




BAL Risk Assessment Certificate

State Environmental Planning Policy
(Exempt & Complying Development Codes) 2008
Clause 3.4 Complying development on bush fire prone land

Proposed Residential Building Development
35 Kenneth Road
Manly Vale NSW 2093
Lot 5 Section 2 DP 976580

19 August 2021



Certifier:	Scott Jarvis BPAD-Level 3 Certified Practitioner BPD-PA-18593 FPAA Member No. 18593	 BPAD Bushfire Planning & Design Accredited Practitioner Level 3
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3.0 BAL & Risk Assessment

Vegetation

Vegetation constraining the building development has been assessed as follows:

Aspect	North East	North West	South East	South West
Vegetation	<input type="checkbox"/> Rainforest	<input type="checkbox"/> Rainforest	<input type="checkbox"/> Rainforest	<input type="checkbox"/> Rainforest
	<input type="checkbox"/> Forest	<input type="checkbox"/> Forest	<input type="checkbox"/> Forest	<input checked="" type="checkbox"/> Forest
	<input type="checkbox"/> Woodland	<input type="checkbox"/> Woodland	<input type="checkbox"/> Woodland	<input type="checkbox"/> Woodland
	<input type="checkbox"/> Forested Wetland	<input type="checkbox"/> Forested Wetland	<input type="checkbox"/> Forested Wetland	<input type="checkbox"/> Forested Wetland
	<input type="checkbox"/> Tall Heath	<input type="checkbox"/> Tall Heath	<input type="checkbox"/> Tall Heath	<input type="checkbox"/> Tall Heath
	<input type="checkbox"/> Short Heath	<input type="checkbox"/> Short Heath	<input type="checkbox"/> Short Heath	<input type="checkbox"/> Short Heath
	<input type="checkbox"/> Arid Shrublands	<input type="checkbox"/> Arid Shrublands	<input type="checkbox"/> Arid Shrublands	<input type="checkbox"/> Arid Shrublands
	<input type="checkbox"/> Grassland	<input type="checkbox"/> Grassland	<input type="checkbox"/> Grassland	<input type="checkbox"/> Grassland
	<input type="checkbox"/> Freshwater Wetlands	<input type="checkbox"/> Freshwater Wetlands	<input type="checkbox"/> Freshwater Wetlands	<input type="checkbox"/> Freshwater Wetlands
	<input checked="" type="checkbox"/> Managed Land	<input checked="" type="checkbox"/> Managed Land	<input checked="" type="checkbox"/> Managed Land	<input type="checkbox"/> Managed Land

Separation Distance

Aspect	North East	North West	South East	South West
Distance	>100m	>100m	>100m	>88m

Effective Slope

The effective slope that will influence bush fire behaviour in each direction has been assessed as:

Aspect	North East	North West	South East	South West
Slope under the hazard (over 100m in degrees)	<input type="checkbox"/> Upslope/Flat	<input type="checkbox"/> Upslope/Flat	<input type="checkbox"/> Upslope/Flat	<input type="checkbox"/> Upslope/Flat
	<input type="checkbox"/> >0 – 5	<input type="checkbox"/> >0 – 5	<input type="checkbox"/> >0 – 5	<input type="checkbox"/> >0 – 5
	<input type="checkbox"/> >5 – 10	<input type="checkbox"/> >5 – 10	<input type="checkbox"/> >5 – 10	<input checked="" type="checkbox"/> >5 – 10
	<input type="checkbox"/> >10 – 15	<input type="checkbox"/> >10 – 15	<input type="checkbox"/> >10 – 15	<input type="checkbox"/> >10 – 15
	<input type="checkbox"/> >15 – 20	<input type="checkbox"/> >15 – 20	<input type="checkbox"/> >15 – 20	<input type="checkbox"/> >15 – 20

Fire Danger Index

The Fire Danger Index (FDI) applying to the Northern Beaches LGA is as follows:

FDI	<input checked="" type="checkbox"/> 100	<input type="checkbox"/> 80	<input type="checkbox"/> 50
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Northern Beaches Council – Greater Sydney Region

Bushfire Attack Level

The highest Bushfire Attack Level (BAL) affecting the subject development has been assessed as (*Table A1.12.5 PBP 2019*):

<input type="checkbox"/> BAL – FZ	<input type="checkbox"/> BAL – 40	<input type="checkbox"/> BAL – 29	<input type="checkbox"/> BAL – 19	<input checked="" type="checkbox"/> BAL – 12.5	<input type="checkbox"/> BAL – LOW
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Based on the above assessment, the Consent Authority should determine that this development proposal **can comply** with certain requirements contained within the **'State Environmental Planning Policy (Exempt & Complying Development Codes) 2008 – Clause 3.4 Complying development on bushfire prone land'**.

This being specifically pursuant to compliance with **'Clause 1.19A – Land on which complying development may not be carried out' –**

- a) The development must not be carried out on land in bush fire attack level – 40 (BAL – 40) or the flame zone (BAL – FZ);
- b) In the case of development specified for the Rural Housing Code – any associated access way to the development must be on land that is –
 - i) not in bush fire attack level – 40 (BAL – 40) or the flame zone (BAL – FZ);
or
 - ii) grasslands

'In the case of development carried out on grasslands – the development conforms to the specifications and requirements of Table 7.9a of Planning for Bush Fire Protection that are relevant to the development'.

Further, this **BAL Risk Assessment Certificate** has been issued, in accordance with the abovementioned **SEPP Clause 1.19A 3) (a)**, by *'a person who is recognised by the NSW Rural Fire Service as a 'suitably qualified consultant' in bush fire risk assessment.*

Should any of the above information require clarification or further discussion, please contact the author.



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Disclaimer

It should be noted that this **BAL Risk Assessment Certificate** only forms part of the certifiable requirements which suitably address the 'Development standards for bush fire prone land' within **Clause 3.4 State Environmental Planning Policy (Exempt & Complying Development Codes) 2008**. The entire section is replicated below for reference.

It should also be noted that the said development must satisfy many other significant requirements to achieve overall compliance with the **State Environmental Planning Policy (Exempt & Complying Development Codes) 2008**, which are not related to 'bushfire development standards', and do not form part of this certification document.

1.19A Land on which complying development may not be carried out—bush fire prone land

- (1) To be complying development specified for any complying development code (except the Housing Alterations Code)—
 - (a) the development must not be carried out on land in bush fire attack level-40 (BAL-40) or the flame zone (BAL-FZ), and
 - (b) in the case of development specified for the Rural Housing Code—any associated access way to the development must be on land that is—
 - (i) not in bush fire attack level-40 (BAL-40) or the flame zone (BAL-FZ), or
 - (ii) grasslands.

Note.

More information about the categories of bush fire attack, including the flame zone, can be found in Table A1.7 of *Planning for Bush Fire Protection*.

- (2) This clause does not apply to the following development—
 - (a) non-habitable detached development that is more than 6m from any dwelling house,
 - (b) landscaped areas,
 - (c) non-combustible fences,
 - (d) swimming pools.
- (3) For the purposes of this clause, land is not in bush fire attack level-40 (BAL-40) or the flame zone (BAL-FZ) if—
 - (a) the council or a person who is recognised by the NSW Rural Fire Service as a suitably qualified consultant in bush fire risk assessment determines, in accordance with the methodology specified in *Planning for Bush Fire Protection*, that the land is not in bush fire attack level-40 (BAL-40) or the flame zone (BAL-FZ), or
 - (b) in the case of development carried out on grasslands—the development conforms to the specifications and requirements of Table 7.9a of *Planning for Bush Fire Protection* that are relevant to the development.
- (4) Nothing in this clause prevents complying development being carried out on part of a lot that is not land referred to in this clause even if other parts of the lot are such land.
- (5) In this clause, **grasslands** has the same meaning as in *Planning for Bush Fire Protection*.

3.4 Complying development on bush fire prone land

(1) This clause does not apply to the following complying development under this code—

- (a) non-habitable detached development that is more than 6m from any dwelling house,
- (b) landscaped areas,
- (c) non-combustible fences,
- (d) swimming pools.

Note.

See clause 1.19A for additional provisions relating to bush fire prone land.

(2) If complying development under this code is carried out on bush fire prone land, the following development standards also apply in addition to any other development standards—

- (a) (Repealed)
- (b) the lot on which the development is to be carried out must have direct access to a public road or a road vested in or maintained by the council,
- (c) the dwelling house must be able to be connected to mains electricity,
- (d) if reticulated or bottled gas is installed and maintained on the lot—
 - (i) it must be installed and maintained in accordance with AS/NZS 1596:2014, *The storage and handling of LP Gas*, and
 - (ii) the storage and handling of any LP gas on the lot must comply with the requirements of the relevant authorities (including the use of metal piping),
- (e) any gas cylinder stored on the lot within 10m of any dwelling house must—
 - (i) have its release valves directed away from the dwelling house, and
 - (ii) be enclosed on the hazard side of the installation, and
 - (iii) have metal connections to and from the cylinder,
- (f) there must not be any polymer sheathed flexible gas supply lines to gas meters adjacent to the dwelling house,
- (g) if the development is carried out on a lot in Zone RU5, there must be—
 - (i) a reticulated water supply connection to the lot and a fire hydrant within 70m of any part of the development, or
 - (ii) a 10,000 L capacity water tank on the lot,
- (h) if the development is carried out on a lot in any zone other than Zone RU5, there must be—
 - (i) a reticulated water supply connection to the lot, and
 - (ii) a fire hydrant within 70m of any part of the development,
 - (iii) the development must conform to the specifications and requirements of *Planning for Bush Fire Protection* that are relevant to the development.

Note 1.

Attached development, council, detached and **dwelling house** are defined in clause 1.5.

Note 2.

Bush fire prone land, landscaped area, road and **swimming pool** have the same meanings as they have in the Standard Instrument.

References/Further Reading

Australian Standard 3959 (2018) Construction of buildings in bushfire prone areas – Standards Australia.

National Construction Code of Australia (2021) – Australian Building Codes Board, Canberra.

Environmental Planning and Assessment Act (1979) – NSW Government Printer.

Rural Fires Act (1997) – NSW Government Printer

Landscape and building design for bushfire areas (2003) – Ramsay G C & Rudolf L, CSIRO Publishing, Collingwood Victoria.

Ocean shores to desert dunes: the native vegetation of NSW and the ACT (2004) – Keith D, NSW Dept of Environment and Conservation, Hurstville NSW.

Planning for Bush Fire Protection. A guide for councils, planners, fire authorities and developers (2019) – NSW Rural Fire Service.

State Environmental Planning Policy (Exempt & Complying Development Codes) 2008