfire alerts is to be used. The alert levels are:

- Advice
- Watch and Act
- **Emergency Warning**
- All Clear

Warnings are published on the following website: www.emergency.wa.gov.au .

When to Issue Alerts and Warnings

The DFES Emergency Alert (EA) system is to be used to disseminate alerts and warnings to the community.

Alerts and Warnings should be activated as early as possible for incidents where there is a possible threat to lives or homes or where there is heightened community concern (such as a small bush fire generating a lot of smoke near homes or a number of roads are closed).

EA Request Procedure

The IC initiates a request for an alert or warning to be issued by contacting the DFES Duty Officer by telephone on 9845 5000. If telephone communications are not available, the request should be via the Chief Bush Fire Control Officer (or delegate) using the WAERN radio.

The DFES Bushfire Talking Points form (see Appendix 2) is used to ensure all critical information, available at the time, is communicated to DFES for public dissemination.

Updating Alerts or Warnings

Once an alert or warning has been issued, it is critical that timely updates are provided as the situation changes. The IC should provide updates via the DFES Duty Officer.

City of Albany Media Channels

The City of Albany can reinforce the message issued through the EA system via its internal media channels including its Facebook page and the City of Albany website.

The IC should contact the City of Albany Emergency Management Staff to initiate internal communication dissemination.

Media Briefing

Information disseminated to the media should be based on the facts know at the time and adhere to the *DFES Bushfire Talking Points* form (see <u>Appendix 2</u>) and/or the *DFES IC Media Points Field Guide*.

Incident Escalation – IMT Formation

If incident escalation warrants the formation of an Incident Management Team (IMT) and establishment of the City of Albany's Central Emergency Operations Centre (CEOC), the role of PIO may be assumed by another person (*refer CoA Policy- Incident Control*).

Appendices

Appendix 1 – <u>Public Information Flow Chart</u>

Appendix 2 – Bushfire Talking Points

Version	Date	Status	Author/Position	Details of Change
1.0		Draft	S Lees	New procedure based on
				DFES Directive 3.2 V1.5 SEMP 4.6 – Emergency Public Information WESTPLAN – Emergency Public Information DFES IC Media Points Field Guide
1.01	23/12/14	Final	D Jones	Reviewed
1.01	29/11/16	Final	S Lees ACRES	Added reference to the Emergency WA website

Appendix 1 Public Information Flow Chart

Incident Controller

- Identifies the need for public information
- Collates information as per Bush Fire Talking Points/Bush Fire Media Points
- Contacts DFES DO and passes on information
- Forwards information to City of Albany Emergency Management Staff
- Continually monitors situation and provides PI updates as required
- The IC may delegate the PIO role to another person
- If an IMT is formed and the CEOC established, the role of PIO may be assumed by another person

DFES Duty Officer

Forward information to DFES MPA

DFES Media & Public Affairs

Activates the EA system and updates Emergency WA website, Emergency Info line and ABC radio

CoA Emergency Management Staff

Alerts CoA Media Staff and Customer Services.

CoA Media Staff

Updates CoA media channels (website, Facebook)

Appendix 2 Bush Fire Media Points

Incident Details:

- Location/origin of the incident
- Start time and cause (if known)
- Streets/areas affected
- What is happening?
- Resources being used
- Number of fire fighters
- Number of appliances
- Other agencies involved
- Any relocations/injuries?
- Hectares involved
- Exclusion zones.
- Road closures in place. Expected re-opening timings.
- People are asked to stay away from (areas)

Key Messages / Public Safety Messages

- Close all doors and windows
- Turn of evaporative air-conditioners but keep water running through the system if possible.
- People need to be alert and watch for signs of fire.
- People are advised to put their bushfire survival plans into action now do not 'wait and see' as this can be deadly.
- Listen for updates on ABC radio or call the DFES information line on 1300 657 209.
- Updates are also available online at http://www.dfes.wa.gov.au

3.9 BOP 3.09 Incident Records

General

Incident records are a critical component of any formal or informal review and must be maintained and stored with this in mind. Incident records include all recorded data, AIIMS forms, message pads, spread sheets, T-Cards, maps, correspondence and completed incident diaries.

Fire Incident Diary

All members undertaking the role of Incident Controller through to Crew Leader, must maintain an incident log. The incident log shall record key messages, occurrences, reasoning and decision making.

The following guidelines apply:

- Incident diaries may be used for multiple incidents.
- No pages are to be removed.
- All records are to be made legibly in pen.
- Any corrections are to be ruled through with a single line and initialled.
- Copies of relevant diary pages should be handed over to a relieving officer, but the original diary must remain in the officer's possession.
- Each new incident is to commence on a new page with the following details included;
 - 1. Incident name, location and DFES Incident No.
 - Incident date.
 - 3. Incident appreciations including key decisions and, where necessary justification for that decision, significant events and actions taken, advice given or received.
 - 4. Other relevant information.

Fire Reports

Every incident, call out or false alarm needs to be accompanied by a fire report.

The fire report is to be completed using the standard City of Albany format and is to be completed by the Incident Controller or Fire Control Officer.

Fire reports should be completed within 24 hours and sent to staff@albany.wa.gov.au for City of Albany filing.

Version	Date	Status	Author/Position	Details of Change
1.0		Draft	S Lees	New procedure based on
				DFES D3.2 V1.5
1.01	24/12/14	Final	D Jones	Final edit and proof

3.10BOP 3.10 Bush Fire Response

Bush Fire Response Principles

The following principles/planning factors apply to all bushfire incidents and should be kept in mind at all times when attending a fire incident:

Principle	Description		
Crew Safety	Safety must be the first consideration at all fires. Adhere to LACES principles prior to and during fire fighting operations. (Refer BOP 4.01 Bush Fire Crew Safety)		
Personal Protective Equipment	All fire fighting personnel must be dressed in accordance with the required standard of PPE (<i>Refer BOP 4.02 PPE</i>)		
Briefings	All personnel must be kept up to date with accurate information regarding the incident. This is achieved by providing timely briefings (<i>Refer BOP 3.12 Briefings</i>)		
Water Supply	Identify suitable water supply to support fire fighting operations		
Observe Local Conditions	Meteorological Conditions: Note temperature, wind speed and direction and severe weather events.		
	Request spot weather forecast (Refer BOP 3.07 Spot Weather Forecasts)		
	Know when wind changes are due and disseminate information to all levels. (Refer BOP 3.05 Red Flag Warnings)		
	Fuel loads: There may be variation to fuel loads which provide opportunities to change tactics.		
	Topography: Slope and aspect will affect fire behaviour and rate of spread.		
Observe Fire Behaviour	Identify the head of the fire and, if possible, contain immediately. If not, work on the flanks where the fire intensity will be lower to pinch out the head fire.		
Contain to Control	Apply resources to contain & extinguish the fire.		
Site Control	Identify and preserve point of ignition site to allow further investigations if required.		
	Isolate areas of risk (including assets in the anticipated path of the fire) from public access.		
	Request WAPOL assistance if required.		
Public Exposure	Apply resources to prevent the spread of the fire to minimise further risk to the public.		
Public Information	Identify key elements of public information and advise the community as early as possible. (Refer BOP 3.08 Public Communications During Incidents)		
Confirm Site Safe for Departure	Conduct thorough assessment to confirm required black out standards have been applied.		

First Arriving Appliance

- The crew of the first arriving appliance assesses the situation. The Crew Leader of the first arriving appliance assumes the role of Incident Controller (IC). (Refer to BOP 3.01 Incident Control and Management)
- Transmit arrival message upon arrival and shortly thereafter an initial incident report (PAFTACS) to the City of Albany Radio Base. (Refer to BOP 3.03 Situation Reports)

Initial Objectives

The initial objectives at a bushfire are as follows:

- Ensure the safety of the fire crew and public at risk.
- Knock-down the running fire and establish a perimeter.
- Contain and extinguish the fire.
- If possible, identify and preserve the point of ignition.

Communications Plans

Regardless of the incident size, initial communications are via the appropriate VHF Command Channel.

Due to their limitations of range and penetration, UHF simplex channels should not be used as **incident command channels**.

UHF and simplex channels are to be used for sector communications.

(Refer to BOP 3.04 Incident Communications)

Positioning of Appliances

Appliances should be sited to minimise the exposure to hazards. Safety considerations when positioning appliances include:

- Ensure the appliance and crew are visible to other road users
- Position off roadways on hard, even ground (when possible)
- Positioned facing an escape point (generally with the rear of the vehicle towards the incident)
- Parked in a suitably sized safe zone
- Position clear of power lines or trees
- Remain clear of smoke, gases and contaminants
- Consider the ramifications of incident escalation
- Position so the crew has a good sight of the incident the pump panel
- Allow access for other emergency service vehicles.
- Emergency beacons and lights shall be turned on when on the fireground.

Safety

The safety of all personnel at an incident is paramount. Safety considerations are detailed in *BOP 4.01 Bush Crew Fire Safety*.

Making Safe

The IC is responsible for declaring a fire safe when they are certain it will not escape control lines and threaten the community by ensuring appropriate blackout standards are achieved. The IC will commit resources until the incident is deemed safe for the community.

A bush fire incident is deemed safe when:

- Fire perimeter is extinguished.
- Fire perimeter blackened (to a minimum of 20m or as specified by the IC. dependent on weather conditions).
- Vertical ignitions extinguished or removed (within 100m of perimeter or as specified by the IC, dependent on weather conditions).

Blackout requires the establishment of appropriate perimeter/firebreak for the size of the fire and current and forecast weather conditions. This means all potential re-ignition sources should be physically removed and/or extinguishment through the use of earthmoving machinery and/or dismounted personnel. The IC is responsible for deciding and declaring the minimum blackout standard. The IC is to ensure the following:

- The declared blackout standard is appropriate to the situation and clearly communicated to fire ground personnel
- Sufficient resources are retained on the fire ground to ensure the blackout standard is achievable and effective
- The bushfire is not declared safe until the following *minimum* blackout standard has been achieved.
- Blackout standards and objectives are included in incident control handovers.

FUEL DISTRIBUTION	BLACKOUT DISTANCE (from control line)s
Ground Fuels (grass, mulch, logs etc)	20 m
Vertical Fuels (trees, structures, fencing etc)	100 m

Departure from a Bushfire Incident

Crews released from a bushfire incident are to depart through the Control Point and ensure their T Card is removed from the incident battle board and the time of departure recorded.

Crew Leaders of departing crews are to assess the crew for possible fatigue prior to embarking on the return journey. Where fatigue levels have the potential to place crews at risk, Crew Leaders are to schedule a rest period prior to departure. Where an immediate return is required alternative return transport arrangements need to be made.

Rules for departure:

- Incident scene made safe
- Appliance/s made up
- Crew accounted for
- Scene handed over to land owner or legitimate authority
- Incident closure message sent to COMCEN via the CBFCO (or delegate)

Debriefings

Debriefing sessions are to be conducted at crew level by the Crew Leader after every incident. Debriefs should address any injuries or damage to equipment that needs attention. (*Refer BOP 3.12 Briefings*)

A review should be carried out at the conclusion of all incidents. Conducting a Post Incident Analysis (PIA) is useful as it provides a systematic approach to identifying areas for improvement and those for acknowledgement.

Larger, more complex incidents will require a formal, comprehensive PIA.

Version	Date	Status	Author/Position	Details of Change
1.0		Draft	S Lees	New procedure based on: DFES Directive 3.5 – Bushfire V1.5 DFES SOP 3.5.1 – Bushfire Response V1.1
1.01	5/1/2015	Final	D Jones	Reviewed - clarified

General

The methods used to contain, control and extinguish a bush fire are varied and influenced by many factors. Strategies fall into three broad categories:

Direct Attack

The direct suppression of fire fronts and edges can offer the greatest opportunity to restrict the spread of a bushfire. Direct attack techniques are to be employed when safe to do so.

Parallel Attack

Conducting fire fighting activities along the running edges of a fire can offer protection for fire fighters whilst restricting the spread of bushfires. Parallel attack techniques are to be used when it is not safe to use the direct attack approach.

Defensive Tactics

Where conditions prevent the application of resources against the fire front, the IC is to adopt defensive strategies to protect life, property and key infrastructure. A return to offensive tactics can be considered when it is safe to do so.

Creating Sectors

As fire incidents grow in size it is necessary to scale up operations. Creating sectors and appointing Sector Commanders allows the IC to better manage the incident.

In line with AIIMS principles, the span of control for any supervisor should not exceed five.

The decision to create sectors, the location of each sector and the identity of the Sector Commanders must be clearly communicated to all fire ground personnel.

Sectors may be physical or functional in nature. Sectors *are* to be created at bushfires under the following circumstances:

PHYSICAL SECTORS	FUNCTIONAL SECTORS
Where the number of active appliances on the	Backburning. Where crews are tasked to
fire ground and reporting to the IC/Ops Officer	undertake a backburn. The decision to
exceeds the accepted span of control (> 5)	backburn must only be made by the IC and be
	communicated to all on the fire ground.
Where the terrain causes crews to operate	Evacuation. Where considerable and dedicated
beyond the physical management of the IC/Ops	resources are tasked exclusively with
Officer	evacuation
Where multiple fires are occurring	Water. Where the provision of water supplies
	requires dedicated management
Where the fire activity on a particular flank	Aerial Suppression. Where the guidance of
requires dedicated management.	aircraft requires dedicated management.

Aerial Suppression

The use of aircraft at bushfires can greatly assist ground fire fighting operations. The IC will determine if aerial suppression resources should be deployed at an incident.

The IC is to ensure the following actions are undertaken when utilising aerial suppression assets:

- The tasks for aerial assets are to be achievable, clearly defined and communicated to the aerial suppression resource
- A dedicated radio communications channel is to be established (usually channel 525).
- The aerial suppression task is supported with sufficient ground-based fire fighting resources.
- A suitably qualified Ground Controller is to be appointed. The Ground Controller must be briefed on the tactical requirements of the IC and operating on the appropriate control channel.

(Refer to DFES SOP 3.5.3 – Ground Control of Aerial Suppression Platforms) Backburning.

When conditions are favourable, backburning is a legitimate method of controlling a running bushfire. However, backburning involves inherent risk and should not be used if conditions are unsuitable.

Backburning is only to be conducted at the direction of the IC.

The IC is to ensure that prior to conducting a backburn, the following prerequisites have been met and noted in the incident diary.

PREREQUISITE	NOTES			
Reasoning Justified	 The requirement/opportunity to backburn has been reasoned and established and recorded in an incident diary. 			
Risk Assessed	 Meteorological conditions are suitable (and BOM forecast indicates conditions will remain suitable) Vegetation types/fuel loading are suitable 			
Resources Assessed & Positioned	 Sufficient resources are in position to safely establish the new containment line created by the backburn A reserve of resources are in position to safely respond to any breakout created by the backburn 			
Safety/Notifications	 All personnel on the fireground have been made aware of the following: The intention to conduct a backburn The timing, location and extent of the backburn The route/s and system of reporting the evacuation of operational personnel from any known or potentially hazardous locations created by the backburn 			

Guidance for the use of drip torches in support of bushfire operations is at <u>BOP 4.05</u> <u>Using Drip Torches Safely.</u>

Use of Suppressants (Foam)

Fire fighting foam contains surfactants and wetting agents that improve the efficiency of water as an extinguishing agent.

However, suppressants pose some dangers to the environment; therefore it is the IC's responsibility to decide whether or not it is appropriate to use suppressants at an incident.

(Refer BOP 3.14 Use of Class A Foam)

Heavy Machinery

Earthmoving equipment can be used to quickly and effectively create firebreaks. ICs are permitted to use earthmoving machinery to assist with fire management.

(Refer BOP 3.15 Use of Heavy Machinery at Bush Fires for details).

Version	Date	Status	Author/Position	Details of Change
1.0	22/01/2014	Draft	S Lees	New procedure based on DFES Directive 3.5 V1.5 DFES SOP 3.5.1 V1.1
1.01	5/1/2015	Final	D Jones	Clarified earthmoving equipment use and reviewed remainder of document.

3.12 BOP 3.12 Briefings

Introduction

Incident briefings ensure that consistent, relevant and accurate information is communicated to all personnel and to ensure a well-coordinated operation is carried out. The level of detail provided at a briefing will depend on the amount of information available to the IC at the time.

All briefings shall adhere to the SMEACS format and be clear and concise.

All briefing notes, display material and maps shall be retained and filed with other relevant incident documentation. (Refer BOP 3.09 Incident Records)

Responsibilities

Personnel with leadership roles shall ensure that the crew/s under their command do not commence any task until the crew has been briefed. It is the responsibility of every person at an incident to ensure they personally understand the details of the briefing before accepting a task.

Briefing Schedule

It is essential that new and updated information is provided to all personnel and that changes are communicated in a timely manner.

Information disseminated at a briefing shall be consistent with the available information and relevant to the circumstances.

Briefings should be conducted as follows:

Initial Deployment Briefings:

Are provided by the Incident Controller (IC) to the crews responding to the initial turn-out. May be given verbally with the key details recorded in the IC's incident log.

Subsequent Deployment Briefings:

Provided, by the IC, to crew members of additional appliances arriving at the incident. May be given verbally with the details recorded in the IC's incident log.

Situation Update Briefings:

Provided to advise personnel of situational changes, adjustments to the Incident Action Plan (IAP) and safety alerts. May be provided verbally but shall be supported by written updates to the IAP and recorded in the incident log.

Delegation Briefings:

Provided to personnel who have been delegated responsibility for any function or position within the Incident Management structure.

General Information Briefings:

Provided to incident personnel, media representatives, other agencies and the general public in locations such as staging areas and welfare centres.

Handover Briefings:

Where there is a change of IC a formal handover is to occur *irrespective of the size/level of the incident*. Incident handovers are to adhere to the standard SMEACS format.

Briefing Format - SMEACS

The standard SMEACS briefing format is to be used for all briefings (see Appendix 1 for sample <u>SMEACS checklist</u>):

S - Situation

Identifies and outlines the past, present and predicted incident situation. Includes the following:

- History
- · Current situation and behaviour
- Predicted Situation
- Values at Risk
- Forecast Weather
- Current Weather
- Resource Deployment

M - Mission

• A concise statement of the incident objectives.

E - Execution

- How the incident mission is to be achieved.
- Divisions and sectors (may be functional or geographical)
- · Strategies for each incident objective
- Tactics
- Task and recovery allocation (including other agency support)
- Authority to act
- Hazards known and anticipated
- Welfare requirements (for fire fighters)
- Part to play for those receiving the briefing
- Implications of not achieving work targets
- Dress requirements (PPE)
- Time constraints and deadlines

A – Administration and Logistics

- Location of control, command and support facilities
- · Ground support, catering and medical assistance
- T-Cards, logs, diaries and record keeping
- Finance and accounting requirements

C – Command and Communications

- Incident management structure
- Incident status (Level 1, 2 or 3)
- Communications plan
- Reporting requirements

S - Safety

- Injury / Near Miss
- Safety Issues

Appendices:

Appendix 1 – <u>Sample SMEACS checklist</u>

Version	Date	Status	Author/Position	Details of Change
1.0	20/11/2014	Draft	S Lees	
1.01	5/1/2015	Final	D Jones	Reviewed

SMEACS BRIE	IST		AIIMS - 2.2 / V1.0)		
Operation Period	Incident Name:	Inc / OCN	Date	Time	Prepared by:	Sector:
Fm:		#:	Prepared	Prepared		
To:						
BRIEFING PRELIMI	-			• Introduce yours		
	iefing, e.g. overview, d	lelegation,			oose of the briefing	
changeover	lanta Conservatore Conservatore	L 1.15-4		• Set the rules of	the briefing	
	briefing points from clear the verview of the Situation					
	verview of the Situation)n 				
History						
Current Situation						
Predicted Situation	1					
Values at Risk						
Forecast Weather Current Weather						
Resource Deploym	nent .					
M - MISSION	ient					
		1				
Incident Objective E – EXECUTION	res					
		T				
Divisions & Sectors						
	Incident Objective					
Tactics						
Task & Resource A	llocation					
Authority to Act –	Responsibilities					
Known Hazards						
Welfare Requireme	ents					
Part to play for the	se receiving briefing					
Implications of not	achieving work					
targets						
Dress requirement	s (including PPE)					
Time constraints &	deadlines					
A - ADMINISTRAT	TION and LOGISTIC	S				
Location of contro	l, command &					
support facilities						
Ground support, C	atering & Medical					
Assistance						
T-Cards, Logs & Dia						
Keeping						
	inting requirements					
C- COMMAND an	d COMMUNICATIO	NS				
Incident Managem						
Incident Status (Le						
	an (who, when, why)					
Radio Channels / E	quipment					
REPORTING:						
- To whom						
- By whom - When						
- wnen - Detail required e.	g sitren proforma					
- HOW (equipment						
S- SAFETY	c, charmets, 140 sj	l				
Injury / Near Miss						
Safety Issues						
BRIEFING SUMM	ARY	<u> </u>				
Ask questions to co understanding	JIIIIIII					
Issue supporting de	ocuments					
Summary						

Date

Time

Sign.

Name

Details of Group Being Briefed:		
To be Used by all briefing Office	rs at Sector,	To go to all incoming staff at Sector, Division,
IMT and SCC / RCC levels.		Division,
		IMT and SCC / RCC levels.

3.13 BOP 3.13 Declaring an Incident Safe

Introduction

The final step in the management of every incident is the act of 'declaring it safe. Incident controllers are to continue to commit appropriate numbers and types of resources until the incident is deemed safe for the community.

Characteristics of a Closed Incident

A bush fire can be declared safe and handed back to the land owner when:

- The fire perimeter is extinguished.
- The fire perimeter is blacked out to a minimum of 20m, or as specified by the IC, dependent upon forecast weather.
- Vertical ignitions removed and/or extinguished within 100m of fire perimeter or as specified by the IC, dependent upon weather forecast.
- The scene has been handed back to the owner or legitimate authority.
- No further tasking will be required, including no further requirement for patrols and/or mop up.

Closing an Incident

After determining an incident is ready to be declared safe the IC will notify the relevant base who, in turn, will advise Comcen.

Comcen require some/all of the following details; brigades and agencies attending, Incident Controller, cause and fire size.

N.B. Comcen require regular updates (min once daily) until an incident is declared safe.

Version	Date	Status	Author/Position	Details of
				change
1.0	11/2/15	Final	D Jones	Based on DFES
				SOP 3.2.3
				Making Safe

The use of Class A foam can enhance the effectiveness of fire fighting operations.

Application Ratio

Foam is supplied in concentrated form and must be mixed with water and aspirated for use. As a guide, the recommended mix ration is up to 0.03% concentration for bush fire fighting operations (equates to approximately one cup of concentrate to 2,000 litres of water).

Environmental Considerations

The use of foam can pose environmental risk to waterways, some agricultural operations and some fauna.

The IC is to ensure Dept. Environment Regulation (DER) and the applicable water authorities are notified if foam enters a water body.

The following factors should be taken into consideration by the IC before authorising the use of foam:

- Protection of Domestic Water Supplies:
 Domestic water storages contaminated with foam or wetting agents are to be flushed before re-use.
- Protection of Aquatic Environments:
 All possible care is to be taken to ensure that foam does not enter water bodies.
- Protection of Agricultural Interests:
 Care should be taken when using foam near agricultural operation to ensure that the foam does not contaminate crops or produce.

Safety Precautions

Safety considerations and guidance for operators using A Class foam concentrate and suppressants are as follow.

- All personnel are to adhere to the manufacturers guidance as detailed on the product MSDS (See Attachment 1 Material Safety Data Sheet – Class A Foam)
- Avoid Inhalation of Foam Vapours. Decant foam concentrate in well-ventilated areas.
- Avoid Ingestion of Foam Concentrate.
- Foam concentrate, and to a lesser degree foam solution, can be harmful. If ingestion occurs, seek IMMEDIATE medical attention.
- Wear Level 1 PPE, gloves and goggles where the risk of contamination exists (e.g. decanting)
- Wipe up any spilt concentrate
- In the event of personnel coming into contact with foam concentrate:
 - Eyes or skin immediately flush with clean water and seek medical assistance if required.
 - Soaked clothing remove and flush with copious amounts of water as soon as possible.
 - If any side effects occur from exposure to the foam concentrates (i.e. dry red itchy skin) seek medical advice

• Dispose of all used foam containers in an environmentally responsible manner.

Clean-Up

As the foam concentrate is corrosive and will cause damage to equipment all fire fighting appliances and equipment used with foam are to be thoroughly flushed with clean water after use.

Version	Date	Status	Author/Position	Details of Change
1.0	20/1/2014	Draft	S Lees	New procedure based on DFES SOP 3.5.5 V1.2
1.01	5/1/2015	Final	D Jones	Review and edit.

The use of earthmoving equipment can greatly enhance the establishment and the effectiveness of firebreaks which, in turn, greatly assists fire fighting operations.

Ordering Heavy Machinery

ICs can request heavy machinery to assist in fire operations through the CBFCO (or delegate) or City of Albany Emergency Management Team. The approval for the request to deploy heavy machinery must be obtained from the City of Albany Emergency Management team.

Approval for expenditure on heavy machinery must be made in line with the City of Albany delegation 2016:013 - Payment of Municipal Funds.

Significant time delays are often experienced before heavy earthmoving equipment arrives on a fire ground. For this reason ICs should make allowances for this time delay when requesting heavy machinery equipment and planning strategies and tactics.

Protracted Incidents – Additional Machinery

Whilst every effort is made to provide support at incidents, resources are limited. Where additional machinery is required, or the incident is prolonged, consideration should be given to escalating the incident level (refer to <u>BOP 3.02 Incident Escalation</u>). Approval from the Manager Ranger & Emergency Services must be obtained prior to ordering additional machinery.

Tasking Heavy Machinery

While heavy earthmoving provides a valuable resource in fire fighting due consideration must be given to the sensitivity of vegetation of the area.

When deploying heavy earthmoving equipment the following operational requirements should be applied.

STANDARD	DESCRIPTION
Ground Support	Heavy machinery is not to operate without supporting ground crew and appliances
Safety	 Supporting ground crews are vulnerable to being physically contacted due to not being observed by the heavy machine operator. Support crews are to: Operate from appliances located no less than 50m (or 2½ times the height of trees being pushed – whichever is the greater) from the supported plant, and Remain in radio communications with the operator.
PPC/PPE	 Heavy machine operators are to be provided with bushfire PPC/PPE equivalent to the requirements stipulated at DFES SOP 3.2.1 – Order of Dress - PPC Matrix.
Communications	Heavy machine operators are to be provided with personal, sector level, communications

Cost Incurred Using Heavy Earthmoving Equipment

Where the cause of a fire can be attributed to preventable circumstances the City of Albany may seek cost recovery from relevant parties. This will be at the discretion of the City.

Version	Date	Status	Author/Position	Details of Change
1.0	20/1/2014	Draft	S Lees	Department of Fire and Emergency Services – Installation Guideline
1.01	5/1/2015	Final	D Jones	Extended content to include cost recovery.
1.02	27/7/2016	Update	D Jones	CoA staff required to order machinery.
1.03	17/02/2017	Update	T Ward S Lees	Added s3 Protracted Incidents

Briefing Incoming Crews

All incoming crews must be advised of threats posed by live power lines and/or damaged poles before being deployed at an incident.

All incidents involving power lines must be treated with extreme caution. Any downed power lines must be treated, as 'live' and no attempt made to suppress fires on it or interfere with them in any way.

Procedure

- Brief all incoming crews on the possibility of live power being present at an incident.
- All incoming crew are to avoid direct and water contact with wires and infrastructure until it has been confirmed the power is off.
- Contact DFES ComCen on 1800 198 140 or 000 with the information listed below.
- This information will be passed by DFES directly to the Western Power Communication Centre for action, such as isolating the power supply to the area.

Information Required	Details
Contact Person and Phone Number	Name reporting:
	Phone No:
	Contact at scene:
	Phone No:
Issue of Concern	i.e. Pole top fire, powerlines on ground etc.
Pole Identification Number	Nearest pole No. found on plate or triangle.
Pole Location	Nearest road, locality or property number.
Requested Action	i.e. crew required, disconnect power etc.

Note: This procedure is for the use of emergency services only. General faults should be directed to the Western Power Fault Number 131 351

Version	Date	Status	Author/Position	Details of Change
1.0	20/1/2014	Draft	S Lees	New procedure based on DFES/Western Power circular
1.01	5/1/2015	Final	D Jones	Procedure clarified

Crew leaders are to identify and report unsafe trees in order to minimise the risk of harm to their crew members. The following procedure is designed to ensure the safe identification, inspection, and if necessary, removal of unsafe trees at bushfires.

Trees identified as being suspect may be removed to eliminate potential hazards to fire fighters. They may also be removed to prevent hop overs caused by embers blowing over control lines.

Tree Removal

Following identification of a potentially dangerous tree a safe working area equivalent to, or greater than, the height of the tree will be marked off. The same demarcation must also be in place before any felling operations are commenced.

Crews should mark offending trees using surveyors tape so everyone can see. Any tracks in the immediate vicinity should also be taped off so passing traffic avoids potential danger.

If the offending tree is further into the bush then the track immediately adjacent to the offending tree shall be marked using surveyors tape.

Offending trees should be brought to the attention of the IC for briefing of incoming crews and personnel and necessary arrangements put in place to remove trees either through qualified tree fellers or suitable earth moving equipment.

The use of unqualified operators to fell trees at bushfires is strictly prohibited.

Identification and Reporting

Where the integrity of a tree at a bushfire is suspect, the following identification and reporting process is to be implemented.

RED/PINK Tree is suspect

BLUE Tree should be extinguished

YELLOW Tree should be felled

Procedure

	NOTES
Mark the Tree as a Hazard	In accordance with marking methods.
Isolate the Hazard	Cordon-off any tracks, roads or areas to prevent personnel from entering potentially hazardous areas.
Report	Inform the IC who will request the assistance of qualified tree fellers where required. Record information related to all saves and fells in incident log.
Identify Tree Location/s	Mark the nearest point on the track to identify tree location/s. Identify map references and, if possible, plot GPS location of the tree
Alert	IC is responsible for alerting all personnel of all risks on their sector. IC must brief incoming relief crews and provide updates when the situation changes.

Minimum Safe Deployable Crew

Tree Felling Teams are to be deployed in pairs – one operator is to be qualified as an Advanced Feller status. Teams are to be deployed with communications, recording (GPS), assessment (TIC) and felling equipment unless prior arrangement has been made for the IC to provide such equipment.

Response

IC is to request *Tree Felling Teams* through City of Albany base.

Note: For safety reasons chainsaw operations will only be available during daylight hours.

Reporting and Tasking of Tree Felling Teams

Tree felling teams are to report to the IC for a full briefing before being deployed on the fire ground. Tree felling teams often require fire fighting crew support. These should be provided wherever possible.

Hazard Assessment

Decisions to fell trees can only be made by qualified advanced tree fellers from DPaW or other environmental officers who are trained to 'sound' trees. Tree Fellers will in the first instance attempt to save all trees where possible and are trained to "sound" the tree to assess its viability. All decisions are to be reported to the IC.

Safety Warnings

Communications and liaison with all crews in the area are to be maintained throughout felling operations. Safety whistles and horns are to be sounded prior to and after felling operations.

Recording and Reporting Tree Removal

The following records are to be made of tree removal:

- Tree Felling Team. When Tree Fellers are engaged they are to record details of assessed (saved) and felled trees through GPS and photographic evidence.
- **IC.** Post incident, records of tree removal is to be submitted with all incident records to Information Management.

Version	Date	Status	Author/Position	Details of Change
1.0	20/1/2014	Draft	S Lees	New procedure based on DFES SOP 3.5.12 V2.1
1.01	5/01/2015	Final	D Jones	Reformatted and updated to include reference to DPaW.

Any person with authority to act under various Emergency Services Legislation and Acts, can erect portable road signs and manage traffic in order to provide for the safety and welfare of themselves, their emergency workers and members of the public during emergency incidents occurring on, or near roads.

Traffic Management at Roadside Fire Emergencies

When responding to roadside incidents the Incident Controller is to ensure appropriate control measures and management structures are in place to maximise the safety of crews and road users. This is the primary consideration of all traffic management plans.

Where fire fighting operations are conducted along roads with reduced visibility caused by smoke, high speed traffic passing and restricted visibility due to bends and dips in roads traffic management should be undertaken as a high priority.

A request for traffic management shall be placed with the CBFCO (or delegate) if crews are working within 1.2m of the roadside as a matter of priority. Crews not directly involved in emergency operations should position themselves off the road, and clear of the incident scene for added personal safety.

The IC has overall responsibility for the management of traffic during an emergency. All traffic management plans are to be implemented in accordance with plans put in place by the IC. These shall not be altered, unless a like threatening situation exists, without the prior approval of the IC.

Vehicle Control Points (VCPs) are the last line of incident site control. For this reason they must be permanently staffed. Staff at VCPs must have radio communications with the IC or IMT at all times.

Main Roads must be notified in the event of a major road closure. Contact number is 138 138

WA Police will provide assistance at road closures affecting major roads. The IC will need to liaise with the WAPOL Commander at scene in the development of a traffic management plan. Major road closures will also include Majn Roads WA involvement to assist with the re-direction of vehicles.

Where Main Roads WA and WAPOL are involved in traffic management at an incident an agency representative should be included in the IMT.

Visibility

To maximise visibility of crew and appliances all crew must wear full PPE. All appliance beacons and hazard lights will be on throughout roadside fire operations.

As soon as possible after arrival at a fire site portable hazard signs (fold-up tripods or similar) and road cones with night time warning lights are to be used to at the incident. The location and distances required for this are outlined in the diagram below.

Note. S = maximum road speed limit in the area e.g. $80kmh = 2 \times 80 = 160m$. Cones are to be spaced 6m apart.

ROAD TRAFFIC WARNING SIGNAGE - DIAGRAMS

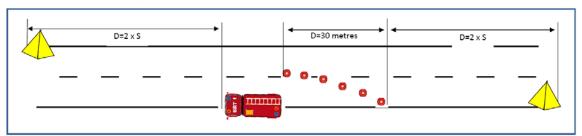


Figure 1 – Road Traffic Control Signs in Support of General Emergency Roadway Setup

All signs are to be clearly visible to drivers. For this reason emergency signage should be placed in a position away from other signs, bends in the road, railway crossings, shade etc.

If smoke obscures the vision of drivers it is essential all crew members, particularly those managing the flow of traffic remain in clear view of traffic travelling in both directions. Where it is deemed necessary to close the road (partially or totally) fire crews shall use the 'stop' 'slow' signs provided with each appliance.

Protection of fire crew

If the emergency incident is on the road then an appliance will need to placed in a fend off position. This position affords greatest protection to crews working on the road, or in the immediate vicinity of the road.

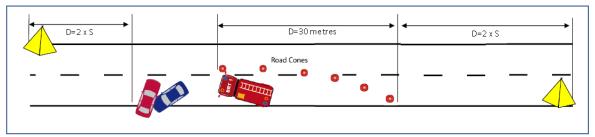


Figure 2 – Road Traffic Control Signs in Support of Incident and Fend-Off Position

Road Closures

Full Road Closure

Access beyond a full road closure VCP can only be authorised by the IC and typically includes vehicles from the controlling agency, a combat agency and support organisations. In addition the IC may give specific permission for a designated vehicle or person to proceed beyond a VCP.

Partial Road Closure

Partial road closures may be realised though lane control measures.

In some cases an IC may allow restricted access. Such situations may arise from residents returning home to check property for damage, to salvage their possessions, to deliver relief to residents or their stock and for essential service crews.

Detours

At times it may be possible for detours to be created. In these instances the IC should consult with the relevant authorities to ensure selected detours are capable of carrying any diverted traffic.

Protracted Duration Emergency

If the incident is likely to be prolonged (more than 4 hours) the IC needs to ensure WAPOL or traffic management contractors are in place. Under these circumstances it is important for communications to be maintained between the IC and traffic management authorities - usually UHF Channel 40.

The welfare of people affected by short term road closures remains the responsibility of the controlling agency in consultation with Department of Child Protection and/or City of Albany. Extended closures will require a more active involvement by Department of Child Protection who may need to organise and coordinate the provision of welfare centres.

Evacuation of Affected People

Selection of suitable evacuation routes and allowing unrestricted egress from incidents is also a consideration of any traffic management plan at an incident. Designated evacuation routes should be for one way traffic only, apart from emergency vehicles that may be attending the scene which may also use the same route.

Public Information

The IC should consider the release of public warnings through DFES alert system especially if the road is, or is likely to be, impacted by smoke and/or fire and/or the incident will be of a protracted duration. (Refer BOP 3.08 Public Information During Incidents.)

While the IC has authority to partially/totally close a road during fire emergency situations they have no authority to direct and divert traffic via alternative routes. This authority remains with Main Roads or Local Government.

Record Keeping

All critical decisions and requests relating to traffic management and/or road closures need to be recorded in the incident log.

Vehicle Control Points need to be clearly identified and an agreement to locate the VCP agreed to by the IC. The IC will need to sign an agreement for each and every VCP at an incident.

Re-Opening of Roads

An IC cannot re-open a major road. On determining the road as being safe the IC hands the road back to the relevant authority for them to make the decision to re-open a road.

The City of Albany gives approval for IC to open 'local roads' - before doing this an IC should liaise with the City of Albany to ensure all necessary precautions have been taken.

All traffic management signs need to be removed as soon as possible after the roads have re-opened.

Related Documents:

Traffic Management During Emergencies State Emergency Management Policy No. 4.8 DFES SOP 3.5.12 V2.1

Version	Date	Status	Author/Position	Details of Change
1.0	20/1/2014	Draft	S Lees	New procedure based on DFES SOP 3.5.12 V2.1
1.01	12/2/2015	Update	D Jones	Included WAPOL procedures when WAPOL involved in major road closures.
1.02	27/2/15	Final	D Jones	Aligned policy to SEMC Policy 4.8

Under the *Bush Fire Act 1954*, a local government Fire Control Officer may request that the incident control of a fire be transferred to Department of Parks and Wildlife (DPaW) or Department of Fire and Emergency Services (DFES).

The existing Incident Controller (IC) is to consult with the Chief Bush Fire Control Officer when considering handing over the control of a fire to another agency.

Handover Briefings

Where the control of an incident is handed to another agency, the current IC must conduct a formal handover to the incoming IC using the standard SMEACS format (*refer BOP 3.12 Briefings*).

Transfer of Control between City of Albany and DPaW:

Under Section 45(a) of the *Bush Fire Act 1954*, control of bush fires may be transferred between Local Governments and Department of Parks and Wildlife (DPaW) at any time after considering which agency is best placed or resourced to deal with the emergency.

The request for transfer of control to DPaW should be made by the CBFCO (or delegate) to the DPaW Duty Officer. The request can be verbal but the request for handover must be noted in the incident log. The outcome of the request must also be recorded in the incident log.

The current IC must notify the DFES Duty Officer or COMCEN and all other personnel involved in the incident of the handover.

If a DPaW IC assumes control of a bush fire, the Incident Management Team (IMT) may move to the DPaW's Albany Operations Centre. (*Refer City of Albany Policy – Incident Control*)

Transfer of Control to DFES:

An IC may request DFES to assume control of the incident under Section 13(4)(a) of the Bush Fire Act 1954.

The request for transfer of control should be made by the CBFCO (or delegate) to the DFES Duty Officer. The request can be verbal but the request for handover must be noted in the incident log. The outcome of the request must also be recorded in the incident log.

The current IC must notify all other personnel involved in the incident of the handover.

Transfer of Control from DPaW or DFES to City of Albany

DFES or DPaW may request that incident control of a fire to be transferred to the CoA. This request should be made to the CBFCO (or delegate) who will determine if the CoA is suitably placed to accept the transfer of control.

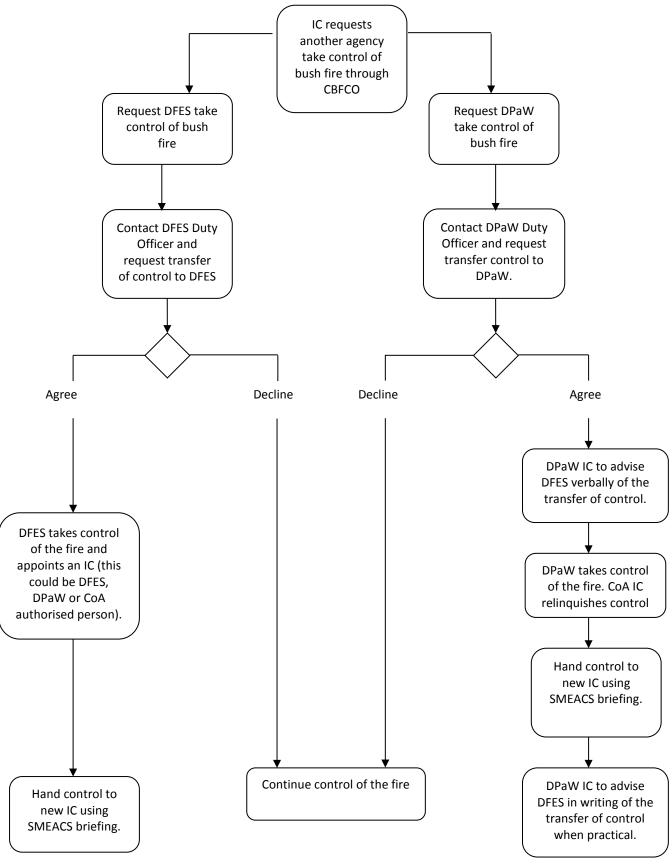
The IC must notify all other personnel involved in the incident of the handover.

Appendices:

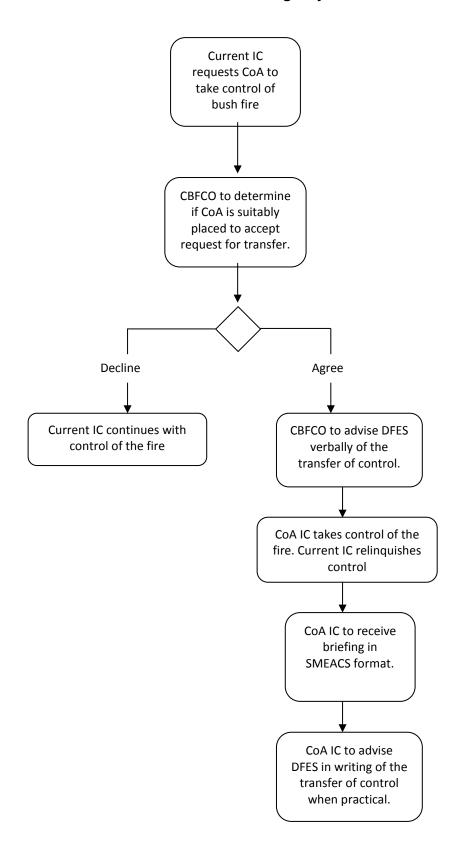
Appendix 1 – Transfer of Control to another Agency Flowchart

Appendix 2 – Transfer of Control from another Agency

Appendix 1 – Transfer of Control to another Agency



Appendix 2 – Transfer of Control from another Agency



Version	Date	Status	Author/Position	Details of Change
1.0	20/1/2014	Draft	S Lees	New procedure based on WESTPLAN - FIRE
1.01	6/1/2015	Final	D Jones	Reviewed

City of Albany Volunteer Bush Fire Brigades are trained and equipped for bush fire fighting. However, there are occasions when volunteers may be confronted by fires other than those in grass, scrub or bush. In most cases these will be structural in nature and often require specialised equipment and/or training.

Responding to complex fires

When confronted by more complex fires it is important that a careful and considered approach be adopted to ensure the safety of all.

This includes the following:

- Initially standing off at a safe distance and carefully appraising the situation.
- Providing a comprehensive and detailed SITREP to base. See also <u>BOP 3.03</u> Situation Reporting
- Base will then provide and/or seek external advice from DFES Duty Officer or similar.
- Only after advice has been obtained, and only if the required resources, equipment and trained personnel are available, should any form of attack be commenced.
- Up until this stage the focus should be on defending other assets at risk, provided this can be done in a safe manner.
- When unsure, seek further advice before commencing operations.

Clandestine Drug Laboratories

Clandestine drug laboratories may be encountered by crews responding to bushfires. As they pose special risks to all emergency responders due caution is required.

Principle	Description
Crew Safety	Withdraw immediately. Contact Police immediately and withdraw 70m upwind of laboratory. Level 2 PPC/E
Notifications	WA Police, DFES Duty Officer and FRS. Radio communications to be minimised – preference given to mobile phone.
Incident Control	WA Police. Bushfire brigades will operate under direction of Police IC.
Known Hazards	Chemicals, potential for explosion and fire and the possibility of secondary booby traps.

Positioning of appliances and crews

Pending receipt of suitable advice crews and appliances should be located out of the smoke plume in case toxic fumes are emitted.

Version	Date	Status	Author/Position	Details of Change
1.0	4/2/2015	Final	D Jones	
1.01	25/8/2015		D Jones	Inclusion of clandestine drug laboratory response.

4 Safety

- BOP 4.01 Bush Fire Crew Safety
- BOP 4.02 Personal Protective Equipment (PPE)
- BOP 4.03 Fatigue Management
- BOP 4.04 Personal Protective Fire Blanket
- BOP 4.05 Using Drip Torches Safely
- BOP 4.06 Refuelling Motors at Incidents
- BOP 4.07 Entrapment At Bush Fires
- BOP 4.08 Consumption of Drugs and Alcohol
- BOP 4.09 Bush Fire Smoke Exposure
- BOP 4.10 Electrical Hazards
- BOP 4.11 Use of Chainsaws

While every volunteer is responsible for his or her own safety the IC sets the standard for safety and carries primary responsibility for safety at an incident. Safety is enhanced by adhering to operational procedures.

The IC must risk assess objectives and tasks to evaluate their suitability and to resource them appropriately to ensure safety.

The IC must also provide a safe working environment to support agencies and civil contractors who may not be trained or equipped to the same level as emergency responders.

General

The conditions experienced at bushfires involve considerable risk. Bush fire volunteers may be exposed to uncontrolled, running fires with associated risk.

The following safety measures have been implemented to minimise the risk to personnel operating at bushfires.

Crew and Sector Safety - LACES

In bushfire situations the changing dynamics of the fire must be continually assessed to ensure a safer environment for all. Fire Fighters, irrespective of their role, are to employ **LACES** principles to ensure the safety of their crews:

FACTOR	ALL FIRE FIGHTERS	CREW/SECTOR LEADERS
L Lookouts	Everybody looks out for everybody else. All personnel continuously re-evaluate their situation and are able to communicate changes to the environment that may threaten their safety.	Assign a lookout to a safe vantage point who remains in communications with the Crew Leader. Task all crew members to be alert
A Awareness	Everybody is aware of the current and anticipated behaviour of the fire and other incident hazards. All personnel have a responsibility to be alert and act decisively before situations become critical.	Remain aware of the fire situation including: Current and potential weather Terrain Fire behaviour Fuel types and fuel loads Hazards Crew locations Nearby activities.
C Communication	Everybody speaks up about what is happening and their concerns at the incident, and everybody listens.	Stay in communication with your people Maintain suitable radio contact Communicate changes in situation Provide regular updates. Use briefing procedures (SMEACS)
E Escape Routes	Know your escape route at all times.	Ensure your crew know the escape route. Position vehicles to allow for rapid escape
S Safety Zone	Identify a safety zone (anchor point) to which you can retreat if fire behaviour escalates. Everybody helps everybody to survive.	Ensure all crew are aware of suitable safety zones. The safety zone must be large enough, close enough and free of hazards.

Crew Safe Working Practices

PRACTICE	NOTES	
Personal Safety	 Understand your task Maintain visual or electronic communications Always adhere to PPE standards Work from an anchor point – where practical work from burnt or clear ground - at a minimum do not work too far from safe ground Identify suitable escape routes Withdraw if you feel threatened Avoid burnt out trees as branches or the tree may fall without warning 	
Protective Water Supply	Ensure that the appliance maintains a 25% minimum reserve of water for crew and vehicle protection.	
Safe Driving	 Observe safe driving practices - drive cautiously when driving in smoke or rough terrain Activate beacons and headlights on the fireground Do not park appliances where they may obstruct or limit access to escape routes Park appliances on burnt or clear ground facing the escape route 	
Aerial Suppression	 Clear the drop zone where water bombing is being undertaken. If this is not possible, take precautions as per item 31 in the Operations Checklist booklet. 	
Report Near-Misses	All near miss accidents are to be reported	

Crew Leader Task Safety Check

Crew leaders are charged with the safety of their crews. Before commencing a task, crew leaders are to undertake the following safety check.

ITEM	NOTES
Task Understood	Obtain a briefing at the control point before being allocated a sector and undertaking firefighting operations - if unsure, ask.
PPE	Ensure all crew members are wearing the correct PPE
Communications	 Ensure communications are established with the Sector Commander, Divisional Commander and Incident Management Team.
Recall Signal	• Ensure all crews are aware of the agreed emergency warning signal (e.g. Three short blasts with the horn or siren)
Protective Water Supply	• Ensure that the appliance maintains a 25% minimum reserve of water for crew and vehicle protection.
Anchor point	• Identify an anchor point (a secure point from which to start the construction of a fireline). A secure anchor point will minimise the chance of being out flanked by the fire while the line is being constructed).
Escape Routes	Escape routes should be marked on the sector map. If there are none marked on the sector map, reverse down the fire line to identify if there is room to turn around in the event of an emergency.
Safe Work Practices	 Avoid driving into dense smoke where visibility is reduced. Avoid parking in areas at risk from direct impact of flames or radiant heat. Remain alert at all times to the location of the fire - if unsure, ask. Be aware of the potential for the fire to generate its own local conditions in addition to the prevailing weather conditions.

Personal Protective Equipment (PPE)

Personal Protective Equipment (PPE) is provided by the City of Albany to all Bush Fire Brigade volunteers, as defined in <u>BOP 4.02 Personal Protective Equipment</u>.

Personnel must be dressed in the prescribed PPE when attending a fire incident. Any personnel arriving at a fire without the required PPE must not be allowed on the fire ground but can be allocated non-fire fighting tasks.

Fire blankets are mandatory for all persons on the fire ground.

Refer to BOP 4.04 Personal Protective Fire Blankets.

The Dead-Man Zone

Crews working within 5 min fire travel time are in the 'dead-man zone'. A sudden wind change can suddenly alter the direction of fire spread and impact crews with little or no warning. All crews must maintain high levels of situational awareness at all times.

Riding on Appliances

Appliances are not to carry more people than its designated seating capacity. Deaths and injuries have occurred at bushfires to personnel travelling on the back of fire fighting appliances.

Riding on the back of appliances is **only to occur** under the following circumstances:

- When the appliance is directly involved in fire fighting operations or at approved public relation activities and moving at a safe working speed.
- Where the appliance has been specifically designed to do so.
- Riding on the back of appliances while travelling between sectors or divisions is **not to occur**. Personnel are to be seated in the cabin wearing a seat belt.

Entrapment/Burnover

Entrapment situations and burnovers at bushfires usually happen due to a breakdown in communications and a loss of situational awareness. All crew must maintain situational awareness in order to minimise risks to their crew.

Burnover and fire blanket deployment training and fire blankets are mandatory for all persons on the fire ground. Fire blankets are for use in entrapment situations as protection from radiant heat and flames and are to be used in accordance with burn over procedures.

Entrapment procedures for crews are detailed at <u>BOP 4.07 Entrapment at Bushfires</u> and *DFES SOP 3.5.11 – Entrapment at Bushfire*.

Red Flag Warnings

Red Flag Warnings provide a process to ensure critical information (such as weather changes) are received, understood and confirmed by **all** personnel at an incident. Red Flag Warnings consist of precise messages that convey present or impending hazards to fire fighters. All personnel must be aware of the Red Flag Warnings procedure.

(Refer to BOP 3.05 Red Flag Warnings)

Heat Related Illness

Conditions experienced during bush fires expose personnel to the risk of heat stress, heat exhaustion and heat stroke. Heat related illnesses are best avoided through careful monitoring of all personnel by Crew Leaders.

Crew Fatigue

Fatigue reduces the safety and effectiveness of individuals, increasing the risk of accidents occurring. During prolonged incidents, crew fatigue must be managed in order to maximise safety. (Refer to BOP 4.03 Fatigue Management)

Falling Trees and Limbs

Fire can weaken tree trunks and limbs. Limb failure or tree collapse can happen well after the fire front has passed and presents a hazard to fire crews. Crews must remain aware of the risk to their personal safety from falling limbs and unstable trees. Trees suspected of posing a risk are to be marked in accordance with <u>BOP 3.17 Tree Removal at Bushfires</u> and recorded for inspection by qualified tree-fellers whereupon the decision will be made to trim/lop limbs or fell the tree.

Such events are to be reported through the chain-of-command to the IC. Further procedures for the identification and removal of dangerous trees at bushfires are detailed in (BOP 3.17 Tree Removal at Bushfires).

Power Pole Support Wires

Some power poles are stabilised using an anchored wire rope (guy wire) to provide tension. Such cables pose a hazard as they may not be visible to crews due to vegetation, smoke, dust or darkness. If such cables are encountered at an incident, high visibility indicator should be used to mark the hazard.

For incidents involving power lines or power poles, refer to <u>BOP 3.16 Callouts Involving</u> <u>Western Power Infrastructure</u>.

Smoke Hazard on Roadways

Smoke over roadways poses a risk to both members of the public and operational crews. This risk is minimised through the use of warning signage, protective techniques and procedures, and safe, considered driving behaviours. Where the risk is assessed as beyond the control of local crews, the IC is to establish formal Vehicle Check Points (VCP) under the control of WAPOL. (Refer to BOP 3.18 Traffic Management at Bushfires).

Version	Date	Status	Author/Position	Details of Change
1.0	20/1/2014	Draft	S Lees	New procedure based on:
				DFES Directive 3.5 V1.5
				DFES SOP 3.5.1 V1.1
1.01	6/1/2015	Final	D Jones	Review and edit

The City of Albany is responsible for ensuring all active Volunteer Bush Fire Brigade fire fighters are equipped with personal protective equipment to provide the minimum safe standards required to fulfil their duties.

Only correctly attired personnel will be allowed to crew City of Albany VBFB appliances.

Personnel arriving at fires without the required minimum PPE must don the appropriate PPE, leave the fire ground or be assigned a non-fire fighting task.

It is the responsibility of each individual and his or her supervisor to ensure the correct level of PPE is worn in the correct manner. It is recommended for safety reasons that undergarments also be cotton.

Minimum PPE Dress Standards for Bushfire Fighting

The minimum standard of dress for all fire fighting personnel is:

- a. Proban overalls or Proban pants and jacket;
- b. Helmet (level 1);
- c. Level 1 wildfire boot;
- d. Gloves:
- e. Goggles; and
- f. Smoke mask.

The minimum standard PPE will be provided to all bush fire volunteers when they have completed the required initial training and have demonstrated a commitment to their brigade.

Full face smoke masks are provided on the basis of 2 masks per seat per appliance. These should be worn by volunteers in accordance with <u>BOP 4.09 Bushfire Smoke</u> <u>Exposure</u>. Personal issue particle masks may be made available upon request to active volunteers.

Minimum Standard of Dress at Public Relations & Media Events

To enhance perception of bushfire volunteers, those personnel involved in public relations and/or media events when photos and/or videos may be taken shall wear overalls/pants & jackets, boots and helmets.

Photos taken on an active fire ground should only include people with full PPE.

PPE Maintenance

All brigade personnel are responsible for the availability, care and cleanliness of their own kit in accordance with the manufacturers care instructions.

See Appendix 1 for care instructions for Proban treated garments.

PPE Inspections and Audit

All volunteers should inspect their PPE each and every time it is used.

Each brigade must conduct an annual audit of all volunteers' PPE. (See Appendix 2)

Equipment Officers shall order replacement PPE items as required through City of Albany.

PPE Replacement

PPE equipment may be replaced on a 'like for like' basis and only when an audit indicates replacement of equipment is warranted.

Version	Date	Status	Author/Position	Details of Change
1.0	20/1/2014	Draft	S Lees	New procedure based on : DFES SOP 3.2.1 V2
1.01	6/1/2015	Final	D Jones	Included City of Albany role in PPE provision and outlined initial provision process and replacement process.
1.02	25/8/2015	Update	D. Jones	S5 – requirement to check PPE after every use. Included smoke masks in PPE list

When It Counts, We've Got You Covered







Specialist Garments for Specialist Applications

TREATED GARMENTS

What is Proban*?

Prob ane is a chemical additive and process that is applied to fabrics made of cellulous type fibres (such as cotton) to provide flame retardancy. During the Proban* process, an inert cross-linked polymer is formed. This polymer is embedded within the individual fibres and is insoluble. It can not be removed by washing and can only be removed by mechanical abrasion or rendered ineffective through incorrect laundering (see below).

What is meant by "flurne retardant" ?
"Flame Retardant" means that the fabric will self-extinguish upon removal from a flame source. This compares to untreated cotton that would continue to burn and to polyester/cotton which burns/melts/sticks at a very rapid rate. When exposed to a flame, Proban® treated fabrics will still char and burn however when removed from the flame source, the fabric self-extinguishes.

How does the fabric salf-extinguish ?

At the point where a Proban® treated fabric is exposed to flame, the fabric forms a localised char that acts as an insulating layer. Upon removal from the flame source, the Probane fabric will not continue to burn outside of this localised char area, nor does it continue to smoulder or exhibit after-glow effects.

How long will a Probate garment remain Basso returdant 7

Probane fabrics meet the minimum standards set out in EN 531:1995 (50 washes @ 75°C). Each batch of Proban® treated fabrics are independently tested to this Standard and are certified by Rhodia Consumer Specialties Limited, the producers of the Probane chemical, to maintain its flame retardant characteristics for 50 washes providing the correct laundering instructions are followed. However, numerous independent tests have shown Proban® treated garments still pass this flammability test after 100 to 150 washes. Conversely, garments can fail flammability tests after just a few washes if they are not laundered correctly.

What alterations are garments made from Probantubric bool valled ? Garments manufactured from Probant treated fabrics are

best suited for situations where there is a risk of being exposed to flame for a short duration (such as a flash fire) and the garments will be worn for an extended period of time and thus comfort is a consideration. Examples of this include wildland fire fighting garments and general workwear in the chemical, electrical, oil, gas and petrochemical industries. Suitable grades of Probane fabric can be used in garments for ferrous metal foundries, welding and flame cut applications.

What elications are garmouts made from Probanfebric not suited ?

Garments made from Proban® treated fabrics should not be worn in environments where they could be exposed to acids, strong reducing agents and/or oxidizing chemicals. Unless a specific finish has been applied to the Proban® treated fabric, it should not be viewed as specific personal protective clothing in any chemical environment (consult with your nearest S&H office if unsure). Nor are they suited for white molten metals such as zinc, aluminum and magnesium where such molten metals will stick to the fabric.

What are the do's and den's whom laundering Probant garments?

The DO'S:

- Proban® treated articles can be washed in any conventional washing machine
- COLD or WARM wash for both whites and colours (temperature not to exceed 60°C)
- Wash programme used should be for non-colour fast articles
- Only SYNTHETIC detergents should be used e.g. Bio-zet Castle, Cold Power Drive, Dynamo FAB, OMO Radiant, Spree or Surf
- For heavily stained or soiled articles a short pre-soak (up to two hours) may be useful
- Regular washing will help prevent soiling build up
- Garments may be tumble dried (take care not to over-dry as excessive shrinkage may occur)
- Garments may be dry-cleaned

The DON'TS:

- DON'T wash Proban* garments in traditional soap based powders e.g. Lux, Velvet, Advance. These so ap powders can form flammable deposits, which may adversely affect the flame retardant performance of the fabric.
- DON'T use hypochlorite based bleaches. Bleaches such as Domestos, White King (and all supermarket blends) attack the Proban* finish and can lead to the flame retardancy becoming ineffective.

For more information about Proban*, please visit the official Rhodia Consumer Specialties Ltd website, www.rhodia-proban.com or contact your nearest S&H Clothing office.

Proban® is a registered trademark of Rhodia Consumer Specialties Ltd.

City of Albany ANNUAL FIREFIGHTER PPE INSPECTION CHECKLIST

of	_)				
4:					
5:					
6:					
1	2	3	4	5	6
1	2	3	4	5	6
1	2	3	4	5	6
1					
1	2	3	4	5	6
	5: 6: 1	4: 5: 6: 1 2 1 2 1 2	4: 5: 6: 1 2 3 1 2 3 1 2 3 1 2 3	4: 5: 6: 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4	4: 5: 6: 1 2 3 4 5 1 2 3 4 5

Boots	1	2	3	4	5	6
Holes in leather or soles (replace)						
Dirty (serviceable after cleaning)						
Clean, good condition (serviceable)						
Eye Protection (Goggles, Safety Glasses)	1	2	3	4	5	6
Cracks in lens, seals perished (replace immediately)						
Scratches effecting vision (replace asap)						
Minor scratches (await next issue)						
Good condition (serviceable)						
Masks (Particle, Respirator, and filters)	1	2	3	4	5	6
Dirty, heavily soiled, blackened (replace)						
Slightly soiled (replace when convenient)						
Clean (serviceable)						

FCO Comments: Where action is required, please make comment below for follow up.				
1				
2				
3				
4				
5				
6				
Equipment Officer Signature:	FCO Signature:	Date:		

As part of its overall commitment to the safety and health of all personnel, including volunteers, the City of Albany will ensure there is a system in place to manage fatigue.

Fatigue management is a shared responsibility, at all levels, including the individual.

For the purpose of managing fire-fighter fatigue shift hours of work (time on fire ground) will be calculated as follows:

- a. Start Time is to be recorded from time of call out
- b. Travel time is to be recorded against the first shift.

Responsibilities

Crew resourcing is a Planning function of Incident Management. The Incident Controller (IC) (or delegate) are to monitor and maintain records of personnel work periods. Time keeping is critical during extended incidents and must be established early to allow for effective crew rostering.

The sourcing and movement of personnel resources to achieve fatigue management objectives is a Logistics function.

Fatigue Management Guidelines

Crew Fatigue

Fatigue reduces the safety and effectiveness of individuals, increasing the risk of an accident occurring. Prolonged incidents create special challenges for the IC.

Crew Fatigue Planning Guidance

There are recognised difficulties in setting absolute timings on tasks during emergencies. All parties are to approach the issue in line with the priorities of preserving life and property – the durations of tasks may need to be adjusted to meet the specific circumstances.

On days with a Fire Danger Level (FDR) of Severe or above consideration must be given to rotating crews and tasks more frequently.

When calling for crew rotation, Crew Leaders must take into consideration the prior work, including non-fire ground work, of crew members, the tasks undertaken and the time elapsed since their last rest period.

On days with a Fire Danger Level (FDR) of Severe or above crews and members of IMT are to be well rested and undertake essential activities only to ensure they are refreshed.

The following fatigue planning guidance is provided for extended incidents. All guidance remains subordinate to fatigue management limits recommended by WorkSafe.

Function	Guidance
Established IMT	A bush fire IMT shift is to be of a maximum twelve (12) hours duration Operational shifts. IMT are to be rotated from duties after four (4) on-duty shifts.
	Rosters are to be developed taking into account previous hours of work, such that no individual works in excess of 84 hours in a 7 day period.
Fire Fighting	Initial responders are to be employed in fire attack duties for a maximum of 12 hours followed by an 8 hours break.
Crew Break	Crews should be provided with the opportunity to consume refreshments and ration packs at least every two hours.
	Dependent upon operational tempo, crews are to be removed from the fire ground and provided with sustenance at least every four (4) hours.
	Breaks should be sufficient to enable crews to rest and be provided with liquid refreshment, sustenance and shade.
Planning Crew	The options to plan crew breaks are as follow:
Breaks	- IMT complete sector rotation - Sector crew-by-crew rotation
Travel Time	Where personnel have been required to work in excess of a 12 hour shift or if personnel are too fatigued to drive home alternative travel arrangement (e.g. bus, taxi) must be arranged by the IC.

NOTE: The above must be adhered to at all times where operational requirements permit this to occur.

Version	Date	Status	Author/Position	Details of Change
1.0	20/1/2014	Draft	S Lees	Based on:
				DFES D 3.5 Bushfire V1.5
				City of Albany Human Resource Policy – Fitness for Work Procedure – NP072749_5
1.01	6/1/2015	Final	D Jones	Review and edit.

This BOP provides guidance on the use and installation of personal protective fire blankets (fire blankets).

Burnover training and fire blankets are mandatory for all persons on the fire ground.

Fire blankets are for use in entrapment situations to protect from radiant heat and flames and are to be used in accordance with burn over procedures. (Refer <u>BOP 4.07</u> <u>Entrapment at Bushfires</u> and DFES SOP 3.5.11 Entrapment at Bushfires)

Directions for Use

- 1 Remove fire blanket from protective pouch.
- 2 To open tear bag at V-slit on side of bag.
- 3 Remove blanket and unfold.
- 4 If in a vehicle position vehicle in a cleared safety zone and crouch as low as possible. Cover whole body with the blanket and breathe shallowly.
- If in the open lie face down on ground or dirt area away from trees and long grass and preferably in a wheel rut or depression.
- 6 Cover all of body loosely with blanket, wrap long edges of blanket under the body and hold corners down with feet and hands. Note wind will likely be strong. Keep nose and mouth as close to ground as possible and breathe shallowly.
- After the fire front has passed, keep yourself protected from embers with your fire blanket and again continue to breathe shallowly.
- 8 Once used contact City of Albany staff for cleaning or replacement arrangements.

Distribution

- New fire blankets are stored in a vacuum sealed plastic bag which is kept inside a red material protective pouch.
- All operational vehicles are to be equipped with one fire blanket per allocated seating position.
- Stickers advising the location of fire blankets must be placed in a prominent location in each vehicle.
- Fire blankets are stowed in specified locations in each appliance.
- Personal protective blankets MUST NOT be relocated or REMOVED from their stowage position.

Stowage

Crew cab heavy tanker 3-1P	Stow all blankets behind rear seats
Crew cab heavy tanker-lsuzu	Hang 4 on grab rail and place 2 or 3 above rear seats
Mercedes	3 behind front seats and 4 under seat in crew haven
Single cab heavy tanker	Parcel shelf behind seats and under crew haven seat
Single cab Isuzu medium	One behind driver's seat, 2 in front of rear window
Crew cab NPS Isuzu 4-1	Place 6 in pouch on grab rail
Crew cab Canter	Stow all blankets under rear seats
Single cab medium tanker	3 behind front seats in cab
Toyota Landcruiser	2 blankets stored in between driver and passenger.
Group vehicles	In container in ute tray. To be relocated inside cab on rear seat under operational conditions

Blanket stowage per vehicle type, as determined by DFES.

	Fast Attack (In bracket in between driver and passenger).
	Heavy Duty – Fire Blankets located on installed brackets that are located to the rear and between the driver and middle passenger seat.
FIRE BLANKET BEHIND SEAT	Fast Attack and Heavy Duty (All vehicles) - Fire Blanket Location Sticker Installed on dashboard.

Version	Date	Status	Author/Position	Details of Change
1.0		Draft	S Lees Project Officer	DFES Installation Guideline
1.01	21/3/2014	Updated	D. Jones EMTO	Reflect DFES change of storage position in FA to in between seats.
1.02	6/1/2015	Final	D Jones EMTO	Reviewed. Removed storage of blankets in tubs under ROPs
1.03	29/11/2016	Final	S Lees ACRES	Reflect DFES change of storage position in FA to behind head rests.

Drip torches, also referred to as fire bugs, are used to deliberately start a fire. This BOP details the safe use of drip torches.

Authorised Uses

Drip torches are only to be used under the direction and control of an Incident Controller. (*Refer BOP 3.10 Bush Fire Response*)

Drip Torch Operation

- The appropriate personal protective equipment (PPE) must be worn when filling, igniting, using or extinguishing a drip torch. (*Refer BOP 4.02 PPE*)
- Before filling a drip torch with fuel, ensure the following:
 - o the tap is functioning
 - o the filler cap is secure, seals correctly and the 'O' ring is in place
 - the drip torch air valve is oriented away from handle (see Figure 1 drip torch components)

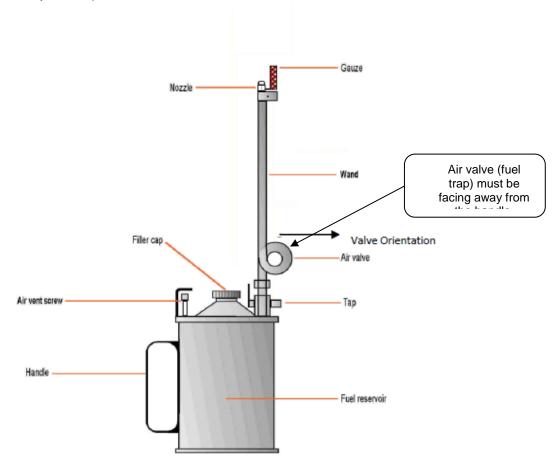


Figure 1 - Drip Torch Components

- Drip torches are to be fuelled with a mixture of diesel and petrol (75% diesel and 25% petrol).
- The fuel must be pre-mixed away from the fireground: do not mix individual fuels in the drip torch.

- Pre-mixed fuel is to be stored in a suitable container that is identified as containing
 the fuel mixture in the designated carrying cradle on the appliance. (This should be a
 green container as per the AFAC standards.)
- The following ignition sequence must be adhered to:
 - loosen air vent screw
 - o ensure wand tap is on
 - o tilt drip torch so that wand is pointing to the ground
 - allow the fuel to drop from the nozzle to the wick (gauze)
 - o ignite pilot flame at the wick
 - o observe and regulate flow using the wand tap
- Drip fuel onto vegetation under the direction of the IC and in accordance with operational plans.
- Store drip torches:
 - o in the designated carrying cradle on the appliance;
 - o no more than 34 full of fuel; and
 - o with the wand tap in the 'on' position.

General Safety Precautions

- Ensure that there is no risk to other personnel in the vicinity.
- Do not leave drip torches unattended.
- Do not use drip torches near stored or escaped flammable liquids or gasses.
- Ensure air valve faces away from the handle.

Version	Date	Status	Author/Position	Details of Change
1.0	21/01/2014	Draft	S Lees Project Officer	New procedure based on DFES SOP 3.5.4 V1.1
1.01	21/3/2014	Review	D Jones	Review based on DFES Safety Circular 7/2012
1.02	6/1/2015	Final	D Jones	Review and edit.

Storing fuel in metal fuel containers is a common practice on all fire fighting appliances as it allows additional reserves of ULP and/or drip torch fuel to be readily available.

If a fuel container is exposed to high temperatures, a build up of pressure inside the fuel container will occur. Upon opening this pressure build up can cause a sudden and vigorous expulsion of fuel vapour.

There have been instances of fire fighting personnel being doused in flammable liquid when opening fuel containers. The fuel ignited and caused burns to the fire fighters. Therefore, personnel opening a fuel container must follow the DFES six step process.

General

The DFES 6 step process is outlined below when refuelling from fuel containers:

- Remove the vehicle to staging areas or water refilling point away from the fire ground to ensure any escaping fuel container fumes and/or liquid will not reach naked flames.
- 2. Remove the fuel container from the appliance and place on the ground prior to opening the container.
- 3. Only re-fuel engines in well ventilated areas with the engine off. Where possible allow the engine to cool prior to refuelling.
- 4. Fully withdraw the retaining pin on the fuel container pourer.
- 5. Prior to pouring fuel make sure you earth yourself, the fuel container and funnel. This will reduce the possibility of static sparks.
- 6. Lift the cap **slowly** with the vent facing **away** from your body.

Filling Fuel Containers

Do not overfill the fuel containers. This ensures an expansion chamber is provided and helps to minimise any pressure build-up.

Ensure all fuel tanks and containers are full before entering the fire ground. Additionally crews should check fuel levels whenever they leave the fire ground and use this opportunity to refill if required.

Dry weather, with humidity levels below 40%, increases the likelihood of static electricity being produced. Static electricity can be caused by movement on the vehicle, the type of shoes worn, ground surface and/or the earthing status of the container.

Reference- DFES Safety Circular, 01/2015. Refuelling static motors at incidents.

Version	Date	Status	Author/Position	Details of Change
1.0	26/03/2014	Draft	D Jones EMTO	New procedure based on DFES Safety Circular 16/2012
1.01	6/1/2015	Review	D Jones	Proofed
1.02	4/2/2015	Final	D Jones	Change name to align with DFES Safety Circular and reviewed to ensure consistency.

The prevention of entrapment through maintaining vigilant situational awareness and following safe work practices is of paramount importance on the fire ground.

The following procedure details the actions that should be taken by fire fighters to maximise their safety if caught in a potential burnover situation by an encroaching bushfire.

Further information is provided at <u>BOP 4.07 Entrapment at Bushfires</u> and DFES SOP D3.5 – Bushfire - SOP 3.5.11 Entrapment at Bushfire

Prevention

Prevention of entrapment situations is supported through the following:

PROCEDURE	NOTES	
Maintain Situational	Ensure crews are fully briefed on the task and risks Ensure crews remain aware of the current and forecast situation	
Awareness	Elisure crews remain aware of the current and forecast situation	
Maintain Sound Work Practices	 Crews must ensure that a minimum of 25% water reserves is maintained in the tank for personal protection. The water deluge system requires 500 litres for a single cab appliance an 700 litres for a dual cab appliance to provide five minutes of protection. 	
	Note: under no circumstances are operations to continue once the water alarm has sounded without the approval of the IC.	
	 Undertake suppression tasks with due reference to LACES: L - Lookout. Seek positions of observation and regularly patrol A - Awareness. Maintain situational awareness and act 	
	 decisively C - Communications. Brief all incoming crews before tasking. Ensure lines of communication are maintained and reporting channels and chains of command known. E - Escape Routes. Constantly identify and assess potential escape routes. S - Safety Zone. Work from anchor points. Ensure all crew 	
	 understand and adhere to recommended safety zones. Ensure all crew understand the concept of the "dead man zone". 	

Burnover Procedure.

Appliance based bushfire entrapment procedure is as follows.

PROCEDURE	NOTES
Notify Commanders of	Transmit Emergency Message (as per BOP 3.04 – Incident Communications).
Emergency Situation	Activate beacons and siren.
Situation	Notify Sector Commander or IC of the location and the situation.
	Request aerial assistance (water bombers) if available.
	Activate the Automatic Vehicle Locater (AVL) emergency button.
Cease Operations	Branch operators close down all branches and place them on the ground.
	All crews immediately return to the vehicle.
	 Close down and remove delivery lines at the pump (except for personal protection lines).
Prepare and Protect the Appliance	Park appliance in a suitably sized safe zone and in a position that affords as much protection as possible for the crew with the rear of the appliance facing the fire front.
	Leave the pump running at a speed that allows the protective sprays to operate (3 bar).
	Note: In the case of appliances with a live drive system, the live drive will be disabled when the water deluge system is activated and the auxiliary pump will automatically start.
Prepare Crew	Conduct a head count to ensure all the crew are present.
	 Close all doors, windows and air vents and leave the engine running on fast idle. Turn air conditioner to recirculate.
	Drop heat curtains.
	Turn on beacons and headlights (if not already activated).
	 Dress in full PPE and cover crew with fire blankets.
	Don the In-Cab Air Dräger Oxy 3000 Unit.
	Crouch below window level.
	STAY INSIDE THE VEHICLE.
	Drink water to minimise the risk of dehydration.
	Note: Do not hose down crew members with water prior to the fire front passing as this may induce steam burns.
Protect Crew	On imminent fire contact activate the water deluge system by moving the Cabin Crew Protection switch to the "on" position.
	Note : the AVL function will be automatically activated when the Crew Protection is switched on.
	Stay close to the floor to minimize smoke inhalation.
	Wait for the fire front to pass – stay in the cab .

What to Expect.

Cabin Internal Temperature Rise	As the fire front approaches, the intensity of the heat will increase along with the amount of smoke and embers. Radiated heat will
	enter the cabin.

Cabin Infiltrated by Smoke	Smoke gradually enters the vehicle and fumes will be released from the interior.		
Appliance External Fittings Catch Fire	Tyres and external plastic body parts may catch alight. In more extreme cases the vehicle interior may catch on fire.		
Fuel Tanks	 Fuel tanks are very unlikely to explode. Fuel containers and drip torches not fitted with anti- explosive mesh may however be at risk. 		

After the Fire Front has Passed.

Observe the Fire	Stay in the vehicle until the fire front has passed and the external temperature has dropped.	
Exit the Vehicle	 After the fire front has passed, account for all crew and check the vehicle for damage. Once the temperature has dropped cautiously exit the vehicle. Be careful – some parts will be extremely hot. Take portable VHF and/or UHF radios with you. Take first aid kits, fire blankets and oxy-viva with you. 	
Move to a Safe Refuge	Move to an area that has already been burnt or cannot be burnt.	
Check Health of Crew	Continue to wear PPE and cover yourself with blankets, continue to drink water and await assistance.	
Re-Establish Communications	Send a SITREP to the Sector Commander/Ops Officer.	

Version	Date	Status	Author/Position	Details of Change
1.0	26/03/2014	Draft	D Jones EMTO	New procedure based on DFES Safety Circular 16/2012
1.01	7/1/2015	Final	D Jones	Review. Confirmed DFES SOP reference.
1.02	8/12/2016	Final	S Lees ACRES	Included reference to deluge system and incab breathing apparatus as per DFES NUCOM – In-Cab Air Dräger Oxy 3000 Training Unit and DFES NUCOM Retrofitted Water Deluge Systems.

4.8 BOP 4.08 Drug & Alcohol Consumption

Introduction

Fire fighters affected by drugs and/or alcohol can pose a safety risk to themselves and their colleagues. Research endorsed by the International Labour Organisation (ILO) shows a strong correlation between drugs and alcohol, both of which impairs a person's capacity to work safely and efficiently.

As all aspects of fire suppression carry an element of risk this BOP aims to ensure the highest possible standards of safety and health are maintained by all volunteers and brigades.

Drugs

The definition of drugs, and issues surrounding drugs have been broken down into two; illegal and prescription drugs.

Illegal and/or Non-Prescribed Drugs

- Illegal/non-prescribed drugs must NOT be consumed by individual when involved in fire response, management and suppression activities.
- No-one shall be involved in fire incident response, management or suppression activities in they have consumed illegal or non-prescribed drugs in the previous 8 hours.
- The same requirements will apply to operational training exercises and hazard reduction burns.

Prescribed Medications

All volunteers are expected to consult with their prescribing doctor in relation to any
prescription drugs and their possible effect on fire response, management or
suppression activities and comply with the direction provided by the prescribing
doctor.

Alcohol

While consumption of alcohol is recognised as a legal and socially acceptable custom in Australia this acceptance can reduce the awareness, in some people, of the issues surrounding alcohol consumption.

For this reason the following will apply:

- Alcohol must NOT be consumed by individuals when involved in fire response, management or suppression activities.
- No-one shall be involved in fire incident response, management or suppression activities if they have consumed alcohol in the 8 hours prior.
- The same requirements will apply to operational training exercises and hazard reduction burns.

The Road Traffic Act (1974) stipulates drivers of vehicles with a GVM in excess of 8 tonne are to have zero alcohol. As most heavy duty appliances exceed this GVM a zero alcohol tolerance is required.

Response to Actions in Breach of This Policy

If a volunteer is of the opinion that someone may be in breach of this policy they are to raise their concerns with anyone of senior brigade management and/or the City of Albany who will follow-up with the person.

It may be necessary to remove the individual from the fire ground. In these instances immediate arrangements need to be made to transport the person off the fire ground and the relevant FCO advised and independent testing arranged through City of Albany Human Resources.

Counselling through City of Albany, Human Resources, will be arranged for persons in breach of this policy.

A second breach of this policy will result in an official warning being issued and infringement recorded.

A third infringement will result in immediate termination of brigade membership.

Related Documents:

City of Albany Drug and Alcohol Policy

Document Control:

Version	Date	Status	Author/Position	Details of Change
1.0	9/1/2015	Draft	D Jones	Updating original City of Albany BOP B6 to align with recent City of Albany Policy
1.01	11/2/2015	Final	D Jones	Update to include reference to RTA 1974.

Bush fire smoke contains particulates and gaseous toxins with the potential to cause irritation to eyes and the upper respiratory tract. Compromised visibility can lead to trips and falls and can become disorientated in potentially dangerous situations.

Fire fighters working at a rural urban interface fire may also be exposed to gases created by burning man-made products.

Minimum Requirements

The minimum requirements for grass/scrub/bushfire include eye and respiratory protection. The IC should make recommendations regarding eye and smoke protection – ultimately the individual is responsible for their own safety and changes to strategies and tactics should be put in place should discomfort be experienced.

If there is no alternative but to work in smoke then the following respiratory protection should be employed. Please note facial hair inhibits the performance of smoke respirators. Smoke respirators should be worn at all stages of an incident, including mopup.

PPE	USE	DURATION	PROTECTION
Half-Face Respirator &	Low to Heavy (bushfire)	Extended periods (general	 ◆Organic gases;
A1 P2 Filter	smoke	operational use)	Particulate matter.
Full Faced Respirator &	Low to heavy (bushfire)	Extended periods (general	 ◆Organic gases;
A2 P3 Filter	smoke	operational use)	Particulate matter;
			•Added face/eye protection.

The following diagrams provide guidance on required smoke respirators.

Low Exposure	Light smoke and haze with minimal exposure to heavier smoke. Visibility greater than 15m. Carbon Monoxide = $0-15$ ppm.
Respiratory Protection:	Full face respirator or half face with eye protection.

Moderate Exposure	Light to moderate smoke exposure with brief exposure to heavy smoke. Visibility between 8-15m. Carbon Monoxide = 15 – 30 ppm.		
Respiratory Protection:	Full face respirator or half face with eye protection.		

	Continuous heavy to very heavy smoke.
	Visibility less than 5m.
	Carbon Monoxide = > 30 ppm.
Respiratory Protection:	Full face respirator or half face with eye protection.
	Consider BA and limiting working durations to 30–60 min.
- Comment of the second	

Document Control:

Version	Date	Status	Author/Position	Details of Change
1.0	11/02/2015	Final	D Jones	DFES SOP 3.5.15 Bush Fire Smoke Exposure
1.01	24/08/2015	Final	D Jones	Included reference to smouldering materials. Added details about facial hair requirements. Training requirement added.
1.02	27/07/2016	Final	D Jones CESM	Updated provision of smoke masks upon request. Training required.

Live electricity at structural fires is a deadly risk to firefighters. For this reason power needs to be isolated before commencing operations.

When electrical hazards are encountered Western Power is to be mobilised through base in order to assess and isolate risk.

Isolation Method

Isolation method turns off power to a single property and should always be undertaken prior to commencing operations.

Isolation of power is effected by operating all switches at 'arm's length' using the back of the hand and by turning the head away to avoid the possibility of flash injuries.

Structural Isolation Methods

Isolation of mains electricity

Electricity should always be disconnected when the situation is not fully known and at any time where water is to be applied within a structure. Electricity should also be isolated at neighbouring property where fire impact is likely.

The IC is responsible for checking the power is off at the mains board and fuses removed prior to commencing a direct attack.

Residual active power after isolation

After turning power off at the main board/meter the overhead line will remain alive. If the overhead line poses a threat to fire fighters the power should be isolated by Western Power. In these instances appliances and fire fighters should not be positioned under live, or possibly live, wires.

A cleared area needs to be maintained around the power line.

Isolation of Solar Electrical Systems

Even with power isolation (above) solar panels will continue to produce electricity until denied solar energy.

Initially isolate mains power at the meter/power board, then AC and then DC power and cover the panels with non-light penetrating material. N.B this should only be attempted if there is no fire activity underneath and it is safe to do so.

Only attempt to extinguish solar components using CO2 extinguishers.

Open Electrical Sources

When an electrical hazard is found the IC and all crew members are to be immediately notified.

Cease all water based until it can be determined it is safe to do so. As a safety measure the area should be marked off for a 10m minimum distance and a demarcation line of 30m minimum for members of the public.

Where wires have made contact with the ground treat all wires as being live and maintain a 10m safe distance from the wires. Western Power should be contacted to isolate the power.

Related Documents

Refer also BOP 3.16 Callouts Involving Western Power

Document Control:

Version	Date	Status	Author/Position	Details of Change
1.0	13/2/2015	Final	D Jones	Ref DFES SOP 3.4.8 Electrical Hazards

When responding to bushfires fire fighters may encounter trees that need felling or a situation where it is advantageous to clear a track of fallen timber. On occasions chainsaws have been used to undertake these tasks.

Changes to legislative requirements and the increased need for specific training on all items of equipment means that the ongoing use of chainsaws by untrained personnel is in breach of these legislative requirements.

In recognising the risks associated with chainsaw use neither DFES nor the City of Albany provide them as standard stowage items on fire appliances. Despite this some bushfire brigades have purchased their own chainsaw.

Tree Felling

The felling of trees with a chainsaw by a bushfire volunteer is **strictly prohibited**. Where it is necessary to fell a tree, earthmoving equipment or suitably qualified operators, as approved by the Incident Controller or the Manager Ranger & Emergency Services, must be used. *Refer BOP 3.17 Tree Removal at Bushfires*.

Clearing Fallen Timber

Bushfire volunteers who hold an appropriate chainsaw operator certificate, can only use a chainsaw to clear fallen timber in an <u>emergency</u> situation (e.g. blocked emergency egress route, vehicle or personnel entrapment, etc.) At all other times earthmoving machinery or approved operators shall be used.

Minimum Qualifications

Chainsaws may only be used by appropriately qualified and trained operators. The minimum qualifications to operate a chainsaw are:

- Trim and Cut Felled Trees (FPICOT2239A) or equivalent.
- Fell Trees Manually (Advanced FPIFGM3213 N.B. This unit supersedes FPIFGM3205A) or equivalent – knowledge and skills to assess, plan and safely carry out felling operations on problem trees (dead, forward leaning, side leaning, hollow, burnt out, co-dominant stemmed or large diameter trees) safely and with expert judgement.

Directions for Use

- 1 Chainsaws may only be used with the prior approval of the Manager Ranger & Emergency Services or the Incident Controller.
- 2 All chainsaw operators must wear full personal protective equipment: chaps, steel boots, gloves, goggles, hearing protection and helmet.
- 3 All chainsaw operators must be accompanied by a spotter at all times.

General Instructions

- All brigade owned chainsaws must be maintained in sound operational condition.
 This includes an annual service of the engine, bar and chain. N.B. These
 expenses are ineligible for LGGS funding and must be borne by the brigade.
- Those brigades with chainsaws will maintain a register of qualified (as per above) chainsaw operators within their brigade. Certificates must be sighted and details recorded.

Related Documents

DFES SOP 3.3.3 – Chainsaw Operations

Version	Date	Status	Author/Position	Details of Change
1.0	7/4/2016	Draft	D Jones CESM	Initial document
1.01	27/7/2016	Update	D Jones CESM	Reviewed and modified.
1.02	29/7/2016	Update	D Jones CESM	Included DFES SOP reference.
1.02	30/11/2016	Final	S Lees ACRES	Review and approval by Manager R& ES.

5 Equipment Management

• BOP 5.01 Vehicle Maintenance

Ensuring Vehicle Operability

Emergency response vehicles are to be kept in a condition that enables them to be ready for use in an emergency.

The following VPOWER check is to be carried out at least once a week during fire season and once a month at other times of the year:

Each of the six letters of the key word (VPOWER) indicates an essential item.

V	Vehicle Fault Report	Before commencing checks refer to the Vehicle Fault Report, note any entries and check that rectification work has been carried out.
Р	Petrol (fuel)	Main fuel tank to be as full as possible. Also spare fuel containers, auxiliary pumps and drip torches are filled correctly.
0	Oil	Main engine sump dipstick. Sump level of auxiliary motors. Primer oil level. Brake and clutch levels. Rescue equipment hydraulic oil.
W	Water	Main tank, foam concentrate level, radiator, windscreen washer, battery electrolyte level.
E	Electrical & Equipment	All lights including beacons, warning lights, headlights, radios etc. Bodywork for damage.
R	Rubber	Tyres for tread/pressure loose wheel nuts. Obstacles between duals, windscreen wipers, fan belts, etc.

Cleanliness

The FCO is responsible for ensuring that the vehicle is maintained in a clean and tidy state, both externally and internally. This includes checking the undercarriage of the appliance to ensure it is free of leaves and other debris.

Pre-Driving Checks - Procedures

To ensure all appliances can immediately contribute to fire fighting operations upon arrival the driver is required to check the following before departing the station:

- Tyres are functional.
- All fuel and water levels, in all containers, are filled as required.
- The radio is set to the relevant command channel.
- Lights and sirens are checked for operability.

Vehicle Check Responsibilities

Responsibilities for the checking of vehicles and rectifying of faults are as follows.

Task	OIC	Driver
VPOWER Checks	Ensure VPOWER checks are carried out	Carry out VPOWER checks
Familiarise with appliance operation	Coordinate rectification	Record and report
Operate vehicle safely	Monitor competency	Operate Safety

Complete Log-Book

City of Albany Log-books are to be completed every time an appliance is driven.

After each use, an appliance should be left in a condition where it is prepared for the next call-out. This includes making sure that:

- The fuel tank is at least three quarters full
- The main water tank is full
- Jerry cans and drip torches are refilled in accordance with guidelines
- Any breakages or repairs required are recorded in the log book and reported to the responsible officer

Arranging Repairs

Where damage has occurred and repairs are required the brigade equipment officer is to notify the City of Albany. The City of Albany will authorise repairs and identify a suitably qualified repairer.

Annual servicing of appliances will be coordinated by City of Albany staff. Suitably qualified service agents will be used for all annual servicing of vehicles.

Modifying Appliances

All modifications to City of Albany/DFES supplied appliances can only be undertaken with the <u>prior</u> approval of City of Albany Emergency Services Section.

Related Documents

DFES - VPOWER Checklist

Version	Date	Status	Author/Position	Details of Change
1.0	20/1/2014	Draft	S Lees	New procedure based on:
				DFES SOPs
1.01	7/1/2015	Review	D Jones	Expanded draft document
1.02	9/1/2015	Final	D Jones	To include old CoA BOP. Also included modifying appliance clause.

6 Emergency Management Policies

- BOP 6.01 Public Information & Communications
- BOP 6.02 Incident Control Policy
- BOP 6.03 Fire Reports
- BOP 6.04 Minimum Training Requirements

General

The WA State Emergency Management Committee (SEMC) defines public information as:

"Information provided to the community during emergency situations with instructions on how to get assistance or to protect personal health, safety and property. Information can be provided through the media and a range of other tools to reach intended stakeholders."

Communities threatened or impacted by emergencies have an urgent need for accurate and timely information and direction. They need to know what has happened, what is likely to happen and what to do and what to expect. They expect to know, where appropriate, what the responding authorities are doing, how, when, where and why.

Scope

This Policy deals only with the public information activities in relation to the response phase of an incident.

Responsibilities

Controlling Agency

The City of Albany is generally the controlling agency for bush fires within the municipality (Refer Emergency Management Regulations 2006). WESTPLAN – Emergency Public Information (section 3.03) stipulates the responsibilities of the controlling agency include:

- a) establishing procedures and protocols for the provision of timely information to the public during emergencies.
- b) ensuring the media is aware of the procedures and protocols that will be in place.
- c) ensuring they have access to the services of appropriately trained media and public information officers.
- d) ensuring the provision of consistent, appropriate and timely information to the public during emergencies.
- e) managing the provision of information to the media to meet their needs and for the dissemination of information and instructions to the public.
- f) liaising effectively with any Emergency Public Information Coordinator or Group (EPIC or EPIG).
- g) reviewing public information activities post-emergency, as part of the debriefing process and providing a report to the SEMC Public Information Group (PING), where required.

Incident Controller

The Incident Controller (IC) is responsible for providing accurate and timely information, based on the facts available at the time, to the Public Information Officer (PIO).

At a small incident all the AIIMS functions, including PIO, may be assumed by the IC.

Public Information Officer

The Public Information Officer (PIO) forms part of an AIIMS Incident Management Team (IMT) and is responsible for coordinating public information for an incident under the direction of the IC.

The PIO liaises with the IC to gain information about the incident, including its cause, size, immediate and impending impact, future consequences, risks, resources involved and other critical information.

The PIO is responsible for:

- providing information and warnings to threatened communities, other stake holders and the general public;
- liaising with news media and the management of media issues; and
- · consulting and liaison with affected communities.
- The dissemination of information within the IMT is not the responsibility of the PIO.

Incident Escalation - PIO Role

Larger incidents may require a dedicated PIO and this role can be delegated by the IC to another person.

At incidents where an IMT has been formed, the PIO may be supported by a Public Information Section comprising:

- Information and Warnings Unit
- Media Unit
- Community Liaison Unit

Community Alerts and Warnings

One Source, One Message

It is critical that the information provided to the media and the community is consistent. Therefore all external communication should be approved by the IC, where reasonably practicable. However, this should not be permitted to delay or interrupt the release of critical information and warnings to affected and threatened communities.

Bushfire Community Alerts

A nationally agreed system of bushfire alerts has been adopted by all fire agencies in Australia to advise the public of the increasing risk to life and the decreasing time until the fire arrives and actions to be taken.

The alert levels are:

- Advice
- Watch and Act
- Emergency Warning
- All Clear

(See Appendix 1 for a full description of the alert levels and Bushfire Warning Triggers)

Issuing Alerts and Warnings

Emergency Alert System:

The Department of Fire and Emergency Services' (DFES) Emergency Alert (EA) system is to be used to disseminate alerts and warnings to the community. The EA system delivers community warnings, via a recorded message, to fixed line phones and mobile phones within a specified area.

This information is also made available on the Emergency WA website (www.emergency.wa.gov.au), recorded public information line (1300 657 209) and broadcast on the ABC radio.

When to Issue an Alert or Warning:

DFES' EA system should be activated during any incident where there is a threat to lives or homes, or where there may be a heightened community concern (e.g. a small bushfire where there is a lot of smoke near homes and/or a number of roads closed).

Updating Alerts or Warnings

Once an alert or warning has been issued, it is critical that timely updates are provided if the situation changes.

City of Albany Media Channels

The City of Albany can reinforce the message issued through the EA system via its internal media channels including its Facebook page and the City of Albany website.

Users must be directed via hyperlink to the Emergency WA website www.emergency.wa.gov.wa for the latest updates.

Briefing the Media

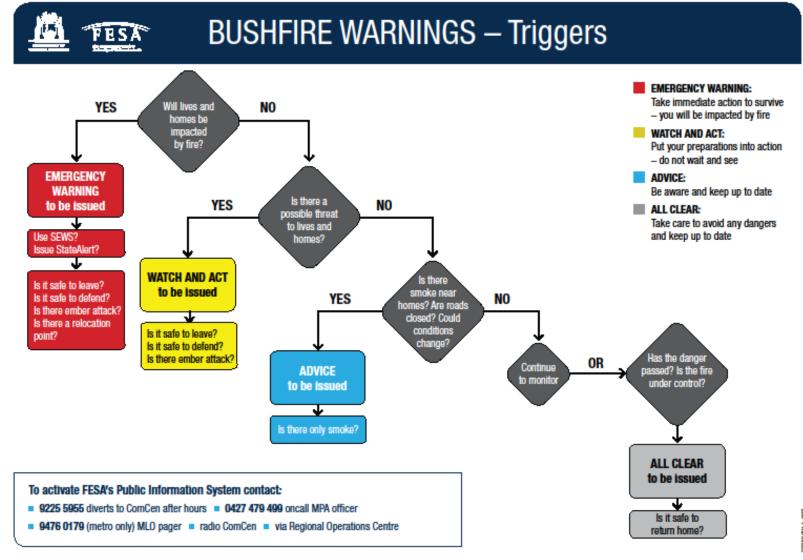
Information disseminated to the media should be based on the facts know at the time and adhere to the DFES Bushfire Talking Points form and/or the DFES IC Media Points Field Guide. (Refer BOP 3.08 Public Information During Incidents)

Appendices

Appendix 1 – Bushfire Warnings

Document History:

Version	Date	Status	Author/Position	Details of Change
1.0	20/1/2014	Draft	S Lees	New procedure based on
				DFES Directive 3.2 V1.5 SEMP 4.6 – Emergency Public Information WESTPLAN – Emergency Public Information
1.01	12/1/2014	Final	D Jones	Review and edit
1.02	30/11/2016	Final	S Lees ACRES	Updated to include Emergency WA web address.



PREPARE. ACT. SURVIVE.

BUSHFIRE WARNINGS: WHAT SHOULD YOU DO?					
ALERT LEVEL	WHEN WILL IT BE ISSUED?	WHAT SHOULD YOU DO?			
ADVICE Be aware and keep up to date Issued at 11am and 4pm unless the situation changes	 When a fire has started but there is no immediate danger There is no threat to lives and homes The fire is likely to be small and may be causing smoke near homes Firefighters will be able to control the fire 	You need to be aware Stay alert and monitor your surroundings by watching for signs of a bushfire, especially smoke and flames Check the Fire Danger Rating for your area Close all doors and windows			
WATCH AND ACT Put your preparations into action — do not wait and see Issued every two hours unless the situation changes	 When a fire is approaching and conditions are changing There is a possible threat to lives and homes The fire will be out of control. There may be smoke and embers around your home and roads Firefighters will be working with machines to put in containment lines to stop the fire spreading 	You need to leave or get ready to defend Put your bushfire survival plan into action If you have decided to leave for a safer place, leave now and take your survival kit with you Leave well before roads are closed and full of smoke			
EMERGENCY WARNING Take immediate action to survive - you will be impacted by fire Issued every hour unless the situation changes	When there is immediate danger and the fire will impact your home There is a threat to lives and homes The fire will be out of control and moving very fast. This is the highest level of warning Firefighters will find it difficult to control the fire and it will take significant firefighting resources and a change in conditions to bring it under control A siren sound called the Standard Emergency Warning Signal (SEWS) may be used to get your attention on radio and television	You need to act immediately to survive If you have not left yet and the way is clear leave immediately for your safer place and take your survival kit with you If you have not prepared your home, it is too late to do it now. Your safest option is to leave for a safer place, if the way is clear Do not relocate at the last minute in a vehicle or on foot as this is deadly, leave immediately if the way is clear			
ALL CLEAR Take care to avoid any dangers and keep up to date Issued when the threat has passed	 When the danger has passed and the fire is under control Firefighters will be working to put the last bits of the fire out and make the area safe It may still not be safe to return home. Emergency services will advise when you can go home 	You need to be careful Remain vigilant in case the situation changes When driving in the fire area you should take extreme caution and drive slowly Dangers like smoke, fallen trees and downed power lines may be on roads and emergency services will still be working in the area			

Policy Statement

This policy addresses the City of Albany's responsibilities as a controlling agency for bush fire under the *Bush Fire Act 1954* and the *Emergency Management Act 2005*.

Objective

6.2

Incident management provides for the safety and needs of fire fighters and the community. Its critical function is the command, control and conclusion of an incident. This policy documents the incident management arrangements in place for the City of Albany's Volunteer Bush Fire Brigades.

Scope

This policy addresses the management of any fire incident attended by the City of Albany's Bush Fire Brigades and/or City of Albany Emergency Management staff.

Safety

The safety of personnel tasked to the incident will be the fundamental priority in all phases of incident management.

AIIMS Incident Management System

The Australasian Inter-service Incident Management System (AIIMS) provides a common framework for emergency management. The City of Albany will use AIIMS in the management of every incident.

Incident Management Teams

An appropriate Incident Management Team (IMT) is to be established for every fire. The size and location of the IMT will depend on the size and complexity of the incident.

Appointment of Incident Controllers

State Emergency Management Policy 4.1 defines Incident Controller as 'the person designated by the relevant Controlling Agency, responsible for the overall management and control of an incident within an incident area and the tasking of agencies in accordance with the needs of the situation'.

The Incident Controller (IC) is appointed by the Controlling Agency as directed within the Emergency Management Act 2005. This means that the IC for a bush fires occurring outside the Gazetted Fire District is appointed by the City of Albany (with the exception of fires occurring on DPaW land).

A designated IC shall be in place for every fire, regardless of its size. The IC is recognised as the sole command authority at all times: **there is only ever one IC at an incident**.

The IC must be deemed competent for the incident being managed.

Incident Control – Initial Response

- The Crew Leader of the first arriving crew assumes the role and responsibilities of the IC in the first instance. (*Refer BOP 3.01 Incident Control & Management*)
- The identity of the IC must be declared to all personnel involved in the incident and recorded in the incident log.
- The IC must be visibly identifiable.
- The initial IC remains in command until relieved by a more suitably qualified person, the incident is brought under control or it is handed over to another agency.

 If any other person takes over the role of IC, the identity of the new IC must be declared to all personnel involved in the incident and recorded in the incident log and a formal handover conducted. (Refer BOP 3.12 Briefings)

First Responders' Training

The City of Albany is committed to providing brigades with training that prepares and equips volunteers with the skills to perform the role of initial IC. A register will be maintained of volunteers who have undergone First Responders' training.

Incident Level Classification

It is the IC's responsibility to declare the Incident Level, as per the definition in the *State Emergency Management Policy 4.1 Operational Management* and *SEMP OP-23* and Section 4.3.3 of *Westplan – Fire*.

Refer to BOP 3.02 Incident Escalation

Request for AIIMS Certified Level 1 Incident Controller

It is recognised that the majority of fires attended by the City of Albany Bush Fire Brigades fall within the Level 1 classification. This classification covers a range of incidents that vary greatly in size and complexity.

The IC can request that an AIIMS certified Level 1 Incident Controller be called in to assume the role of IC.

The following factors are triggers for the despatch of a qualified Level 1 Incident Controller to an incident:

- if the incident occurs on a day when the Fire Danger Rating is Very High or above;
- if the estimated time to control the incident is longer than two hours;
- if the incident is complex or situated in difficult terrain;
- if the incident poses a likely risk to life or property; or
- if the incident causes, or is likely to cause disruptions to the local community.

The Chief Bush Fire Control Officer (CBFCO) or delegate, or City of Albany Emergency Management staff can also request that an AIIMS certified Level 1 Incident Controller be called in to assume the role of IC.

City of Albany Incident Control Van Deployment

The Forward Control Van (FCV) provides additional fire management resources. When deployed to a fire incident it can be utilised as a Forward Control Point (FCP).

The FCV will be deployed if:

- requested by the current IC;
- requested by the CBFCO (or delegate) or the Rangers & Emergency Services Manager (or delegate);
- the incident occurs on a day when the Fire Danger Rating is Very High or above;
- the estimated time to control the incident is longer than two hours;
- the incident is complex or situated in difficult terrain;
- the incident poses a likely risk to life or property; or
- the incident causes, or is likely to cause disruptions to the local community.

City of Albany's Central Emergency Operations Centre (CEOC)

An IMT located at the City of Albany's Central Emergency Operations Centre (CEOC), should be activated when the ICV is deployed. The CEOC will be suitably equipped and maintained by the City of Albany to provide support during emergency incidents.

The CEOC provides support to the IC. It utilises City of Albany's resources that can assist in the following AIIMS functions and roles:

- Planning
- Logistics
- Public Information Officer

The CEOC is located at the City of Albany's Mercer Rd Office at 39 Mercer Road, Walmsley. Access (24/7) to the CEOC is to be made available to CoA Emergency Management personnel, the CBFCO and the DCBFCO.

The Wellstead Community Resource Centre, located at 49 Windsor Rd, Wellstead can be activated as an operations centre to support fire fighting operations taking place in the North East sector.

Location of Incident Controller

The IC may decide to relocate from the fire ground to the CEOC or transfer the IC role to a qualified person situated in the CEOC. The IC's decision to relocate, or transfer the role of IC is to another person, the must be communicated to all parties involved in the incident and recorded in the incident log.

Communications

When the CEOC is activated the following officers must be immediately informed:

- Chief Bush Fire Control Officer
- City of Albany Chief Executive Officer (or delegate)

Regular situation reports are to be provided by the IC to the CEOC.

(Refer BOP 3.03 Situation Reporting)

Joint Agency IMT

An IMT may comprise personnel from other agencies.

- Joint fire grounds with other agency personnel must only occur if all personnel accept the command of the designated IC and all instructions.
- IMT members need to be aware of the qualifications and experience of the IC. A matrix of IC training, qualifications and experience will be available.

Handover of Bush Fires Control

Under the Bush Fire Act 1954, a local government may request that control of the fire be handed over to DPaW or DFES. (Refer to *Westplan – Fire*).

However, the request may be declined by the other agency, in which case the City of Albany will remain the controlling agency and continue to control and resource the incident to the best of its capabilities.

The IC must record all requests for the handover of control of an incident in the incident log and the handover communicated to all personnel involved in the incident.

(Refer BOP 3.12 Briefings)

Incident Records

The ICs is to record actions and key decisions made in the incident log.

For more information refer BOP 3.09 Incident Records

Legislative and Strategic Context

- Emergency Management Act 2005
- Emergency Management Regulations 2006
- Bush Fire Act 1954
- State Emergency Management Plan Westplan Fire
- State Emergency Management Policy No 4.1
- State Emergency Management Policy OP-23

Version Control

Version	Date	Status	Distribution	Comment
1.0	17/10/2013	Draft	S Lees	Initial draft
		Revised		
1.01	12/1/2015	Final	D Jones	Review and edit.
1.02	27/7/2016	Update	D Jones	Changed address of CEOC
1.02	01/12/2016	Update	S Lees ACRES	Changed ICV to FCV

Introduction

Fire reports are a crucial element in the overall management of fire operations within the City of Albany providing specific details about each incident. Further to this fire reports can help provide data to various agencies which may have an interest or involvement with City of Albany fire operations, including Police Arson squad.

Fire reports are integral to Local Government Grant Scheme (LGGS) submissions placed by the City of Albany in support of requests for additional resources from DFES.

Fire Reports

All City of Albany Bushfire Brigades are to complete a Fire Report every time they are mobilised in response to any fire, incident or false alarm. Brigade fire reports are to be submitted by the most senior brigade person attending the incident.

Reports are required from the primary brigade, normally the local brigade, and also from any supporting brigade/s. The person acting in the role of 'base' will also complete a fire report.

To ensure accuracy of information fire reports should be submitted within 24 hours of the incident concluding.

Submitted reports are to be emailed to staff@albany.wa.gov.au where they will be filed in accordance with City of Albany record management policies.

Document Control

Version	Date	Status	Author/Position	Details of Change
1.0	19/1/2015	Final	D Jones	Updating previous City of Albany BOP.

6.4 BOP 6.04 Minimum Training Requirements

General

The City of Albany has a long-held policy of requiring volunteers who attend fires to have completed essential training. Originally the minimum level of training required was successful completion of Modules 1 -3 (Bushfire Safety, Bushfire Behaviour & Bushfire Suppression).

With the restructuring of DFES training modules, it has been necessary to review the minimum requirements for volunteer bushfire fighter training. Worksafe Improvement Notices reinforced the need for all volunteer fire fighters to have undertaken training consistent with the fire ground roles fulfilled.

Minimum Training Requirements

The following minimum training requirements will apply to all Fire Fighters before they can participate in any fire fighting activity, including controlled burns;

All fire fighters

- Completion of Burnover and Blanket Training
- Completion of Introduction to Bush Fire Fighting

Fire Control Officers

Fire Control Officer Course

Senior Roles Training Requirements

In addition the City of Albany actively encourages senior personnel to have completed training as outlined below.

Where qualified trained personnel are not available to fill these roles then suitably experienced personnel can do so.

Crew Leader

Crew Leader and Advanced Fire Fighter Course

Ground Controller

Ground Controller

Sector Commander

Sector Commander

Incident Control

Level 1 Incident Controller

Ongoing Training

While successful completion of introductory training is a requirement for every fire fighter there also exists the need for regular and ongoing training.

To ensure all volunteers are fully conversant with equipment, and operational policies and procedures brigades should undertake refresher training on an annual basis (minimum).

Document History:

Version	Date	Status	Author/Position	Details of Change
1.0	16/02/2015	Final	D Jones EMTO	Clarification of Training

				Requirements at each level.
1.01	19/08/2015	Update	D Jones EMTO	Training requirements for firefighters and FCOs clarified.
1.02	28/10/15	Update	D Jones CESM	Ground Controller training

7 Glossary of Terms

AIIMS - Australasian Inter-Service Incident Management System

BOP - Brigade Operating Procedure

CBFCO - Chief Bush Fire Control Officer

CEOC - City Emergency Operations Centre

DPaW - Department of Parks and Wildlife

DFES - Department of Fire and Emergency Services

EOI – Expression of Interest

FCO - Fire Control Officer

FCP - Forward Control Point

FCV - Forward Control Van

GVM - Gross Vehicle Mass

IC - Incident Controller

IMT – Incident Management Team

OIC - Officer In Charge

PIA - Post Incident Analysis

PIO - Public Information Officer

PPE/PPC – Personal Protective Equipment/Personal Protective Clothing

SITREP – Situation Report.

SMEACS - Situation, Mission, Execution, Action, Communication, Safety

VBFB - Volunteer Bush Fire Brigade

VCP - Vehicle Control Point

WAERN - Western Australian Emergency Radio Network

8	Atta	ch	m	ents	:

• Attachment 1 – Class A Foam Material Safety Data Sheet (MSDS)

8.1 MATERIAL SAFETY DATASHEET - Class A Foam

Date Prepared: 4/18/2011 Supersedes Date: 1/7/2011

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: Chemguard First Class FC

Chemical Family: Surfactant mixture.

Product Use/Description: Fire-fighting foam concentrate

Company Identification: Australian supplier:

Fire Protection Products Level 3, 95 Coventry Street, Southbank, VIC 3006, Australia Tel: +61 3 9313 9711

Fax: 1300-720-733 (+61) 03 9313 9709

www.chemguard.com

MSDS Preparer: Regulatory Compliance Specialist (817) 473-9964

For Chemical EmergencySpill, Leak, Fire, Exposure, or Accident Call CHEMTREC Day or

Night Outside USA and Canada: +1 703-527-3887 (collect call accepted)

READ THE ENTIRE MSDS FOR A COMPLETE HAZARD ASSESSMENT

2. COMPOSITION / INFORMATION ON INGREDIENTS

CONTAINING: HAZARDOUS AND/OR REGULATED COMPONENTS



Chemical Name	Percentage	CAS	OSHA Hazard
Diethylene glycol monobutyl ether	11.5	112-34-5	YES
Proprietary mixture of alkyl sulfates,	Proprietary	Mixture	YES
ethoxylates, amphoterics, solvents and			

COMPOSITION NOTES:

Irritant

Statement of Hazardous Nature

This product is classified as: Xi, Irritating. Hazardous according to the criteria of ASCC. Considered a dangerous good according the Australian Dangerous Goods (ADG) Code.

Risk Statements

R36/37/38 Irritating to eyes, respiratory system and skin.

Safety Statements

S2 - Keep out of the reach of children S24/25 - Avoid contact with skin and eyes

S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice

S28 - After contact with skin, wash immediately with plenty of soap and water or a recognized skin cleaner S36/37 - Wear suitable protective clothing and gloves.

S45 - In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). S53 - Avoid exposure - obtain special instructions before use.

S46 - If swallowed, seek medical advice immediately and show this container or label.

3. HAZARDS IDENTIFICATION*

*As defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. See Section 8 for exposure guidelines & Section 11 for toxicology and ingredient specific information.

EMERGENCY OVERVIEW WARNING! MAY CAUSE EYE AND/OR SKIN IRRITATION

Routes of Exposure:

Eye Contact: Exposure during the handling or mixing may cause immediate or delayed irritation or inflammation.

Skin Contact: Exposure during the handling or mixing may cause immediate or delayed irritation or inflammation.

Ingestion:_Ingestion of large quantities may cause abdominal cramps, nausea, vomiting, diarrhea.

Inhalation: Exposure to this product in excess of the applicable TVL or PEL may cause or aggravate other lung conditions. Exposure to this product may cause irritation to the nose, throat, and upper respiratory system.

Chronic: None known

<u>Medical Conditions which May be Aggravated by Inhalation or Dermal Exposure</u>: Persons with unusual (hyper) sensitivity to chemicals may experience adverse reactions to this product.

<u>Carcinogenic Potential:</u> This product and its ingredients are not listed as a carcinogen by NTP, OSHA, ACGIH or IARC.

4. FIRST AID MEASURES

Eyes: Immediately flush eyes thoroughly with water. Continue flushing eye for at least 15 minutes, including under lids. Seek immediate medical attention.

Skin: In case of contact, immediately wash with plenty of soap and water for at least 5 minutes. Seek medical attention if irritation or redness occurs. Remove contaminated clothing and shoes. Clean contaminated clothing and shoes before re-use.

Ingestion: If victim is conscious and alert, give 2 – 3 glasses of water to drink. Do not induce vomiting without medical advice. Do not induce vomiting or give anything by mouth to an unconscious person. Seek immediate medical attention. Do not leave victim unattended. Vomiting may occur spontaneously. To prevent aspiration of swallowed product, lay victim on side with head lower than waist. If vomiting occurs and the victim is conscious, give water to further dilute the chemical.

Inhalation: If respiratory irritation or distress occurs remove victim to fresh air. Seek medical attention if respiratory irritation or distress continues. If breathing is difficult, give oxygen. If breathing as ceased apply artificial respiration using oxygen and a suitable mechanical device such as a bag and a mask.

Notes to Physician: All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.

5. FIRE FIGHTING MEASURES

Flash Point – No flash to boil **Extinguishing Media** – Water, Foam, Carbon Dioxide, Dry Chemical, Halon

Lower Explosive Limit – Not Applicable Special fire fighting Procedures – None

Upper Explosive Limit – Not Applicable **Auto Ignition Temperature** – Not Applicable

Hazardous Combustion Products – None known

Unusual Fire & Explosion Hazards – None known

6. ACCIDENTAL RELEASE MEASURES

Wear appropriate protective gear for the situation. See Personal Protection information in section 8.

Containment of Spill: Dike or retain dilution water or water from firefighting for later disposal. Follow procedure described below under cleanup and disposal of spills.

Cleanup and Disposal of Spill: Vacuum or pump into an appropriate storage container. For smaller spills use absorbent materials and dispose of properly. Washing area with water will create large amounts of foam.

Environmental and Regulatory Reporting: Runoff from fire control or dilution water may cause pollution. Spills may be reportable to the National Response Center (800-424-8802) and to state and/or local agencies.

7. HANDLING AND STORAGE

Minimum/Maximum Storage Temperature: Store at temperatures of 35°F - 120°F. If Material freezes, it may be thawed without loss of performance.

Handling: Use with adequate ventilation.

Storage: Store in an area that is dry, well ventilated and in closed containers.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls: Where engineering controls are indicated by use conditions or a potential for excessive exposure exists, the following traditional exposure techniques may be used to effectively minimize employee exposures.

Eye Protection: When engaged in activities where product could contact the eye, wear safety glasses with side shields, goggles, or face shield.

Skin Protection: Skin contact should be minimized through use of latex gloves and suitable long sleeved clothing. Consideration must be given both to durability as well as permeation resistance.

Respiratory Protection: Avoid actions that cause dust exposure to occur. Use local or general ventilation to control exposures below applicable exposure limits. NIOSH or MSHA approved particulate filter respirators should be used in the context of respiratory protection program meeting the requirements of the OSHA respiratory protection standard [29 CFR 1910.134] to control exposures when ventilation or other controls are inadequate or discomfort or irritation is experienced. Respirator and/or filter cartridge selection should be based on American National Standards Institute (ANSI) Standards Z88.2 Practices for Respiratory Protection.

Ventilation: Use local exhaust or general dilution ventilation to control exposure within applicable limits.

Work Practice Controls: Personal hygiene is an important work practice exposure control measure and the following general measures should be taken when working with or handling this material:

Do not store, use, and/or consume foods, beverages, tobacco products, or cosmetics in areas where this material is stored.

Wash hands and face carefully before eating, drinking, using tobacco, applying cosmetics, or using the toilet.

Wash exposed skin promptly to remove accidental splashes or contact with this material.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance – amber pale liquid **Vapor Pressure** – Not Evaluated

Odor – Slight solvent odor Density – Not Evaluated
Physical State – Liquid Boiling Point – 205°F

Specific Gravity (H2O=1) – 1.01 Melting Point – 40°F

pH 6.0 - 8.5 Solubility in Water - 100% Soluble

10.STABILITY AND REACTIVITY

Stability: Stable.

Conditions to avoid: Unintentional contact with water.

<u>Hazardous Polymerization:</u> Hazardous polymerization will not occur.

Incompatibility with other materials: Strong oxidizers

<u>Hazardous Decomposition:</u>Oxides of nitrogen, sulfur, carbon.

11. TOXICOLOGICAL INFORMATION

Acute Eye and Skin Toxicity Data:

Toxicological Information and Interpretation:

Concentration Solution (As Used)

Eye Irritation: Severely irritating Practically non-irritating

Toxicity category IV

Skin Irritation: Non-irritating Slightly irritating

Acute Dermal LD50 >2020 mg/kg of body weight >2020 mg/kg of body weight

Acute Oral Effects:

Acute Oral LD50 >5050 mg/kg of body weight >5050 mg/kg of body weight

Chronic Toxicity:

This product does not contain any substances that are considered by OSHA, NTP, IARC or ACGIH to be "probable" or "suspected" human carcinogens.

12. ECOLOGICAL INFORMATION

Concentration Solution (As Used)

 Chemical Oxygen Demand:
 760,000 mg/l
 3,800 mg/l

 Biological Oxygen Demand (20 Day)
 417,000 mg/l
 2,085 mg/l

 Biodegradability (B.O.D./C.O.D.)
 55%
 55%

 Biodegradability
 60.9%
 60.9%

(OEDC 301B and (OPPTS 835.3110(m))

Total Organic Carbon:

LC50 (96 hour Oncorhynchus my kiss)

LC50 (48 hour, daphnia magna)

Not Determined

Not Determined

Not Determined

Not Determined

13. DISPOSAL CONSIDERATIONS

Waste Disposal: Chemical additions, processing or otherwise altering this material may make the waste management information presented in this MSDS incomplete, inaccurate or otherwise inappropriate. Dispose of waste material according to local, state and federal regulations. Discharge to waste treatment facilities only with permission. Anti-foam agents may be used to reduce foaming in the waste streams. Do not incinerate.

14.TRANSPORTATION INFORMATION

Hazardous Materials Description/Proper Shipping Name: NOT REGULATED

Hazard Class: Not Applicable Identification

Number: Not Applicable

Required Label Text: Not Applicable

Hazardous Substances/Reportable Quantities: Not Applicable

15. REGULATORY INFORMATION

SARA Title III Hazard Classes:

Fire Hazard: NO

Reactive Hazard: NO Release of Pressure: NO Acute Health Hazard: YES

Chronic Health Hazard: NO

16.OTHER INFORMATION

NFPA Ratings: Health: 2 Flammability: 0 Reactivity: 0

Label Requirements:

WARNING! MAY CAUSE EYE AND/OR SKIN IRRITATION

NFPA/HMIS Definitions: 0-Least, 1-Slight, 2-Moderate, 3-High, 4-Extreme

Protective Equipment: Safety Glasses, gloves

ADDITIONAL INFORMATION:

The information contained in this document is given in good faith and based on our current knowledge. It is only an indication and is in no way binding, notably as regards infringement of, or prejudice to third parties through the use of our products. Chemguard guarantees that its products comply with its sales specifications. This information must on no account be used as a substitute for necessary prior tests which alone can ensure that a product is suitable for a given use. Users are responsible for ensuring compliance with local legislation and for obtaining the necessary certifications and authorizations.

END OF MSDS

9 **Document Approval/Revision History**

Document Development Officer:			Document Owner: (Member of	
Administration Coordinator Emergency Services Document Control			EMT) Executive Director Planning & Development	
File Number - Document Type:		CM.STD.4 Guideline (Operating Procedures)		
Synergy Reference Number:		NPD1545167		
Meta Data: Key Search Terms		Fire, Operating Procedures		
Status of Document:		Administrative decision: Approved.		
Document file details:		Location of Document: Extranet N:\Corporate Services\Governance and Risk\Corporate Documents		
Quality Assurance:		Bush Fire Advisory Committee Executive Management Team Chief Bush Fire Control Officer Deputy Chief Bush Fire Control Officers Fire Control Officers		
Distribution:		Public Document		
	nt Revision Histo	<u> </u>		
Version	Author	Version	n Description	Date Complet d
0.1	Administration Coordinator - Rangers & Emergency Services	Draft – Prepared in consultation with: Emergency Management Team Chief Bush Fire Control Officer CoA VBFB membership		20/01/201
1.0	Administration Coordinator - Rangers & Emergency Services	Approved by Execut under delegated aut Delegation Number I Issue directions to B	hority: 2014:041:	16/04/201
1.01	CESM	BOP 2.03 Driving Under Emergency Conditions BOP 6.04 Minimum Training Requirements		October 2015
1.02	MRES / CESM / ACRES	Review of BOPs – u BOP 1.01 Hazard Red BOP 1.03 Fire Manage BOP 2.02 Crewing Fire BOP 2.03 Driving Eme BOP 2.04 Out of Area	duction Burns ement Requirements e Appliances ergency Vehicles	February 2017

	BOP 3.07 Spot Weather Forecasts BOP 3.08 Public Information During Incidents BOP 3.15 Use of Heavy Machinery BOP 4.02 Personal Protective Equipment BOP 4.04 Fire Blankets BOP 4.07 Entrapment at Bushfires BOP 4.09 Bush Fire Smoke Exposure BOP 4.11 Use of Chainsaws BOP 6.01 Public Information & Communications BOP 6.03 Incident Control Policy	
--	---	--