

From: [Corey Shackleton](#)
To: [Grace Macdonald](#)
Cc: [David Mollerstrom](#)
Subject: Fw: NSW RFS Policy Clarification Request - BAL Application (SSD Industrial Development)
Date: Tuesday, 26 April 2022 1:36:58 PM
Attachments: [BAL Mapping Summary Report - Horsley Industrial Park.pdf](#)
[Horsley Park 5 BAL 20220405.pdf](#)
[NSW RFS advice 04032022.pdf](#)

[EXTERNAL EMAIL**]**

Good afternoon, Grace,

As requested, below is the submission to the NSW RFS.

Any questions, let me know.

Regards

Corey

From: Corey Shackleton
Sent: 26 April 2022 09:18
To: Mathew Smith <Mathew.Smith@rfs.nsw.gov.au>
Cc: Built And Natural Environment <BuiltAndNaturalEnvironment@rfs.nsw.gov.au>
Subject: NSW RFS Policy Clarification Request - BAL Application (SSD Industrial Development)

Good morning Mat,

Please see below matter/PBDB which has been discussed with David Boverman from a DPAP perspective. This is also one of the projects I mentioned when we spoke the other week. I have sent this to you personally as it's another industrial development in a low bushfire risk area that has been inappropriately conditioned, the same as the previous one we have dealt with.

I am seeking DPAP review and comment in accordance with the DPAP advice service. It is understood that DPAP will consult with PES and escalate to yourself as needed.

Issue:

1. Application/extent of BAL and Non-Combustible Construction
 - This is the same issue / condition that has been previously raised and addressed. The NSW RFS issued advice on 9 February 2022 (see attached) which is clear in relation to this matter and a similar recommended condition for a proposed warehouse (Warehouse 2A) at Oakdale West Estate (OWE). Based on the outcome reached for that matter, it was assumed that this policy issue was now resolved, however, the NSW RFS advice for this proposal (dated after the previous advice), is inconsistent and appears the NSW RFS has reverted to the previously incorrect position.
 - *Please note that for the OWE matter, the issues identified in the advice request were resolved directly with the Department of Planning and Environment (DPE) before receiving the NSW RFS advice. The resolution*

reached with DPE was ultimately consistent with the NSW RFS advice that followed (9 February 2022). The wording and resolution for this matter is substantially the same as that applied in the final consent for OWE.

2. Conditioning

- The ongoing practice of recommending strict compliance with AS3959 and requiring non-combustible construction is limiting the ability for performance/alternate approaches. Conditions should be worded to allow performance compliance without the need for DA consent modification. This is critical given construction approvals are outside the scope, authority, responsibility, and expertise of the NSW RFS. It is therefore essential that any advice and/or conditions recommended by the NSW RFS allows for performance / alternate approaches.

3. Administrative Process

- To minimise further delays it is requested that advice provided be in a form which will be forwarded directly to DPE (as the consent authority) so the issues can be resolved without further delays.
- The original SSD application was approved by the NSW RFS with number of conditions, including one relating to building construction which was considered inappropriate.
- A modification was lodged to amend the condition, supported by a report by Travers Bushfire & Ecology, which was effectively rejected.
- This has created ongoing and considerable delays.
- Failure to resolve this issue at this stage will lead to further potential concurrence and referrals and/or breach cases as well as inappropriate and unacceptable time delays for this State Significant Project over issues that are limited to building code and construction approvals.

Background - Development Context

- The site is in what is a substantially an urban setting (Western Sydney) and will ultimately be surrounded by industrial and residential development.
- It is common for industrial buildings to be constructed in bushfire prone areas;
- Industrial buildings are usually:
 - much larger than a typical residential dwelling;
 - inherently constructed in a more fire-resistant manner than a typical residential dwelling;
 - include internal fire sprinklers; and
 - are not used for living/accommodation.
- It is common for large industrial buildings to span across multiple Bushfire Attack Levels (BALs), including well beyond 100 metres from a bushfire hazard (i.e. starting from within and finishing outside 'bushfire prone land').
- Industrial buildings must provide natural lighting for the purposes of energy efficiency, workplace amenity, etc. This is typically done through a range of measures, but the most effective and common is through translucent roof sheeting.

Background - Proposed Development

- The proposal a State Significant Development (SSD) application for the construction of industrial warehouse buildings and accompanying facilities, landscaping, and onsite parking at 335-337 Burley Rd Horsley Park.
- The development is 'the construction of four (4) large warehouses' on four (4) lots these being Lots 201, 202, 204 & 206
- The proposed development is located within an approved industrial subdivision (DA 839.1/2019).
- The proposed development is located on land classified as bush fire prone on the Fairfield City Council Bush Fire Prone Land (BFPL) Map.
- It is located in a generally low-risk bushfire prone area;
- Warehouse buildings Lots 201 and 206 are more than 100m from the bushfire hazard (see attached "Horsley_Park_5_BAL_20220405.pdf"); and
- Warehouse buildings Lots 202 and 204 are more than 25 metres from the bushfire hazard at its closest (eastern) point and over 100 metres away from the bush at the furthest (western) end.

Background - Concurrence and Referrals

- The NSW RFS provided advice on 20th August 2020 (REF: DA20200520001740-EIS & DA) to DPE in respect of the state significant development;
- The NSW RFS advice was based on a bushfire report prepared by Eco Logical Australia dated June 2020.
- Additional information was submitted to support a modification of the bushfire conditions. The modification submitted was based on additional information prepared by Travers Bushfire & Ecology, dated 27 January 2022.
- The NSW RFS provided a response to the modification on 4 March 2022 (see attached "NSW RFS advice 04032022.pdf").
- This latest response did not accept the recommendations of the Travers Bushfire and Ecology submission and retained the previously applied conditions.

Legislative Context

- The NSW RFS often provide advice on industrial development on bushfire prone land under s.4.14 of the *Environmental Planning and Assessment Act 1979* and through the SSD process.

- PBP 2019 states:

"The NCC does not provide for any bush fire specific performance requirements for these particular classes of buildings. As such AS 3959 and the NASH Standard are not considered as a set of Deemed to Satisfy provisions, however compliance with AS 3959 and the NASH Standard must be considered when meeting the aims and objectives of PBP."

"The general fire safety construction provisions of the NCC are taken as acceptable solutions however construction requirements for bush fire protection will need to be considered on a case-by-case basis."

- In the absence of a DTS standard, AS3959 is typically applied to industrial

buildings in bushfire prone areas. This does create several compliance issues due to the nature of certain industrial buildings;

- As per the advice of the NSW RFS on 9 February 2022:
 - PBP 2019 does not identify that there is sufficient threat to warrant specific construction requirements in areas greater than 100 metres from a bushfire hazard.
 - Compliance with AS3959 and/or the NASH Standard would be met without building bush fire protection construction features in areas greater than 100 metres from a bushfire hazard since the maximum regulated distance in these standards is 100 metres. Additionally, PBP 2019 does not warrant specific requirements in areas greater than 100 metres from a bush fire hazard.
 - PBP 2019 does not require specific construction requirements in BAL-LOW areas. It should be noted that neither does AS3959 and/or the NASH Standard.
 - PBP 2019 does not require the highest assessed BAL to be applied to the entire building in the case of commercial and industrial development (NCC Class 5 – 8 buildings). It requires/allows building construction requirements for bush fire protection to be considered on a case-by-case basis when buildings are within 100 metres of bushfire hazards.
 - PBP 2019 does not have any requirements for buildings in BAL 12.5 to be constructed entirely with non-combustible materials, nor does AS3959 and/or the NASH Standard.

Current Position

- The latest advice by the NSW RFS (amongst other things) requires the following:

“New construction of the proposed buildings on Lots 201, 202 and 204 (per the estate masterplan, rev. P13, dated 14.12.21) must be non-combustible, and comply with Sections 3 and 5 (BAL 12.5) of the Australian Standard AS 3959:2018 Construction of buildings in bush fire-prone areas or NASH Standard (1.7.14 updated) National Standard Steel Framed Construction in Bushfire Areas – 2014 as appropriate, and Section 7.5 of Planning for Bush Fire Protection 2019.”

- This is considered to exceed the prescriptive boundaries of AS3959 and the NCC.
- Due to the significant nature of the development and the issues (functionality and cost) associated with this specific NSW RFS condition, a more detailed review has been undertaken by Blackash Bushfire Consulting.

Non-Compliances

- These are articulated under the ‘issues’ (above).

Methodology and Criteria for Assessment

BAL Mapping

- Consistent with the previous NSW RFS advice (dated 9 February 2022) detailed BAL mapping has been undertaken to provide for a more specific BAL application across the estate (see attached “Horsley_Park_5_BAL_20220405.pdf”);
- The BAL Map was based on a site inspection and the site assessment

methodology in PBP 2019 and outputs of the Method 2 (Short Fire Run) approach. Site assessment and modelling details can be found in the attached BAL Mapping Summary Report ("BAL Mapping Summary Report - Horsley Industrial Park").

Analysis

BAL Mapping

- Consistent with the previous NSW RFS advice the use of detailed BAL mapping is an accepted performance-based approach.
- Based on the low-risk nature of the site, the site assessment and associated radiant heat modelling is considered appropriate and acceptable.

Proposed Resolution

- The NSW RFS:
 1. Maintain the previously stated position for industrial construction (application of BAL and non-combustible construction for this site where the issues are the same);
 2. Restate the condition (condition 2) as follows:
"The construction shall comply with the National Construction Code (2019), Australian Standard AS 3959:2018 Construction of buildings in bush fire-prone areas and/or NASH Standard (1.7.14 updated) National Standard Steel Framed Construction in Bushfire Areas – 2014 and Section 7.5 of Planning for Bush Fire Protection 2019 on a prescriptive (deemed to satisfy and/or acceptable solution) basis and/or performance basis"
- Please note that the intent of this wording is to clarify that the construction certificate issues should not be confused with the Development Consent issues.
- 3. The advice provided be in a form which will be forwarded directly to DPE (as the consent authority) so the issues can be resolved without further delays.

Timeframe

- Based on the time already invested in the resolution of this matter (and also the time spent previously) an expediated review and response is requested by COB Thursday 28 April 2022.

Many thanks

Regards

Corey Shackleton

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