

7 November 2014

Concerning an Application for a Planning Permit Lot 7 South Cathedral Lane, Buxton

Earlier this year I became aware of difficulties being encountered by Arthur and Angela Jones of Buxton in applying for a planning permit to erect a dwelling on land zoned Farm Zone (FZ) in the Murrindindi Planning Scheme. So extreme is their plight that I decided to assist them as *pro bono* clients.

At Mr Jones' request, as a further step in assisting them I provide this summary of the application as it involves bushfire protection — others experiencing similar behaviour by the CFA and councils may find this of value in pursuing their case.

Following is annotated correspondence from the CFA and my responses to the Joneses concerning the involvement of the CFA in dealing with a Bushfire Management Overlay Bushfire Management Statement, initially a BMO statement prepared by another that was rejected by the CFA and subsequently a fresh statement prepared by me.

1. The letter from me dated 5 February 2014, responding to a CFA letter dated 25 February 2013 objecting to the granting of a permit for the subject land. In preparing a new BMO statement I covered the issues raised by the CFA as its reasons for objecting to the issue of a permit.
 - .1 Item 1 in my letter concerning "achieving an acceptable level of bushfire protection". With no public guidelines on when an "acceptable level" is achieved, it's left to the CFA person to decide and in my experience that's never explained, despite the sophistication and level of technical detail in a BMO statement. It's disturbing to speculate on why.
 - .2 Concerning Item 4 covering the "precautionary principle"; something to hide behind to avoid making a decision? How the "precautionary principle" came to be part of *Clause 13.05-1 Bushfire planning strategies and principles* (VC 83) in the planning scheme needs investigation, considering how it is being used (or misused) by councils, CFA and VCAT to disallow planning permits.
 - .3 The offer in the final paragraph of my letter to meet on-site with CFA to discuss the issues with the objective of a win-win outcome was never taken up.
2. Concerning the letter from CFA Chief Officer Euan Ferguson, dated 10 July 2014. Disappointing that he seems not to have seen any value in meeting with me as the Joneses' bushfire protection consultant to try to achieve a win-win outcome to a currently unsatisfactory stance by the CFA.
3. Then my letter to the Joneses dated 20 October 2014 responding to a CFA letter dated 3 October 2014.
 - .1 Concerning CFA's reference to the "best available bushfire science", Item 8 in its letter dated 3 October 2014. Is the CFA aware of something better than the current wisdom coming along that warrants waiting for and if so what is the problem with the current best available bushfire science and how long is the waiting likely to be?

Does CFA dispute the efficacy of AS 3959—2009 *Construction of buildings in bushfire-prone areas* and the commensurate *defendable space* specified in Table 1, Clause 52.47 Murrindindi Planning Scheme introduced by the Minister for Planning on 31 July 2014? If it does dispute AS 3959—2009 it should give the Joneses and Victorians its reasons.

- 2 Concerning “ember attack”, Items 4 and 5 in my letter, it is known from as far back as the CSIRO report into the 1944 Beaumaris fire that ember attack is the main cause of housing loss in bushfires. It’s as if the CFA chooses not understand how bushfires spread or it disputes the efficacy of the ember protection features of AS 3959—2009 *Construction of buildings in bushfire-prone areas* and the role of the home owner in protecting their assets from ember attack.
- 3 Concerning *land sterilisation* covered in the final page of my letter. I can see no justification for *sterilising land* on the basis that it **might** experience bushfire at some future time. Disturbing that the CFA Chief Officer seems to be supporting the *sterilising* of this land for no tangible reason. Surely more than humbug statements are necessary when the effect on people’s broader well-being is involved.
- 4 Concerning the paragraph on the final page of my letter, headed “Planning Arbitration Meeting”, it’s now up to councils to decide based on the weight of evidence, but a disturbing prospect given this statement by Murrindindi Shire Council CEO Margaret Abbey in an ABC Television News interview on 22 October 2014:

And they’re [the CFA] certainly the skilled experts in relation to this area and so we need to take their advice very seriously.

And in the light of Ms Abbey’s statement and I’m told this is the position of other councils having to make their own decisions on BMO statements, this quote from Planning Minister Matthew Guy in the same news article:

If anyone’s suggesting that we should remove the CFA entirely from having any voice on bushfire permit applications I think that’s going a little extreme.

As it’s now up to councils to implement the new rules (VC 109) properly and judge each case on its merit, how many councils have availed themselves of having their planners undertake the Melbourne University course established in response to 2009 Victorian Bushfires Royal Commission Recommendation 55 that “the State initiate the development of education and training options to improve understanding of bushfire risk management in the building and planning regimes”?

Did Minister Guy consider the capability of councils to properly weigh up the evidence before making a decision (VC 109) or accept that until the CFA took a reality-based position on the “primacy of life” — which is a subject in itself — a proper BMO outcome for many will continue to be as elusive as the proverbial dog chasing its tail?

4. Concerning the letter from Mr Terry Hayes, CFA Executive Manager Community Capability, dated 23 July, my annotations speak for themselves.
5. Finally, concerning the right to seek a review of an adverse decision by the Victorian Civil and Administrative Tribunal (VCAT) mentioned in three of the letters from the CFA.

Until VCAT requires a full and factual disclosure of the CFA’s reasons for its recommendation against an application and the appearance of the CFA person responsible for the recommendation to be questioned on that decision, can VCAT arrive at a balanced decision on the bushfire protection matters involved?

Surely the CFA must know that for the average citizen struggling to establish a home on their land a review at VCAT is beyond their financial resources, particularly when the CFA engages barristers and solicitors to defend its position.

Prepared and authorised by John Nicholson, Director, *pro bono* for people disadvantaged by the application of the Bushfire Management Overlay.

CFA Headquarters
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23 July 2014

Mr Arthur Jones
457 South Cathedral Lane
Buxton VIC 3711
Email: aajones2@bigpond.com

Dear Mr Jones,

The purpose of this correspondence is to follow up our recent conversation regarding your property at Lot 7, 457 South Cathedral Lane Buxton.

1 The CFA has reconsidered the merits of your proposal following our recent meeting and site visit. I wish to advise you that the previous decision of the CFA has not changed due to the ongoing landscape and local bushfire risk to your property. This is consistent with the requirements of the Murrindindi Planning Scheme. I wish to reiterate that it is open to you to seek a review of the decision on Lot 7, 457 South Cathedral Lane through the Victorian Civil and Administrative Tribunal.

2 I note that your total land holdings offer a range of opportunities for you to move forward. This includes availing yourself of the post-Black Saturday temporary rebuilding provisions at Clause 52.39 of the Murrindindi Planning Scheme, considering the merits of siting a dwelling on lower-risk lots within your ownership, and considering whether the consolidation of lots within your ownership creates opportunities to more effectively manage the bushfire risk. All of these options could be further explored with your local council and I would encourage you to consider them.

As you are aware the Minister for Planning has announced changes to the Bushfire Management Overlay that we expect will be implemented shortly. These changes are being developed by the Department of Transport, Planning and Local Infrastructure. Once implemented you may wish to consider whether the changes impact on your development proposal.

Yours sincerely,



1. Unfortunately the CFA steadfastly refuses to explain the "ongoing landscape and local bushfire risk" to the property.
2. Some confusion or lack of knowledge of the subject by CFA, as a planning permit is being sought for land that has not previously had a dwelling on it.

Terry Hayes
Executive Manager Community Capability
CFA

20 October 2014

Arthur Jones
457 South Cathedral Lane
Buxton Vic 3711

Dear Mr Jones

**Bushfire Management Overlay – Bushfire Management Statement
Lot 7 PS 428209 457 South Cathedral Lane, Buxton**

Following for your consideration is my response to the letter to Ms Karen Girvan, Murrindindi Shire Council from Darren Viney, Manager Community Safety, Country Fire Authority, dated 3 October 2014, concerning your Planning Application 2012/228.

Parts of the attached copy of Mr Viney's letter are numbered and I will now refer to those numbers in expressing my views on matters in that letter:

Item 1: Qualifications and Bushfire Experience

Concerning the first dot point, who are the people within the CFA that "extensively reviewed" the Bushfire Management Overlay Bushfire Management Statement and advised Mr Viney on the matters covered in his letter? Do the people Mr Viney broadly refers to have the necessary qualifications and bushfire experience to provide such advice?

Murrindindi Shire Council in considering Mr Viney's letter in the course of making a decision on your permit application should be satisfied that any advice behind that letter comes from appropriately qualified people, [REDACTED]

We are in the 21st not the 19th century and you and the Shire should expect a fully transparent approach by a referral authority, particularly when that authority's position may be to your disadvantage—incumbency should not be viewed as an unquestionable panacea.

Concerning qualifications and experience, my professional resume and an extract from the transcript of the 2009 Victorian Bushfires Royal Commission covering the CFA's use of one of my WMO reports as an example of what it was then seeking in a site-specific report is appended.

Item 2: Credible Fire Experience and Likely Fire Behaviour

Concerning the second dot point, in "Item 2 Bushfire Protection: Planning Requirements – Clause 52.47" of my letter to you dated 5 February 2014, it was stated that I had explained in my BMO statement why I had concluded that the *subject land* is not located in an area of "extreme bushfire risk".

Having gone to considerable detail in analysing then recording how I arrived at that conclusion, Mr Viney still does not provide any detail as to how he arrives at his conclusion that "for the site in question, the potential fire behaviour is extreme for the combination of ecological vegetation classes at steady state fuel loads, topography and FDI 100 and above weather conditions".

Planning Scheme Amendment VC 109 Table 1 Defendable space and construction introduced new defendable space requirements that match Table 2.4.2 Determination of Bushfire Attack Level (BAL)— FDI 100 (1090 K) in AS 3959—2009 *Construction of buildings in bushfire-prone areas*.

Commencing on page 14 of my Bushfire Management Statement I provided worked examples of fire intensity at the dwelling based on specified defendable space according to VC 83 Table 1, which is now conservative considering the VC 109 reductions in defendable space distance. Following are two of the same worked examples, but to FDI 100 and flame temperature 1090 K:

.1 Along a line towards Grid North from the proposed dwelling site – FFDI 100 and flame temperature 1090 K

- Fire Danger Index (FFDI) of 100
- Flame temperature of 1090 K
- Flame width – default 100 metres accepted as appropriate
- Vegetation classification – “forest” with assessed fuel load of 25 tonnes/hectare surface fuel load and 35 tonnes/hectare overall fuel load
- Effective slope – 3 degrees downslope
- Site slope – 3 degrees downslope
- Elevation of the receiver – the default result is accepted

Results

The distance to the “classified vegetation” is treated as 59 metres, entirely on the *subject land*:

- Flame length – 28.18 metres
- Radiant heat flux – 10.66 kW/m²
- Bushfire Attack Level is **BAL-12.5**

.2 Along a line towards Grid 45 degrees from the proposed dwelling site – FFDI 100 and flame temperature 1090K

- Fire Danger Index (FFDI) of 100
- Flame temperature of 1090 K
- Flame width – default 100 metres accepted as appropriate
- Vegetation classification – “forest” with assessed fuel load of 25 tonnes/hectare surface fuel load and 35 tonnes/hectare overall fuel load
- Effective slope – 7 degrees downslope
- Site slope – 7 degrees downslope
- Elevation of the receiver – the default result is accepted

Results

The distance to the “classified vegetation” is treated as 59 metres, entirely on the *subject land*:

- Flame length – 35.18 metres
- Radiant heat flux – 13.42 kW/m²
- Bushfire Attack Level is **BAL-19**

Having regard to the above worked examples, I find Mr Viney’s reference to “FDI 100 and above weather conditions” confusing. Is Mr Viney basing his assessment of “extreme fire behaviour” on a fire danger index exceeding FDI 100 and if so what FDI? If he is, in the interest of full transparency he should state what that FDI is, as exceeding FDI 100 seems to me to be exceeding government policy the basis of Table 1 defendable space.

The reference to a fire danger index (FDI) is questionable when linking it to building survival when that building is to be constructed and maintained to the requirements of the Bushfire Management Overlay, particularly to the more conservative requirements of VC 83 as I have applied it to your proposed development.

Under the heading "Understanding of the fire danger rating system", Thursday, 13 March 2014 posting in my blog "Bushfire – fact, fiction and other information relevant to living with bushfire in Australia" I express my opinion on the application of the fire danger rating system. <http://bushfireaustralia.blogspot.com.au/2014/03/understanding-fire-danger-rating-system.html>

How does Mr Viney define "extreme fire behaviour" and its relevance to the survival of the proposed dwelling—is he aligning with the definition of "extreme fire behaviour" in the Australasian Fire and Emergency Service Authorities Council (AFAC) Wildfire Glossary, January 2009:

A level of wildfire behaviour characteristics that ordinarily precludes methods of direct suppression action. One or more of the following is usually involved:

- high rates of spread
- prolific crowning and/or spotting
- presence of fire whirls
- strong convective column.

Predictability is difficult because such fires often exercise some degree of influence on their environment and behave erratically, sometimes dangerously.

The AFAC definition includes a reference to "wildfire behaviour characteristics that ordinarily precludes methods of direct suppression action". This definition principally relates to firefighting activity.

Having regard to the results of my worked examples clearly identifying the conservatism of BAL-29 design and construction for the proposed dwelling together with the defendable space specified, I contended that unexplained, Mr Viney's mention of "extreme fire behaviour" is emotive language that may inappropriately influence the Murrindindi Shire Council in deciding on your application.

Item 3: Wind Velocity

Concerning the third dot point, Mr Viney's statement that the "topography will tend to funnel winds..."

With the Murrindindi Shire Council no doubt reliant on factual advice from the CFA in dealing with your permit application, I question his use of the word "tend".

Fire behaviour affecting the proposed dwelling site, including wind, is well covered in my Bushfire Management Statement. Certainly increasing wind speed will increase the rate of spread and fire intensity, but this fire intensity is covered by the application of Table 1 (VC 83) defendable space and the nominated bushfire attack level (BAL).

I also question Mr Viney's statement concerning "facilitating the development of highly damaging convective winds".

On page 12 of my Bushfire Management Statement I refer to "the unlikely event of a pyrocumulus buildup producing wind greater than the normal updraught/downdraught associated with a severe thunderstorm" and explain the pyrocumulus phenomenon in footnote 13. I assume Mr Viney is associating "highly damaging convective winds" with pyrocumulus development above or in very close proximity to fire on or adjoining the *subject land*.

The "Report on the Physical Nature of the Victorian Fires occurring on 7th February 2009" prepared by Dr Kevin Tolhurst for the 2009 Victorian Bushfires Royal Commission, states that it took several hours for the pyrocumulus clouds to develop into a "fire induced thunderstorm" later during the evening of 7 February 2009. The thunderstorm produced lightning and some rain shower activity, but there is no mention of "damaging convective winds".

On the contribution of topography as a factor in creating a fire induced wind strong enough to cause damage to the proposed dwelling, the only reference to fire induced wind was that such wind snapped off trees in a gully in the Bunyip Ridge Fire. The same phenomenon is mentioned for the same location in the "Bushfire CRC Victorian 2009 Bushfire Research Response Final Report October 2009".

My inspection of the *subject land* and an overview of the land to the North found no evidence of damage to trees consistent with strong wind.

Examination of both the Tolhurst and CRC documents reveals that the major issue associated with the pyrocumulus development was extensive ember attack.

Mr Viney's use of the word "tend" ought to be viewed with concern by the Murrindindi Shire Council in the absence of detailed supporting explanation or reference to any peer reviewed scientific paper.

Item 4: Ember Attack

Protection against ember attack is covered in my Bushfire Management Statement and is inherent at all levels of design and construction according to AS 3959—2009 *Construction of buildings in bushfire-prone areas*.

Causes me to wonder if Mr Viney is questioning the efficacy of the ember attack defensive provisions of AS 3939—2009.

Item 5: Fire Intensity, Ember Attack and Potential Fire Storm Conditions

Protection against fire intensity, including ember attack is well covered in my Bushfire Management Statement and Item 4 above.

Mr Viney refers to "potential" firestorm conditions", but without any explanation or definition—the Australasian Fire and Emergency Service Authorities Council (AFAC) Wildfire Glossary, January 2009, defines "fire storm":

Violent convection caused by a large continuous area of intense wildfire often characterised by destructively violent surface in drafts, a towering convection column, long distance spotting, and sometimes by tornado-like whirlwinds.

In the absence of detail from Mr Viney I contended that as summarised above in Item 3, my Bushfire Management Statement adequately addresses fire intensity, ember attack, and fire storm conditions in the event they may be experienced in the area around the dwelling and strong fire-induced wind.

Item 6: Housing Loss in 2009

I respond to Mr Viney's to "extreme fire behaviour" above in Items 2, 3 and 5.

Concerning his statement that "quite extreme fire behaviour destroyed most of the houses in the vicinity of the subject land" begs the questions, how many houses were lost out of the total number he counted, how many of those houses were constructed to the requirements of the Wildfire Management Overlay and/or AS 3959 *Construction of buildings in bushfire-prone areas*, how many were unoccupied on the day of the fire and how many were defended by the occupants or neighbours?

Item 7: Regrowth Patterns of the Forest

I have photographs taken when I inspected the *subject land* that show epicormic growth on the trunks of some of the trees at the edge of the cleared area.

Some of the eucalypt tree species on and around the subject land are not fire tolerant and nature restores these trees from seeds scattered in the soil around them. The "massive sapling regrowth" mentioned by Mr Viney is an indication that the fire passed over the ground with insufficient heat to kill those seeds. The vigorous sapling regrowth is also obvious in some of my photographs.

A useful reference on the subject is "Gill, A. M. (1981). Adaptive responses of Australian vascular plant species to fires. In *Fire and the Australian biota* (eds A. M. Gill, R. H. Groves and I.R. Noble), pp. 273-310. The Australian Academy of Science, Canberra, 1981".

Item 8: Substantially Restricting Development in the Areas of Highest Bushfire Risk

Concerning Mr Viney's reference to statements by the 2009 Victorian Bushfires Royal Commission "that there should be a clear objective of substantially restricting development in the areas of highest bushfire risk and where development is approved, risk-mitigation measures and construction standards should be related to the degree of risk.

I followed the proceedings of the Royal Commission and formed the opinion that the Commissioners were particularly influenced by the severe fire behaviour that impacted on Pine Ridge Road and Victoria/Reserve Roads, Kinglake and the loss of life involved, causing them to recommend the restriction of development mentioned by Mr Viney.

The circumstances in Pine Ridge Road and Victoria/Reserve Roads at the time of the fire were quite different from those of the *subject land* today for example defensible space to match BAL-29 design and construction (VC 83) is available entirely on the subject land. The paper "Bushfire CRC Victorian 2009 Bushfire Research Response Final Report October 2009" provides detailed information on Pine Ridge Road and Victoria/Reserve Roads at the time of the fire.

Concerning Mr Viney's comment that he "notes the lack of detail regarding the constructed response on the site to offset this extreme risk"; under the subheading "1.2 Designed and Construction of the Dwelling, Appendix C Bushfire Protection Conditions" included with my Bushfire Management Statement are conditions addressing what I contend is the real bushfire threat to the proposed dwelling.

Under the subheading "1.2.2 Wind loading" I have specified a wind speed of not less than 100 kph. In his commentary on the "snapped off trees" in the Bunyip Ridge Fire Dr Tolhurst states that the winds would need to be in excess of 120 km/h to cause that type of damage.

As I have stated earlier, I observed no evidence of tree destruction on and around the immediate vicinity of the *subject land* and doubt that fire approaching from the North or West of the subject land would involve sufficient fuel quantity over distance to cause cyclonic wind at the proposed dwelling site.

It is exasperating that Mr Viney in effect says no to my wind load specification without giving me an opportunity to review that in the interests of achieving a win-win outcome. The North Queensland cyclone construction wind loading requirement could have been considered.

I'm also surprised and disappointed that the CFA Chief Officer visited the land, but did not take the opportunity to engage with me onsite to allow me to explain my assessment of the bushfire threat and negotiate win-win outcomes.

Unfortunately, my experience with the CFA is that apart from a couple of its officers, it avoids contact with bushfire protection specialists engaged by people seeking planning permits and indeed in some cases the applicants themselves.

That the CFA, a government body purporting to be community based, indeed needing the trust and support of the community to minimise loss from fire, so disdainfully treats one of its fire service levy paying clients — you, a long standing ratepayer of the Murrindindi Shire — and expects the Shire to reject your application based on such shallow advice appals me, as I am sure it would any fair-minded person.

Item 9: Precautionary Principle and Clause 13.05

Under the heading Item 4 in my letter to you dated 5 February 2014 I commented in detail on my view of the relevance of the "precautionary principle" in bushfire protection.

Having researched the origin and application of the precautionary principle I am of the opinion that it is invoked by agencies and other bodies that want to avoid making a decision, particularly a decision that is performance based rather than compliance with regulations or a code.

Sterilising the Subject Land

The most disturbing aspect of CFA's position expressed by Mr Viney's is that it sterilises the *subject land*: it can't be developed for the purpose intended when the subdivision was originally approved with CFA support.

Under the heading Item 5 in my letter to you dated 5 February 2014 commencing with the following paragraph I deal with the likely actual exposure of a dwelling on the subject land to bushfire:

I have earlier dealt with "access and egress" for the *subject land* in Item 3 (above), but here add there can be no certainty that every bushfire event will directly impact the full length of South Cathedral Lane, as that's a situation dependent of the location of the occurrence, the influence of wind and slope on the fire and direction of travel of that fire and the availability of fuel (vegetation) that will influence fire behaviour directly impacting the dwelling.

Sterilising the land for 7 February type conditions that may never occur again in that part of Victoria or at the most infrequently when the potential exists for only comparatively few days each summer when bushfire weather conditions are extreme is grossly unfair. Particularly when the State is providing increasingly sophisticated bushfire survival advice and warnings to enable residents to plan their own individualised bushfire survival arrangements.

There must be more to CFA's willingness to sterilise the *subject land* than meets the eye and my strong recommendation is that Murrindindi Shire seek a full and frank explanation from CFA before it makes any decision on your permit application.

Planning Arbitration Meeting

Having regard to the CFA's downgrading to the status of recommending referral authority by VC 109 the opportunity now exists for Murrindindi Shire Council to make its own decision on your permit application. Consequently, the Shire should be urged to convene and chair a meeting between Mr Viney and me to explain and be questioned on our positions before it makes a decision on your permit application.

Victorian Civil and Administrative Tribunal (VCAT)

In his final dot point Mr Viney draws attention to VCAT. If you are denied a permit you should expect detailed advice from the Shire on the reason for such a decision. If it appears that the CFA influenced that decision and you seek a review by VCAT you should have your advocate subpoena Mr Viney to give evidence at the Hearing.

Sincerely



John Nicholson, AFSM
Director



Our Ref: 12000-560584-887598
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Council Ref 2012/228

Friday, 3rd October 2014

Karen Girvan
Murrindindi Shire Council
P.O. Box 138
ALEXANDRA VIC 3714

Dear Karen,

PLANNING APPLICATION 2012/228

Applicant: T & C Development Services
Subject land: 457 South Cathedral Lane, BUXTON, 3711
Purpose: Construction & use of (1) one dwelling

I refer to your letter received 8 September 2014 seeking comments from CFA on the subject permit application in accordance with section 55 of the Planning and Environment Act 1987 (the "Act")

In accordance with section 56 of the Act, CFA has considered the application and provides the following comments pursuant to section 56(3) of the Act –

- ① • This application has been extensively reviewed by a range of people within CFA.
- CFA agrees with the BMS author's suggestion that credible fire scenarios and the likely fire behaviour should be considered in determining whether a proposal is acceptable or not.

CFA's considered view about credible fire scenarios and likely fire behaviour is as follows:

- ② • The area around 457 South Cathedral Lane has characteristics that can create extreme fire behaviour to impact on the subject allotment. In particular, there are extensive tracts of unbroken vegetation, within steep, undulating topography, with the site in question located in a narrow valley that runs approximately NNW to SSE. For the site in question, the potential fire behaviour is extreme for the combination of ecological vegetation classes at steady state fuel loads, topography and FDI 100 and above weather conditions.
- ③ • The topography will tend to funnel winds-significantly increasing the rate of spread and fire intensity and facilitating the development of highly damaging convective winds.
- ④ • The dominant canopy species of the EVCs and the vegetation types contributing to landscape fire behaviour around the site are capable of producing massive ember attack- stringybarks (*E.obliqua* & *E. macrorhyncha*), peppermints (*E.radiata* & *E.dives*) and manna gum (*E.viminalis*).

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- ⑤ • The area on and around the site has the potential to be exposed to the fire front with its associated radiation and flame impact, and when it is downwind of a main fire area, exposed to mass ignition from spotting with potential firestorm conditions.
- ⑥ • This potential was borne out in the 2009 bushfires, where quite extreme fire behaviour destroyed most of the houses in the vicinity of the subject land in the evening and under conditions that were much less severe than at earlier times in the day. This was due to the characteristics and interactions of the fuel and topography within the landscape.
- ⑦ • The severity of 2009 bushfire is also evidenced in the regrowth patterns of the forests on and in the vicinity of the subject land. There is massive sapling regrowth, where the majority of canopy tree species were killed and regeneration is predominantly from seed, rather than from epicormic buds, even for stringybarks and peppermints that are comparatively tolerant of bushfire.
- ⑧ • The 2009 Victorian Bushfires Royal Commission stated that there should be a clear objective of substantially restricting development in the areas of highest bushfire risk and where development is approved, risk-mitigation measures and construction standards should be related to the degree of risk. CFA's view, based on the best available bushfire science, is that the subject land is one of these locations and notes the lack of detail regarding the constructed response on the site to offset this extreme risk.
- ⑨ • Development on the Subject land would not provide a precautionary approach to the protection of life safety and be at odds with the state planning policy on bushfire – Clause 13.05.
- Once council (as the Responsible Authority) has made its decision on the application, the next step in the process is an independent review by VCAT should any party have an issue with that decision.

A copy of this letter has been forwarded to the applicant pursuant to Section 56(3A) of the Act.

If you wish to discuss this matter in more detail, please do not hesitate to contact the undersigned on (03) 5833 2413.

Yours sincerely,

Darren Viney
Manager Community Safety
Country Fire Authority

cc: T & C Development Services

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Ref: Planning



10 July 2014

Mr Arthur Jones
457 South Cathedral Lane
BUXTON VIC 3711
Email: aajones2@bigpond.com

Dear Mr Jones *Arthur,*

Re: Planning Permit Application – Lot 7, 457 South Cathedral Lane, Buxton

I am writing to advise you of CFA's position with regard to the planning permit application for Lot 7, 457 South Cathedral Lane Buxton. Thank you for the time you have taken to ensure that I have an understanding of the issues from your perspective.

Firstly, I wish to advise that CFA cannot provide consent to your application for a permit to build on Lot 7, 457 South Cathedral Lane, Buxton.

CFA's decision is in accordance with the current Victorian State Planning Policy Framework, expressed in the Victoria Planning Provisions. These provisions are designed to support the protection of life above all other considerations and limit development where risk to life and property cannot be reduced to an acceptable level. CFA has confirmed its decision in each of a number of reviews of your proposal.

Victoria's planning system provides for an independent review process through the Victorian Civil and Administrative Tribunal (VCAT). It is your right to contest CFA's decision on this matter at VCAT.

However, your application does raise a number of matters which I will pursue with other relevant authorities to seek a resolution. In saying this, I do not wish to convey an impression that CFA believes there are alternate options available in the near future.

Terry Hayes, Executive Manager Community Capability and a member of my Executive team will provide further advice as it becomes appropriate to do so.

Yours sincerely

Euan Ferguson AFSM
Chief Officer

CC: Executive Manager Community Capability



Disappointingly, Mr Ferguson failed to explain why he was of the opinion that the risk to life and property had not been reduced to an acceptable level in this instance, compounded by the refusal of the CFA to define or provide any guidelines on achieving an "acceptable level" of risk.

5 February 2014

Arthur Jones
457 South Cathedral Lane
Buxton Vic 3711

Dear Mr Jones

**Bushfire Management Overlay – Bushfire Management Statement
Lot 7 PS 428209 457 South Cathedral Lane, Buxton**

I refer to the draft BMO Bushfire Management dated 3 February 2014 sent to you earlier today.

In accordance with your instructions, in preparing the draft statement dated 3 February 2014, I took into account the "letter of objection to the granting of a permit" from CFA's Darren Viney, dated 25 February 2013 to Ms Melissa Crane, Murrindindi Shire Council, concerning your earlier Bushfire Management Statement.

Parts of the attached copy of Mr Viney's letter are numbered and I will now refer to those numbers in expressing my views on matters in that letter and how I addressed them in the draft BMO:

Item 1: Clause 13.05 Bushfire Murrindindi Planning Scheme is addressed under the heading "2 Bushfire Management Overlay Provisions" on page 4 in the draft BMO statement. The first paragraph on page 5 leads into my views on clause 13.05 and the three footnotes are intended to be instructive. The paragraph above the sub-heading "2.1 Location objective – clause 52.47–3" outlines my approach to satisfying clause 13.05.

Further, "in the absence of any methodology or guidelines for quantifying or ranking bushfire risk" in clause 13.05 or clause 44.06 Bushfire Management Overlay or clause 52.47 Bushfire Protection: Planning Requirements, Murrindindi Planning Scheme, a decision on "achieving an acceptable level of bushfire protection" requires the CFA person dealing with the matter to form an opinion.

Item 2: Bushfire Protection: Planning Requirements – Clause 52.47

Under the heading "2.1 Location objective – clause 52.47–3" commencing on page 5 the draft BMO statement presents what I will argue is considerable factual detail on how the decision guidelines of Standard BF3 are addressed.

Having considered the results of my addressing these decision guidelines I am satisfied that the *subject land* is not located in an extreme bushfire risk as asserted in by Mr Viney — in essence an area of extreme bushfire risk would be land where there is steep downslope over distance below the dwelling site and land under the control of the owner was not large enough to accommodate the *defendable space* required for the slope and class of predominant vegetation involved. Clearly not the situation with the *subject land*.

The *defendable space* specified in conjunction with the *bushfire attack level* (BAL) of construction according to AS 3959—2009 *Construction of buildings in bushfire-prone areas*, plus a specification to deal with strong wind, will at least provide a shelter from a passing fire front in the unlikely event that the dwelling begins to burn in the aftermath of the arrival of a bushfire. Of course this will depend on effective ongoing implementation of the maintenance requirements, and you and your family have an up-to-date bushfire survival plan.

Item 3: Concerning "safe access for emergency services and other vehicles" I have specified the CFA's requirements for emergency service vehicles access under the heading "4 Access" on page 4 of the draft Appendix C Bushfire Protection Conditions.

Emergency services vehicles and here I'm principally addressing firefighting vehicles, would be unlikely to venture along South Cathedral Lane when unsafe to do so — the need for emergency services vehicles to attend the proposed dwelling is dealt with under the heading "*Peak of a CFA 'worst case scenario' bushfire event at the dwelling site*" on page 12 of the draft BMO statement.

There is no logic in denying you the right to build on your land due to the condition of the fuel each side of Cathedral Lane, when there are several other dwellings to be serviced by the emergency services: ambulance, police and SES.

Item 4: Concerning "applying the precautionary principle to the protection of human life", reference to the "precautionary principle" only appears once in the Murrindindi Planning Scheme: Clause 13.05 Bushfire planning strategies "Where appropriate, apply the precautionary principle to planning and decision-making when assessing the risk to life, property and community infrastructure from bushfire". But there are no benchmarks or guidance on when an acceptable level of bushfire protection is achieved.

To me, calling up the precautionary principle in the absence of any specific bushfire protection related definition it is reasonable to conclude that this principle is being "stretched" as an approval consideration where bushfire protection is the issue. There are numerous international papers that clearly identify the "precautionary principle" as being associated with "ecologically sustainable development".

As an example, the "precautionary principle" is defined in s 391(2) [Commonwealth] Environment Protection and Biodiversity Conservation Act 1999 as follows:

... lack of full scientific certainty should not be used as a reason for postponing a measure to prevent degradation of the environment where there are threats of serious or irreversible environmental damage.

Also helpful is a decision of the Full Federal Court of Australia *Parker v Minister for Sustainability, Environment, Water, Population and Communities* [2012] FCAFC 94 (29 June 2012) dealing with the import into Australia of a particular species of cat, the Savannah Cat.

The judges' reasons for rejecting an appeal to allow import of the Savannah Cat into Australia cited the following extract from an environmental assessment report prepared for the Minister for the Environment, Heritage and the Arts concerning the suitability of the import of the Savannah Cat:

Although there is a *lack of scientific certainty*, given the biological similarities between the Savannah Cat and the Domestic Cat, and applying the *precautionary principle*, it is considered reasonable to suggest that the Savannah Cat if established in the feral Domestic Cat population in Australia, would increase the hunting success of feral cats.¹

Unlike the Savannah Cat, there is a wealth of knowledge of bushfire and the impact of bushfire on structures, two examples being the development of *AS 3959 Construction of buildings in bushfire-prone areas* and the report *Flame temperature and residence time of fires in dry eucalypt forest*, by B M Wotton, J S Gould, W L McCaw, N P Cheney and S W Taylor, 2011, *International Journal of Wildland Fire* and the science behind the slope drawing on page 10 of the draft BMO statement.

In considering Mr Viney's statement I am curious as to what he is actually addressing in citing the "precautionary principle" as a reason for objecting to issue of a planning permit, his perceptions of a level of risk that automatically disqualifies a permit application anywhere in the "forested" area of South Cathedral Lane or on your land or inadequacies in your earlier BMO statement or a combination of all three?

Item 5: I have earlier dealt with "access and egress" for the *subject land* in Item 3 (above), but here add there can be no certainty that every bushfire event will directly impact the full length of South Cathedral Lane, as that's a situation dependent of the location of the occurrence, the influence of wind and slope on the fire and direction of travel of that fire and the availability of fuel (vegetation) that will influence fire behaviour directly impacting the dwelling.

Concerning "bushfire hazard", being familiar with South Cathedral Lane and its vegetation I contend that its fuel load does not exceed the *default fuel load* the basis of Table 1 clause 52.47, being 25 tonnes/hectare surface fuel load and 35 tonnes/hectare overall fuel load —Plates 9–12 in Appendix E Site Photographs support this, as does reference to the elements of fuel load in

¹ My emphasis.

Hines, F., Tolhurst, K.G., Wilson, A.G. and McCarthy, G.J. 2010, *Overall fuel hazard assessment guide*, 4th edition July 2010, Fire and adaptive management, Report No 82, Department of Sustainability and Environment, Victoria.

And, while EVC 23 includes Messmate Stringybark, Plates 1–12 support my assessment that if Messmate Stringybarks are present in the area where embers from their bark will reach the dwelling site they are very limited.

Concerning “topography”, I have dealt with that in detail under the heading “2.1.2 Terrain” on page 7 of the draft BMO statement, and how the slopes involved will influence fire intensity reaching the dwelling site in the BAL calculations under the heading “*Demonstration of the appropriateness of the specified defendable space*” on page 14 of the statement. The radiant heat flux underlined under the heading “Results” for each calculation is expressed as kW/m² (kilowatts/square metre) — 29 kW/m² is the upper limit for BAL –29 construction.

Concerning “likely bushfire behaviour” and fires “likely to have extreme fire intensity”, my BAL calculations do not support that assertion. Regardless of the weather and slope the Australian forest is considered to burn with a short-lived possible peak of 1200 degrees Celsius (refer subparagraph 2.2.1 Duration of the passage of the fire front). The transmission of radiant heat flux from a fire decreases over distance (again refer to the results of the BAL calculations), and construction according to AS 3959 includes protection against ember attack at every level. On convective heat — essentially hot air and hot smoke — a fire burning in very dry and heavy fuel loads, as was the situation in the drought-affected Victorian forests involved in the 2009 fires, will produce high levels of convective heat. However, BAL–29 construction specified for the proposed dwelling will be well-able to cope with convective heat generated. Finally, I would like to see the results of localised wind testing that supports the statement that “the topography of the valley is likely to increase local wind speed as wind will funnel into it”.

Concerning the comment “representative of the bushfire behaviour that impacted the site and surrounding area during the 2009 Victorian Bushfires” I am aware that there were dwellings that survived the 2009 fire in the area, but not if they were attended by the occupiers who sheltered from the peak of the fire then went outside to deal with ember attack, but expect that some of them would have been constructed and maintained to the requirements of the Wildfire Management Overlay. I know that the timber log dwelling and nearby shed at 681 Cathedral Lane survived unattended. I also understand from the VBRC transcript of the cross-examination on 9 February 2010 of then CFA Director Community Safety Lisa Sturzenegger that no lives were lost in 2009 in dwellings constructed to the requirements of the WMO.

Summarised, having regard to my detailed analysis of the bushfire threat that would be faced by the dwelling as proposed and the consequent fire protection conditions specified in Appendix C Bushfire Protection Conditions, I don't agree that “the landscape risk surrounding the site presents a level of bushfire risk, “which would warrant development not proceeding” (4th dot point under Item 3 in Mr Viney's letter) — particularly given the few and far between circumstances when “extreme and severe” bushfire fire conditions referred to by Mr Viney would actually involve the subject land.

Finally, I am willing to participate in a site meeting to discuss the issues I have raised in the BMO statement and this letter.

Sincerely



John Nicholson, AFSM
Director

(r)

Our Ref: 12000-560584-887238
Telephone: 03 5833 2412
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Council Ref: 2012/228

25 February 2013

Melissa Crane
Murrindindi Shire Council
P.O. Box 138
ALEXANDRA 3714

Dear Melissa,

OBJECTION TO THE GRANT OF A PERMIT

Permit No: 2012/228
Applicant: T & C Development Services
Site Address: 457 South Cathedral Lane BUXTON 3711
Purpose: Construction and use of one (1) Dwelling

I refer to your letter dated 04/01/2013 seeking comments from CFA acting as a Referral Authority pursuant to Section 55 of the *Planning and Environment Act, 1987* on the above application.

DECISION

CFA advises that it **objects to the grant of the permit** for the construction and use of one (1) dwelling at 457 South Cathedral Lane Buxton on the following grounds:

State Planning Policy Framework – Clause 13.05

1. The proposal fails to comply with the State Planning Policy Framework Clause 13.05 – *Bushfire* as the risk to human life and property from bushfire will not be reduced to an acceptable level.

Bushfire Management Overlay – Clause 44.06

2. The proposal fails to comply with the purpose of clause 44.06 – *Bushfire Management Overlay* as the application fails to demonstrate that the risk to life and property from bushfire can be reduced to an acceptable level.

Bushfire Protection: Planning Requirements - Clause 52.47-3

- 2
3. The proposal fails to comply with the objective of Clause 52.47-3 (Landscape objective) and the requirements of Standard BF3 as:
- the subject land is located in an area of extreme bushfire risk at both the local and broader scale.
 - the topography of the land surrounding the site will significantly increase the intensity and severity of bushfire.
 - there is no safe access and egress to the site as a bushfire will directly impact the full length of South Cathedral Lane and the site is not located in immediate proximity to an established urban or township area.
 - the landscape risk surrounding the site presents a level of bushfire risk which would warrant development not proceeding.
- 3
4. The proposal fails to comply with the objective of Clause 52.47-10 (Water supply and access objectives) and the requirements of Mandatory Standard BF10 as safe access cannot be provided for emergency and other vehicles at all times.

BASIS FOR DECISION

4

The above decision applies the precautionary principle to the protection of human life as required by Clause 13.05 of the Murrindindi Planning Scheme.

5

Access & egress to the property and the characteristics of the bushfire hazard in combination with the topography of the land produces an unacceptable risk to life and property (described below in more detail).

Bushfire hazard

The subject land is surrounded in all directions by Herb-rich Foothill forest - EVC 23 (*the EVC*). This EVC typically contains a very high to extreme fuel load and is dominated by Eucalyptus species – including Messmate Stringybark (which is notorious for spotting). This vegetation continues for 1 km to the West, 10 km to the north, 1.7 km to the south.

Topography

The subject land is located in a heavily forested valley with ridge tops on either side flowing from north-west to south east. Land to the north and east slope up towards the property (downslope from a fire behaviour perspective) and range from 4 - 14 degrees.

Likely bushfire behaviour

As the surrounding land has such a high fuel load, fires are likely to have extreme fire intensity (amount of heat energy produced).

The prevailing winds on days of high bushfire risk typically come from a north to north-west direction then shift to a south westerly direction in the afternoon. The topography of the valley is likely to increase local wind speed as wind will funnel into it. This will significantly increase the rate of spread and intensity of any fire in or entering the valley and, in combination with fire generated winds, has the potential to produce localised wind speeds approaching cyclonic conditions.

Topography will also significantly increase the rate of spread of any fire as flames traveling up hills simply preheat the fuel above. Given the extreme steady-state fuel loads of the EVC, fire intensities are likely to be significant.

A bushfire in the landscape would expose the proposed dwelling to:

- extreme levels of radiant heat
- extreme levels of ember attack and burning debris
- exposure to significant convective forces (fire generated winds)
- prolonged direct flame contact

All of which were representative of the bushfire behaviour that impacted the site and surrounding area during the 2009 Victorian Bushfires.

Access & egress

Access to and within the property is via a gravel road that is enclosed by forest on either side. The development will be located a minimum distance of 1.7 km from a non-forested area and 7.5 km from the township of Buxton. Due to the long access & egress route through a heavily forested area, safe access and egress for emergency and other vehicles can not be provided during bushfire events.

CFA requests that a copy of any notice given under section 65 of the Act be sent to CFA pursuant to section 66 of the Act and that a copy of CFA's letter is forwarded to the permit applicant.

If you wish to discuss any of the above conditions or this matter in more detail, please do not hesitate to contact the undersigned on (03) 5833 2400.

Yours sincerely,



Darren Viney
Manager Community Safety (delegated officer)
Country Fire Authority