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## VFBV Interim Submission

### 2009 Bushfires Royal Commission Submission

Volunteer Fire Brigades Victoria makes the following submission in response to matters raised during the course of the first stage of the Royal Commission into the bushfires that occurred throughout Victoria during February 2009.

## **INTRODUCTION**

1. Volunteer Fire Brigades Victoria (“VFBV”) makes the following submission in response to matters raised during the course of the first stage of the Royal Commission into the bushfires that occurred throughout Victoria during February 2009 and in particular those that ravaged the state with tragic outcomes on the 7<sup>th</sup> February 2009.
2. The Country Fire Authority (“CFA”) volunteer based service model embeds CFA into the community, and the community into CFA. That volunteer based model is unequivocally central to achieving the objective of a safer community in areas exposed to bushfire danger.
3. No resource model other than CFA’s community volunteer based model has the necessary, flexibility, contingent capacity, scalability or community empathy required to deal with the range of incidents experienced during the fire season, including disasters such as those recently experienced in Victoria.
4. Volunteers make up the vast majority of the human resources that are applied to the preparation for and management of bushfires in this State.
5. In this context, the VFBV is a signatory to a Charter with the CFA and the State Government that commits the parties to co-operation and consultation on matters that impact upon volunteers.
6. In particular the Charter obliges the parties to ensure that *“volunteers’ views, opinions and concerns are fully considered before adopting any new or changed policies, procedures or approaches which impact on them as CFA volunteers”*.
7. Recommendations made by this Royal Commission must be cognisant that in the longer run any changes that are made will largely be carried into effect by volunteers.
8. Whatever recommendations are made by this Royal Commission, the task of implementing any changes will nonetheless require the parties to the Charter to honour their obligations to volunteers.
9. Therefore VFBV has a vital interest in the outcome of the Royal Commission as one of the principal agents for any change or the creation and implementation of new practices and procedures in our communities.
10. VFBV is the body that represents the CFA’s 60,000 volunteer fire brigade members. Of these, approximately half are trained to undertake fire suppression roles whilst the remaining members perform a range of support functions including incident management roles and other brigade and community support functions.
11. Compared to the relatively low numbers of paid staff dedicated to the task this is a significant resource. The paid personnel within the CFA number several hundred (excluding personnel committed to the 10/14 fire station manning roster) and 3,578 paid staff from within the Department of Sustainability & Environment (“DSE”) and its networked agencies available to perform emergency fire response activities.
12. To further emphasise the capacity of CFA’s volunteer workforce and put the size of CFA’s volunteer workforce into a more general perspective, it is larger than the entire current and proposed Australian Defense Force (army, navy and air force) and nearly 6 times the combined number of police and paid fire and emergency service workers in Victoria.
13. CFA and its volunteers provide fire and emergency service cover for 60% of Melbourne’s suburbs, all Victorian provincial cities and towns and all of country Victoria excepting National Parks and public lands (where primary responsibility is under the

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Department of Sustainability and Environment - often supported by CFA and its volunteer work force).

14. It is currently estimated that the value that accrues to the community (and the government) from the contribution of CFA volunteers is in the vicinity of \$840M<sup>1</sup> per annum whilst to train, equip and resource a paid workforce of sufficient size to match the current capability of CFA volunteers would cost Victorian taxpayers and insurance holders in the billions of dollars a year in additional cost.
15. CFA's local community based volunteer brigade structure, incorporating volunteer community members trained to national professional standards and qualified in a variety of roles for firefighting and other emergency response, operational support and community education/advice services, is at the core of all CFA activity.
16. The resource model that integrates CFA's 60,000 volunteers (98% of CFA's workforce) and the 1,300 paid operational and support staff who work with and in support of volunteers is essential for state-wide service delivery for Victoria. The integrated model provides resource planning flexibility that is fundamental to CFA's ability to maintain a state-wide volunteer base, targeting paid resource support to supplement volunteers as required depending on local community circumstances (such as volunteer capacity, community capacity, level of risk, service demand etc).
17. Victoria is one of the most fire prone areas in the world. CFA's volunteer based resource model is the only approach capable of economically and practically dealing with the quantum, scale, spread and simultaneous occurrence of fire emergencies experienced in Victoria – whether this be day to day demands, major disasters or a combination of both. *Multiple, protracted major incidents witnessed over recent years have demonstrated the capacity of this volunteer resource model to combat incidents occurring across the State on a day to day basis as well as the capacity to combat fires and incidents continuing over an extended period of time.*
18. As well as providing the capacity to deal with multiple emergencies throughout the State every day, CFA's volunteer based resource model provides contingent capability to deal with large scale emergencies and scalability to continually ramp up resources as new incidents occur and/or to cope with long duration incidents.
19. Notwithstanding that CFA and others need to continuously strive for improved community safety outcomes, decisions about CFA's future (and the future of Victoria's emergency management arrangements) must not be made without careful analysis of the impact of these decisions on future volunteer involvement, future volunteer capacity and community shared responsibility.
20. Any projected improvement in one aspect of emergency management and community safety must be carefully assessed in terms of the degree to which it will positively or negatively impact on Victoria's ability to build an even stronger volunteer based CFA for the future

### **THE 2008-2009 FIRE SEASON**

21. The 7<sup>th</sup> February 2009 presented what many experts have described as the worst fire danger day in Victoria's recent history. The effects of one of the most extensive droughts and its impact on forest and grassland fuels exceeded the memory of many fire management practitioners and the conditions that prevailed during the most recent "benchmark event", Ash Wednesday 1983. The shorter term conditions leading up to the 7<sup>th</sup> February and the forecast weather for the 7<sup>th</sup> were also far beyond what most fire managers had previously had to contend with and as result may have been for some, difficult to fully comprehend.

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<sup>1</sup> CFA Annual Report 2007-08

22. In the lead up to the 2008-09 fire season it was clearly evident that it would not be a normal one. In recognition of the emerging danger, volunteers across the State spent many thousands of hours working with their communities to ensure that there was an increased level of understanding of the threat and to establish the need for higher levels of preparedness.
23. Our people also took particular steps to ensure that they were ready and that their physical resources were at the highest state of preparedness. The success of these programs and activities was demonstrated by the fact that despite the horrific conditions experienced throughout the season, the firefighter safety record was exemplary.
24. Prior to the 7<sup>th</sup> February, many hundreds of CFA volunteers had been engaged in responding to and successfully containing hundreds of grass scrub and forest fires across the state associated with a fire season that was emerging as one of the most difficult and dangerous in CFA's history. This included extensive damaging fires in central Gippsland and in the Bunyip State Forest just to the east of metropolitan Melbourne both of which were still not under control leading up the 7<sup>th</sup> February.
25. On Saturday the 7<sup>th</sup> February 2009, one of the worst if not the worst fire danger day in Victoria's history, thousands of skilled and qualified CFA volunteer fire fighters and support members responded to the major fires across the state on both private and public land while hundreds more attended some 1400 additional incident notifications that were rapidly attended and made safe. In addition to these personnel, many more CFA volunteers manned ICC's and Fire Stations and performed key tasks in support of fire fighters on the ground. Thousands more remained available and were subsequently tasked to on-going rotations of personnel to man fire appliances and to provide support in various HQ's and ICC's over the next several days as the fire fight continued and community recovery operations commenced.
26. VFBV acknowledges that the protection of human life is paramount and should be used as the guiding principle to inform both the recommendations associated with this Interim Report and any future report that the Royal Commission may hand down.
27. However what also must be recognised is the fact that from time to time circumstances including adverse weather and fire behaviour may lead fire fighters to make decisions in which their personal safety is the primary consideration. This will limit the ability of CFA to act to protect the lives of people in dangerous situations. This is especially likely to occur where people live in high risk areas with limited access and little or no defensible space.
28. It is essential that these circumstances be conveyed to the community prior to every fire season and accompany the overriding principal that when major fires occur, members of the community cannot always expect to have a fire fighting vehicle and crew dedicated to the protection of their property for the duration of the period that their property is under threat.

#### **INFORMATION MANAGEMENT & COMMUNITY WARNINGS.**

29. VFBV strongly supports the contention that the acquisition and analysis of intelligence and its timely conversion to information suitable for public consumption which subsequently elicits an appropriate response, can and does save lives and minimises the extent of property damage during a bushfire.
30. **VFBV is anxious to ensure that the Commission (and ultimately the community) recognises that it will not always be possible to issue timely and accurate warnings, particularly when a bushfire commences in a vulnerable area and impacts assets within a matter of minutes following ignition. This situation is far from unique to a bushfire and can emerge as a consequence of other emergencies such as a gas explosion, building collapse or a terrorism related incident.**

31. **The safety of the community and the protection of assets and the environment must be a shared responsibility between the agencies responsible for bushfire prevention and suppression and the community. Just as the agencies may have a statutory obligation to protect the community, the community has an equally compelling obligation to take steps to personalise the risk, implement measures to prepare their properties and to take the appropriate action to minimise the impact of bushfires on their lives and property.**
32. **The CFA must be adequately funded to enable volunteers and paid staff to be provided with the training and resources to increase community penetration of the bushfire safety message.**
33. However, evidence accrued over many years indicates that an appropriate response to community information and warnings during a bushfire will only occur if the community has participated in and understood programs designed to ensure adequate steps have been taken prior to the event. These programs include the need to prepare for the likelihood of a bushfire and to agree on the actions that the community and individual asset owners intend to take in the event of a bushfire threat materialising.
34. As the Commission should now clearly understand, many people are required to make decisions about their level of participation in community education programs without any personal experience or real understanding of the level of risk that they may face in a fire. The factors that influence an individual's decision to participate in community education programs is premised upon on a sometimes unimaginable event and the quite separate factors that influence their behaviour when impact is imminent are extremely complex and multi faceted.
35. Accordingly there is no single program or "one fits all" solution.
36. CFA's community education programs delivered by volunteers and paid staff have reached tens of thousands of residents and property owners over a significant number of years. These programs have continued to be refined as the profile and sophistication of the community changed. Many of these programs including Community Fireguard, Bushfire Blitz and Living with Fire have been held up as world's best practice. A number of witnesses that have already appeared before the Commission have alluded to the challenges that these programs face in trying to achieve a high level of community penetration.
37. Volunteers support new and improved initiatives to continually reinforce important fire awareness messages within their communities.
38. CFA volunteers are central to the delivery of CFA community education programs and will remain central to the effective delivery of current and new community education initiatives. Up to date, on-going training of Volunteers is essential for successful implementation of these programs. To be effective, training programs must achieve adequate targeted and consistent delivery; course design; course timing; and delivery modes which are conducive to optimal volunteer participation.
39. **The responsibility for issuing warnings must rest with the agency which is designated as having the primary responsibility to manage the fire i.e. the combat agency.**
40. The combat agency should be in receipt of the most up to date information about the current circumstances and future extension of the emergency and in particular, the strategies and tactics that are being employed to bring the incident under control.
41. **The direct responsibility to issue warnings during the passage of a bushfire should rest as it does today, with the Incident Controller at the designated Incident Control Centre.**

42. Any contemplation that an agency or entity other than the one that is directly responsible for managing the incident should be given the responsibility to initiate dissemination of information to the community will potentially lead to confusion, duplication, inadequate analysis of intelligence and advice based on uncorroborated or inaccurate information.

#### **TRIGGERS FOR ISSUING WARNINGS**

43. **VFBV has reservations about the establishment of fixed triggers for issuing warnings.**
44. These reservations particularly apply to those emergency events that are characterised by rapid onset and extended geographic impact. In these circumstances, established (or fixed) triggers for the issuing of warning can often be overrun by the speed of the event. The ability of the responsible agency to follow the procedure required before giving a warning, to obtain intelligence, corroborate that intelligence and disseminate meaningful information upon which the community are able to make decisions about their safety and security may not be able to keep up with the speed with which the emergency is developing
45. “Triggers” as a means of guiding decisions about the giving of warnings can be a helpful guide, but they should not be used inflexibly.
46. VFBV recognises that triggers could be developed that act in support of decision making rather than dictate when specific actions should occur.
47. Community information and warnings are not unique to a bushfire emergency.
48. Whatever system or process is put into place that aids the transmission of information and warnings to the community must also be suited to application to other types of emergencies e.g. a hazardous materials incident, gas explosion, flash flood event, and the multitude of other emergencies for which the community need to be informed in order to make decisions about their personnel safety and the security of their property.
49. VFBV believes that there is nothing fundamentally wrong with the current structure, which is designed to oversee and implement community messaging.
50. The extreme events of 7 February 2009 highlighted gaps in the systems and processes used to acquire and validate intelligence and then translate this into meaningful and timely messages to the community.
51. Rather than look at the responsibilities and triggers for community messaging, the agencies need to ensure that the appropriate infrastructure is in place to ensure the best possible information or intelligence is available to those responsible for issuing warnings and that appropriate priorities are given to these tasks.

#### **PROCEDURES FOR ISSUING WARNINGS**

52. **Under normal operating circumstances, there can only be one point for the collection and analysis of intelligence and from which information and warnings are subsequently distributed to the community via appropriate modes during an emergency. This should be the ICC that has been designated to manage the fire.**
53. **VFBV considers that the separation of responsibility between the Integrated Emergency Co-ordination Centre (“iECC”) and the ICC in all functions including information management must be unambiguous. That separation must be on the premise that the iECC is a state-wide Co-ordination Centre and the ICC is the Control Centre for individual fires or a complex of fires.**



54. **The role of the iECC should be to support individual ICC's and ensure that they are appropriately resourced and are performing effectively and meeting the obligations of the agencies. The iECC should also maintain a state-wide overview in order to inform key stakeholders and in consultation with IC's, prioritise resource allocation when there are competing demands.**
55. **Where necessary, the iECC may promulgate messages and community information that is an amalgam of information from more than one ICC and is generic in nature or that is designed to provide broader information of the strategic picture concerning the overall state-wide impact of a bushfire or series of fires.**
56. In the context of the fires that occurred on the 7<sup>th</sup> February 2009 VFBV contends that the gaps in the dissemination of community information and messages were evident at all levels within the incident management structure. This includes:
  - the provision of information from the fire ground;
  - the receipt of that information and corroboration by appropriate personnel in the incident control centre;
  - the aggregation of information available from other sources including other agencies and the community;
  - the ability to rapidly analyse and corroborate the intelligence and turn it into meaningful information at the ICC; and
  - the systems to ensure that it was disseminated in so far as is practicable to the appropriate target audiences.

#### **CONSTRUCTION, CONTENT AND DISSEMINATION OF WARNINGS**

57. **VFBV supports the need to review the structure of messages that are provided to the community, particularly those that require an urgent appropriate response to threats arising from any emergency.**
58. It is recognised that the construction and content of communication with members of the public during times of emergency when people are under significant stress requires particular analysis and an understanding of the psychology of human behaviour.
59. Accordingly whilst VFBV makes no specific recommendations or comment in relation to this particular topic, it does support further research and advice to ensure that messages not only reach their target but have the desired reaction.

#### **DELIVERY OF WARNINGS AND COMMUNITY INFORMATION DURING BUSHFIRES**

60. **VFBV recommends that there be one single multi agency bushfire information website for Victoria.**
61. **The site must be transparent to the community but be capable of receiving inputs from a variety of sources including ICC's, RECC's and the state iECC.**
62. **VFBV considers that the modes/methods of information from which the community is able to obtain information of immediate relevance to their personal situation and which contains succinct easily interpreted information upon which they are able to make decisions concerning their safety must have a design capacity to accommodate the "worst case scenario".**
63. **VFBV further emphasises to the Commission that the receipt of information and the subsequent taking of appropriate safe action is a joint responsibility between the community and the combat agencies. Just as the combat agency has an obligation to provide access to accurate and timely information in so far as is possible, members of the community have a mutual obligation to actively seek information and not adopt a passive approach, waiting to be informed.**

64. **VFBV supports the maintenance and enhancement of the Victorian Bushfire Information Line (VBIL) as a primary point of information for the general public during a bushfire. However, to be effective, the facility must be enhanced with arrangements to implement a surge capability.**
65. **Staffing within the VBIL must include personnel with an intimate knowledge of the geography of the state as there were many anecdotal reports of delays in providing information to callers when operators had insufficient knowledge of placenames and locations.**
66. People under pressure during an extreme event will seek information from wherever it is available. If they are unable to obtain up to date and accurate information quickly and simply from official sources, they will seek it from wherever they can. If this alternative source does not have accurate and timely information, people may make decisions that place them at greater risk. Accordingly every effort must be made to ensure that the VBIL and other official sources are able to perform effectively and meet the demands of the community regardless of the circumstances.
67. VFBV strongly advocates that the website and other technological solutions providing community access to information should be managed jointly by CFA and DSE and not undertaken by a separate entity which is more than likely to add additional levels of bureaucracy, a lack understanding of the nature and potential impact of the event and result in further delays to the dissemination of urgent information.

#### **APPLICATION OF A STANDARD EMERGENCY WARNING SIGNAL**

68. VFBV notes that the use of the standard emergency warning signal (SEWS) has been ventilated at some length during the course of this phase of the Royal Commission.
69. The use of the SEWS warning has been effective in other jurisdictions and for other emergencies such as flood and cyclone.
70. If this is to occur, there will need to be a review of the agreed protocols for the use of the warning.
71. VFBV agrees with the evidence of the CFA's Chief Officer that if the SEWS was to be used in accordance with the currently agreed protocols on a day like 7 February 2009 when multiple fire events across multiple areas of the state impacting on multiple communities occurred, then the warning sound may have been played many tens of hundreds of times throughout the day.
72. The danger in this scenario is that the effect of the warning is potentially diluted and the impact of the signal in alerting the community to urgent messages following is significantly reduced throughout the passage of the day as people seek to separate out information that is relevant to them and to ignore the remainder.
73. The success of SEWS systems is well proven in situations where there has been a period of development prior to the onset of a real and imminent threat to the community or in circumstances where the emergency has been almost singular in frequency and therefore the use of this signal in accordance with the protocols agreed has had an identifiable impact. In establishing protocols for the use of SEWS it is necessary to ensure that its use is effective.
74. If the SEWS signal is to be adopted as an introduction to urgent threat warnings then protocols relating to the manner in which it is used and the authorisations necessary for it to be used will need to be reviewed. For example, if the ICC following authorisation by the IC is responsible to disseminate urgent threat messages, then the current process of further authorisation via the DERC to use the SEWS signal is an



unnecessary additional process which can only add further to the delay in dissemination.

### **MULTI-MODAL MESSAGE DISTRIBUTION (WARNING) SYSTEMS**

75. **The greatest challenge facing emergency managers today is the dissemination of information and urgent threat messages during a dynamic high impact incident.**
76. **New or enhanced multi-modal solutions are required that ensure that the whole community has access to information during an emergency regardless of the individual attributes and characteristics of the population. The Government must provide the necessary budget appropriations to ensure systems and processes are implemented that embrace the community as a whole.**
77. **VFBV considers that an open call for expressions of interest nationally and internationally to design or design and operate a comprehensive community information system would flush out opportunities for innovation and partnerships.**
78. **Regardless of the approach or key system performance and operating criteria, the Government must make available initial and on-going funds that support the introduction of appropriate solutions. Ideally this system would be supported by other jurisdictions and the Commonwealth in order to introduce a standard approach to emergency management messaging and amortise costs across a wider range of participants.**
79. VFBV understands the dilemma that faces CFA and other emergency agencies, not just those responsible for bushfire, in achieving maximum targeted penetration of urgent threat messages and other pre-impact warnings even where the intelligence acquisition analysis and message construction processes are both timely and accurate.
80. If messages are to be effective and save lives, then they must reach all those at risk. This task and the multiplicity of modes of communication necessary to achieve this level of distribution may result in gaps leaving some lives at risk.
81. The principal way in which these gaps can be minimised is by ensuring that community education programs include specific information relating to principal and alternative sources from which authoritative information regarding an emergency can be obtained.
82. Technology is advancing at a rapid pace in today's environment. Opportunities exist to utilise technological solutions such as intrusive telephone messages involving both fixed and mobile handsets for the dissemination of information to a far greater extent today than has ever existed. These messages can either be generic in coverage or targeted based on billing address. In general terms, today's people expect to be able to access information from supported technological portals whether they be telephonic or computer based.
83. There will also be a requirement to consider alternative solutions more suited to recipients who are not wedded to technology and look for more traditional and familiar means of communication or those that for a range of other reasons require assistance to obtain information and execute safe actions.
84. In this diverse environment, the expectation is that regardless of the demographic profile or preferred method of communication, the solution must be all embracing. What is clear is that a multi-modal solution is required and that government must inject the necessary funds to ensure that no section of the community is denied access to information during an emergency whether by reason of age, disability, technical competence or literacy.

85. The introduction of any new community information and messaging package will require substantial community education. Costs associated with such a program must be incorporated into initial and on-going financial appropriations. As has been experienced with bushfire related community engagement and education programs, programs to introduce and maintain awareness of any message distribution system will not be limited to initial introduction but will continue to one degree or another almost indefinitely.

#### **INCORPORATION OF FIRE DANGER INDICES IN COMMUNITY INFORMATION**

86. **VFBV acknowledges that an improved method of warning that more accurately portrays the potential severity of a particular weather forecast coupled with environmental conditions on ignition and the likelihood and/or difficulty of suppression is required.**
87. **Any proposal to more accurately or helpfully describe fire danger and which is designed to assist community recognition of the risks associated with a particular combination and range of conditions must be accepted and introduced nationally. This approach is desirable as it will minimise anomalies between states and serve to ensure that tourists and visitors are not confused.**
88. It is recognised that the traditional information conveyed by a declaration of “total fire ban” is not an adequate descriptor of the magnitude of the risk confronted on days such as 7 February 2009 compared with the relatively lower risks of days on which a Total Fire ban declaration might be required nonetheless.
89. There needs to be a more informative method of conveying risk levels.
90. It may be that a numeric scale of warnings similar to that used to indicate the severity of a cyclone or a more descriptive term could be applied to highlight those conditions that are represented by fire danger indices that lie beyond the nominal extreme rating (FDI >50) and the upper limits associated with indices well in excess of this base rating e.g. 200 or 300.
91. VFBV believes that the publication of fire danger indices alone will do little if anything to inform or educate the community.
92. It may improve recognition if numerical fire danger indices were linked with other more recognisable descriptors that would cause the community to acknowledge and act in accordance with the risk that they face.
93. Any change to the manner in which the levels of risk associated with different values of fire danger are communicated to the public will require a significant investment in initial and on-going community education programs.

#### **EVACUATION**

94. **VFBV acknowledges that there is only one guaranteed safe option for the community to take during a fire and that is not to be in the area under threat.**
95. **However, VFBV does not support the wholesale evacuation of specific or more widespread areas of a community at risk from a bushfire.**
96. **VFBV supports improved engagement and education programs that inform and empower the community to modify their properties where necessary and which assists individuals to make well informed decisions regarding their own safety in the event.**
97. **VFBV understands that the Government will set out clear reasons in its Submission to the Commission as to why policy in relation to evacuation should**

**not be substantially changed or modified. VFBV supports the argument advanced by the Government and also supports retention of the underlying principles of the “prepare, leave early or stay and defend” policy.**

98. Mandatory evacuation can be extremely divisive in a community that depends primarily on volunteers from within the community for their protection from bushfires.
99. VFBV suggests that in some instances, volunteer firefighters would be reluctant to enforce a mandatory evacuation with the knowledge that it could increase the level of risk of loss of life and injury and property loss.
100. Mandatory evacuation will significantly add to the burden of asset protection workload that will befall brigades and volunteers and will complicate triage arrangements where the fire services are required to identify what can be saved and what must be sacrificed in the interest of broader objectives.
101. Occupants whose property combines adequate preparation and defensible space and who remain provide a valuable resource that enables the CFA to concentrate on those people who require urgent assistance, priority asset protection including critical community infrastructure and the overall effort to stop the spread of the fire.
102. In this context a mandatory evacuation, if in fact it is successfully executed, will potentially add to the overall losses incurred.

#### **PECUNIARY INTEREST.**

103. **VFBV does not support any changes to the current legislation that give rights to members of the community having a pecuniary interest to remain with their property to protect that property.**
104. VFBV believes that a fundamental tenet of a democracy is the right of every individual to take steps to protect their assets including their home from whatever threat confronts them.
105. The statutory removal of this basic right will do little to enhance personal safety as people will find a way to access their property if forced to leave or will remain silent and inconspicuous in the event that the property is attended by emergency service workers participating in the transmission of an order to evacuate.
106. As VFBV understands, this is an increasingly prevalent approach adopted by individuals, for example in those states of the USA where mandatory evacuation is practiced.

#### **FIRE REFUGES**

107. **Regardless of the depth and frequency of public engagement programs designed to elicit improved property protection or safe departure from threatened areas, a number of people will choose to remain and then seek refuge and the security that gathering in a group is seen to provide at an alternative location during the impact phase of a bushfire. VFBV believes that these people cannot be ignored just because they failed to adhere to public policy or react to prior advice.**
108. **VFBV considers that the past policies relating to Refuges and the future application of a similar philosophy must be re-visited in the light of the most recent experience.**
109. The events of 7 February 2009 provided a clear indication that many people in rural communities sought a safe location to remain within their communities during the impact of the bushfires. This was evidenced by the number of people who congregated in various centres in small rural townships, often at the local fire station (Kinglake) or as

in the case of Marysville, the football ground were they felt safer and in a position to gain information, advice and community support.

110. This would seem to indicate a need to maintain appropriate community infrastructure that satisfies the needs of the community in this regard.
111. Whilst questions will always arise relating to the location and size of this type of facility in the context of our latest experience, it is an issue that cannot be ignored or dismissed as has occurred in relation to the more recent decisions by many municipalities to no longer support designated safe areas within their council boundaries due to the fear of litigation.
112. The responsibility for funding, providing and maintaining facilities at which the community may safely gather during a bushfire event clearly rests with government, local and state.
113. Concerns regarding the risk that these facilities may be at during a major bushfire can be primarily offset by proper planning and scientific evaluation regarding siting, vegetation management, construction techniques and materials, and known parameters regarding the effects of radiant heat separation from heat sources and minimisation of opportunities for ember attack.
114. The question of civil liability should be resolved on the basis of adequate specifications and design criteria for these safe areas and their maintenance. Like many other municipal assets, council have an obligation to maintain them to acceptable and expected standards. Provision of these facilities should fall under the same umbrella.

#### **SCHOOL BUSHFIRE SAFETY**

115. **Government in conjunction with CFA must implement a program to assess the risk from bushfire of all schools in bushfire prone areas and take appropriate steps to ensure they offer a safe haven for students and staff in all circumstances.**
116. **Where in specific instances the safety of a particular property is unable to be guaranteed, the school should not be occupied on those days deemed to pose an unacceptable level of threat.**
117. There is no doubt that the events of 7<sup>th</sup> February have raised serious and justifiable concerns regarding the safety of our children in schools across the state of Victoria. The single most important factor that needs to be considered in relation to this is that schools must offer a safe haven for our children regardless of the risks that may present in connection with their location
118. Given that the effects of a bushfire on buildings are well known and documented, coupled with our most recent experience, it should not be difficult to develop rigorous specifications around ensuring the safety of our education facilities.
119. There may well be instances of other similarly vulnerable groups located in rural areas that will need to be subjected to the same level of scrutiny and the implementation of an alternative range of options designed to secure their safety.

#### **INTELLIGENCE ACQUISITION, ANALYSIS & MANGEMENT**

120. **VFBV believes that the management of intelligence and information during a bushfires must be improved. Volunteers play a key role in ensuring that intelligence and information management systems and processes are thorough and robust.**

121. **Improvement to the current capacity and capability of systems and processes for intelligence and information management requires an investment in training and infrastructure by the CFA including programs for skills maintenance, skills enhancement, additional communications infrastructure and vehicles.**
122. **In the early stages of a rapidly developing fast running fire, incident prediction does not require a dedicated team of specialists but can and should be a priority function of the incident control team in place during this phase of the fire**
123. **VFBV contends that the current AIIMS provides an internationally tested and robust structure from the fireground upward capable of facilitating intelligence and information management to meet all stakeholder requirements. No major modification to the AIIMS is considered appropriate or necessary.**
124. **Improved intelligence acquisition can be achieved by better pre-planning and deployment of arrangements and facilities for Sector and Division Command.**
125. For the purposes of attempting to add clarity to issues associated with the acquisition of intelligence and the management of information during a bushfire, VFBV describes the management of any emergency as being divided into two distinct but interconnected functions and two distinct but similarly interconnected geographic and spatial elements. These functions are embedded in the philosophy and operation of AIIMS.
126. In this context:
  - intelligence is raw uncorroborated information received from any number of sources that requires further analysis and validation prior to further use or dissemination;
  - information is intelligence that has been validated and enhanced in so far as is practicable and within a finite period that then allows its use for other purposes including strategic and tactical incident management and particularly, the dissemination of information and warnings to the community.

The key incident management functions occurring within an ICC can be broadly described as:

- those activities applied to strategic and tactical fire suppression or containment; and
- those activities associated with the provision of information to key stakeholders including the community.

Both functions have the primary objective of saving lives and property.

The spatial elements can be broadly described as the “area of operation” and the “area of interest”.

The “area of operation” is that part of the emergency that is immediately visible and threatened by the incident whilst the “area of interest” encompasses that area at future risk. It is the “area of interest” that demands timely action based on prediction, assessed vulnerability and scenario evaluation.

127. The early detection of any fire is essential if it is to be quickly controlled and damage limited. There will always be a development phase associated with a fire after which it will reach its quasi steady rate of spread and on a bad day, become uncontrollable. This time lag will depend on a number of factors including the location, weather topography, fuel and weather conditions leading up to the start of the fire. Due to variables associated with fire development, it is rarely possible to estimate the time after ignition at which control become impossible. However, what is clear is that the

worse the weather conditions the more likely it is that early fire development will exceed initial response capability resulting in the failure of first attack. When first attack fails and ample fuel is available, it is unlikely that firefighters will gain the upper hand until weather conditions abate. In these circumstances, the “area of interest” should become a primary focus of the IMT.

128. On the 7<sup>th</sup> February 2009, VFBV believes that any fire ignitions in grassland and forest areas had the potential to rapidly exceed first attack capability and therefore response and ongoing planning to deal with the fire should have been based on “worst case” scenarios.
129. We reiterate that incident prediction in the early stages of a bushfire does not require sophisticated processes and a team of highly skilled practitioners.
130. The process described by Mr. Rocky Barca in his evidence to the Commission is sufficient to provide preliminary data on which to base further strategies relevant to the “area of interest” and for community warnings.
131. CFA volunteers endorsed to perform Sector, Division and higher roles are sufficiently trained to undertake the basic tasks necessary to reveal potential spread paths and to use this information to indicate on a map likely fire spread and potential areas of impact.
132. VFBV have previously raised with CFA its view that a higher priority needs to be placed on the continued development of volunteers to undertake these and all other incident management roles.
133. In conjunction with this strategy, the CFA must as a matter of urgency develop and implement a robust and dynamic operational human resource management system capable of identifying the availability of competent volunteers. There also needs to be a commitment from the CFA to ensure the cadre of professionally trained and competent volunteers are effectively used in these roles so as to maintain competency and continually build agency capability.
134. Prediction of the spread of a bushfire is not as difficult or complex process as some have made it out to be.
135. VFBV believes that in any area of Victoria, local commanders are aware of the topographic features of their fire districts and the fuel within those districts; are usually in possession of the forecast weather conditions for the day and have an understanding of the weather conditions that exist at the time the fire commences.
136. Mapping and prediction of fire spread once the initial location of the ignition is known is critical to resource allocation, the development of initial combat strategies, and the recognition of the likelihood of first attack failure therefore meaning that information to the community and the actions that they should take must be a priority.
137. It is a relatively simple undertaking to apply the factors to tools such as the McArthur Fire Danger Meter to gain a preliminary understanding of rates of spread, flame height and potential spotting distances. Using the known weather conditions it is then relatively simple to run a line on a map which will present the fire commander with the likely threats downwind of the fire (the “area of interest”) and the time at which various areas will come under that threat.
138. These predictions must occur as soon as possible following the commencement of the fire and should be undertaken at the Incident Control Centre level with projections of spread, short and longer term, forming the basis for defining a geographic footprint of the “area of interest” for which on-going fire management strategies will be based and community information designed and distributed.



139. What is essential to the availability of robust information is a capacity and capability to rapidly acquire and validate intelligence in the first instance!
140. Substantial improvement to performance in this regard will occur if, in concert with the pre-planned establishment of Strike Teams, Crews and the population of IMT's, Sector and Division Command capability was also pre-identified and placed on a high level of readiness. This will require an additional number of appropriately equipped vehicles and communications resources.
141. It is a well established fact that the role of field command is two-fold; tactical fire attack and the provision of intelligence to support strategy development and stakeholder information. The early deployment of additional levels of field command will not only enhance tactical management on the ground but will provide the greatest opportunity for the flow of accurate and timely intelligence concerning performance and achievements in the "area of operation" and potential impacts further afield in the "area of interest".
142. On days such as the 7<sup>th</sup> February, the deployment of Sector and Division Command capability must occur immediately that it is apparent that initial attack has been or is likely to be unsuccessful and additional resources are responding.

### **SOURCES OF INTELLIGENCE**

143. **The key issue faced by any emergency management agency is to ensure that as much as possible of the intelligence concerning what is occurring within both the "area of operation" and the "area of interest" is captured by the ICC for urgent analysis and distribution as useable and meaningful information.**
144. **Accordingly the ICC must be the focal point for collation of all intelligence residing with the emergency services and the community. This will include processes involving Victoria Police, other non-government agencies supporting the emergency and a reverse intelligence transfer mechanism within the VBIL.**
145. **The agencies with the support of Government must ensure that the necessary protocols and policies are in place to support this approach.**
146. What is intended is a robust process and support systems to ensure that all of the intelligence relating to a particular fire is quickly acquired and then centralised at the ICC so that the best possible intelligence is used to inform community information and strategic fire management. It is of little use for example to have information from fire towers operated by DSE going to the local DSE office, information available from Police Offices in the field operating in Police vehicles going to a Police centralised communication centre, information from the community going into the combat agencies or support agencies Headquarters or the Integrated Emergency Co-Ordination Centre. Using these examples, the time it takes for this information to be transferred to a central location during a fast running fire travelling at up to 15-20 kilometres an hour means that any delay results in increasing irrelevance of intelligence due to the passage of time.
147. The early deployment of pre-arranged Sector Commanders and Division Command capability as described above will have potential to add significantly to the provision of accurate and timely intelligence concerning the spread and threats associated with a fire.
148. VFBV understands that the defence agencies have well developed technology that supports the acquisition of intelligence direct from the incident ground. Given the significant investment already made in these systems, it would seem sensible to explore opportunities for closer co-operation with Defence that would deliver a greater return to the community from this investment. There is no reason why the best available technology is not used to support fire fighting in this country.

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## **ARRANGEMENTS AND STRUCTURES FOR INCIDENT MANAGEMENT DURING BUSHFIRES**

149. **VFBV submits that the application of the AIIMS for the management of bushfires in Victoria is a robust and effective model. VFBV does not see a need for any significant amendments to the current AIIMS and to date VFBV is not aware of any credible evidence adduced in the Commission that would substantiate a need for change.**
150. **However, VFBV contends that whilst the AIIMS is robust, in some instances the manner in which it is applied requires attention. In particular CFA (and DSE) need to adopt a more aggressive approach to the rapid deployment of Sector and Division capability onto the fireground during a fast moving rapid impact fire.**
151. **A different approach to the insertion of competent Sector and Division command capability much earlier at a fire during periods of extreme fire danger has the potential to markedly improve the acquisition of intelligence and the subsequent flow of information to the community.**
152. **CFA should ensure that competent people are available and additional vehicles and communications infrastructure is provided to permit the rapid establishment of appropriate arrangements for Sector and Division capability.**
153. **VFBV submits that the State Emergency Management Manual be reviewed to ensure that it reflects current practice, policy and legislation and in particular specifies that the agency responsible for the dissemination of information to the community during an emergency should be the designated combat agency – i.e. CFA, DSE or MFB.**
154. The overall Incident control and management systems that are universally used by the emergency services (with the exception of the police service) in Australia is a well tried and robust model that was initially developed overseas, imported to Australia, modified and applied to the management of bushfires in this country. Since its inception, it has undergone at least one major review taking into account many years of use in Australia and overseas. No major structural modifications were made to the system as a result of this review. It is a universal system which incorporates international best practise in emergency management and has served CFA and DSE and other fire management agencies in this country very well over a number of years.
155. It is the foundation structure which supports emergency management during a bushfire in a holistic command, control and co-ordination sense. The functions are clear and unambiguous and are specifically designed to enable effective and efficient emergency incident management. Both overseas, and in this country, there is no evidence to suggest that this system is ineffective or inappropriate for dynamic bushfire management. In fact to the contrary. In recent times the US government has mandated the National Inter-agency Incident Management System NIIMS (similar to the Australian model) as the model under which all emergency incidents will be managed in that country.
156. Of some note in this regard is the instance in which teams of ICS competent fire managers from the US Federal Emergency Management Agency (“FEMA”) were drafted in to manage the impact of Hurricane Katrina which severely impacted and disrupted the New Orleans area.
157. VFBV believes that the system and structures associated with the system are sound. Any shortcomings can be attributed to the manner in which the system is applied, not the system itself.

158. Whilst there are some exceptions, the key elements of the AIMS system as it is presently applied in relation to bushfires in this State have generally been built around the past experience of fires that commence in semi-remote areas, take time to develop and often remain confined to public land. In this kind of situation time and impact are not necessarily key determinants in the initial structural application of the AIMS. For these fires, a measured and gradual build up of resources occurs over hours if not days. There is ample time to source competent personnel and vehicles etc to grow the incident management structure as the need to maintain oversight and direction of the operation grows.
159. During these events, the threat to communities and people may not emerge for days, i.e. until the next extreme fire weather event occurs. These characteristics have generally been the experience over the last 20 years or so, with some limited exceptions.
160. The process of a slow build up consistent with fire characteristics of the kind described is not suited to those fires that exhibit blow up characteristics within a short time following ignition and which have the potential to spread rapidly and impact private property, key infrastructure and lives. These are the characteristics of the major fires that occurred on the 7<sup>th</sup> February and in Gippsland on days preceding the 7<sup>th</sup>.
161. Rapid insertion of Sector and Division capability must occur in these circumstances and this can only be achieved by having competent personnel, vehicles and communications pre-planned and strategically positioned to enable deployment with minimum delay.
162. The present Emergency Management Manual has been shown to be out of date and not reflective of current agency obligations, statutory responsibility, inter-agency agreements and policy or best practice emergency management. The Manual is in need of review. The review should take place in consultation with affected agencies, and in the case of CFA's input, take into account the opinions and expertise available from volunteers.

#### **INCIDENT MANAGEMENT RESPONSIBILITY**

163. **VFBV considers that in recent years, the State's emergency management arrangements have clouded the issue of responsibility and accountability for managing bushfires as Government has sought to pursue a more holistic and transparent "whole of Government" approach to bushfire management.**
164. **It is without question that the protection of life and property is the single most important priority of the bushfire management agencies.**
165. **The CFA is the agency primarily responsible by legislation for those areas of the State where, with the exception of that portion of the metropolitan area covered by the MFESB, people and property exist.**
166. **Counsel Assisting in his draft findings acknowledges CFA as the lead fire agency in relation to bushfire in Victoria.**
167. **VFBV considers that in order to meet CFA's statutory responsibility, CFA's Chief Officer ought not only to have the responsibility to issue community warnings and information but must also have the responsibility, or at least the legislative oversight, of the combat arrangements for any bushfire in Victoria that poses a threat to the "country area of Victoria".**
168. The legislative responsibility and accountability of CFA is quite clear. Section 14 of the CFA Act 1958 states that: "*The control of the prevention and suppression of fires in the country area of Victoria is, subject to this Act, vested in the Authority*". The "country area of Victoria" is described as; "*that part of Victoria which lies outside the*

*metropolitan fire district, but does not include any forest, national park or protected public land”.*

169. However there needs to be further clarity given to the existing arrangements when fire on public land has the potential to impact on the “country area of Victoria” and lives and property. In these circumstances VFBV believes that the Chief Officer of the CFA must be able to direct the control effort to ensure lives and property is adequately protected.
170. Given that the CFA is accountable for the “country area of Victoria”, then the CFA should have control and responsibility for any fire that threatens the “country area of Victoria”.
171. With the exception of those areas of the State that remain subject to the provisions of the marginal 1.5 kilometres in accordance with the *Forests Act 1958*, the high risk areas of the State including where people and the majority of the Victoria’s critical infrastructure and built assets are located is in areas for which the CFA is wholly responsible.
172. VFBV does not dispute that the State is best served by co-operative arrangements that ensure that all of the governments resources, protocols and public policy is applied in a seamless manner to achieving safer community outcomes unhindered by inter-Departmental or “turf” wars or unnecessary duplication.
173. VFBV also supports integration of many facets of government operations, functions and facilities to ensure that the best value is gained from the limited budget available.
174. However, in relation to some of these arrangements, VFBV expresses concern that under the veil of integration, joint agency co-operation rather than full integration is both wasteful and in worst cases, may contribute to increased loss of life and property.
175. VFBV contends that there should be no ambiguity whatsoever in connection with the responsibility and accountability to protect life and property during a bushfire. However, VFBV is not proposing a single agency having responsibility for the management of all bushfires in Victoria.
176. In this context, VFBV hastens to add that the arrangement described above should not preclude substantial and increased integration and inter-agency co-operation between CFA and DSE.
177. Nor should such an arrangement in any way detract from the appointment of the “best person” to fulfil various ICC and field command roles regardless of agency as has been alluded to in the draft Interim Report of Counsel Assisting in connection with the selection of personnel to perform the role of Incident Controller.

#### **INCIDENT CONTROL AND CO-ORDINATION CENTRES**

178. **VFBV emphasises that the role of the iECC should be one of co-ordination, state-wide strategy development and resource prioritisation in circumstances where competition exists. The iECC has no command or control role and must not act independently of the appointed ICC.**
179. **Key personnel in an iECC should retain responsibility for the oversight of operations being conducted at an ICC to ensure the primary functions, responsibilities and outputs required of an ICC are occurring in a structured and timely fashion.**
180. **Purpose designed and equipped ICC’s should be located throughout Victoria based on a risk management approach founded on a “worst case” scenario assessment including the likelihood of multiple incidents involving different hazards.**

181. **Competent and endorsed volunteers should be utilised in IMT roles in preference to interstate and overseas personnel. This approach will assist in ensuring local knowledge is embedded in the IMT, a key recommendation of the Esplin Inquiry<sup>2</sup>. It will also ensure the growth of internal agency capability as distinct from a reduction in agency capacity and capability that accompanies the deployment of external resources from either overseas or interstate.**
182. **VFBV cautions against any proposal by the agencies to augment incident management personnel from interstate and overseas. The significant expenditure incurred in the past on this arrangement would be far better spent on increasing capacity and capability within the State rather than adopting a strategy that will potentially reduce capacity and capability.**
183. It is important that the Chief Officer of DSE and CFA play a more active role in the oversight of ICC operations to ensure that the necessary key objectives and expected outputs of ICC's is occurring. However in a broader sense, the IECC should not be more than a co-ordination centre. For instance it should not be responsible for the acquisition and analysis of intelligence and the dissemination of information to the community relating to individual fires. To undertake this at a Centre that is far removed from the immediate environment of a particular fire can only lead to unnecessary delays in the provision of timely information to support strategic fire management and community information. Intelligence of a specific nature connected with a particular fire must be rapidly passed onto the appropriate ICC and not retained or used by the iECC without the endorsement of the relevant IC.
184. CFA and DSE, and in fact all emergency services, must ensure that there are an appropriate number of Incident Control Centres capable of being established across Victoria to cater for multiple Level 2 and Level 3 incidents. The use of purpose designed and equipped Incident Control Centres should not be confined to use during bushfires but should be capable of being adapted to meet the requirements of an all hazards approach to emergency management. These Centres should have the same functionality and capability and be accessible by all personnel, including volunteers, likely to be assigned to the facility.
185. Incident Control Centres must be provided with the latest technological facilities and have available to them appropriately trained personnel including volunteers who can be deployed at short notice not only for bushfire management but to implement the demands arising from an all hazards approach to emergency management. The utilisation of volunteers in key roles in an ICC is an important objective in embedding local knowledge into the IMT and building agency capability and experience.
186. VFBV believes that any proposal that may give rise to the augmentation of incident management personnel by sourcing people from interstate or overseas prior to every effort being made to develop and use volunteer personnel, is a gross mistrust of and devalues volunteers who are trained and experienced to perform the whole range incident management roles including that of Level 3 Incident Controller.
187. VFBV has previously raised the issue of the lack of utilisation of volunteers in key IMT roles with CFA and DSE. Volunteers are trained to the same standards as paid staff and undergo the same assessment process. Many volunteers also have extensive experience in bushfire management and in addition possess supplementary skills that meet the recommendations of the Esplin Inquiry that noted that technical skills are but one of the attributes necessary to perform key incident management roles.
188. VFBV believes that any investment in sourcing interstate and overseas resources would be far better spent on increasing capacity, capability and competency within the

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<sup>2</sup> Report of the Inquiry into the 2002-2003 Victorian Bushfires pg 153

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State including on additional training for volunteers rather than contributing to the capacity and capability of another agencies workforce at the expense of our own.

189. In his Report to the Government following the 2002-2003 Victorian fires, the Emergency Services Commissioner expressed concern *“in relation to the long term viability of the current model of paid, volunteer and seasonal fire fighting capability given organisational changes within government and agencies and the changing demographics of Victoria”*<sup>3</sup>. VFBV expresses similar concerns; if volunteers are not used to the fullest extent possible consistent with their training and experience then other social pressures and opportunities will assume a higher priority and the contribution by volunteers to the safety and security of the community will be lost. To put it more succinctly: “if you don’t use them, you lose them”.

### **FUNDING PRIORITIES**

190. If Victoria is to maintain and build an even more effective Volunteer based CFA, careful decisions on investment priorities will have to be made by the CFA and the Victorian Government.
191. The capacity, effectiveness and availability of CFA volunteers is directly dependant on investment in:
- Volunteer training and sustainability;
  - Training;
  - Equipment – personal protective equipment; up to date command and control technologies and communications equipment; fire fighting appliances and command and control vehicles that are fit for use; and, other tools of trade necessary for safely carrying out our their duties;
  - Administrative and organisational support for Volunteer brigades;
  - An open, inclusive and supportive organisational culture focussed on volunteers and their communities; and,
  - Recognition and support for Volunteers’ employers and families as well as volunteers who are self employed.
192. It is our submission that a high priority should be recommended for investment in support for CFA volunteer recruiting, training, equipping, organisation and community engagement strategies along with investment in operational systems, technologies and other support requirements outlined above.

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<sup>3</sup> Report of the Inquiry into the 2002-2003 Victorian Bushfires pg xxxv