

Building and Development Dispute Resolution Committees—Decision

Sustainable Planning Act 2009

Appeal Number: 62 - 11

Appeal Applicant: Queensland Fire & Rescue Service (QFRS)

Assessment Manager: Innovative Certifiers Pty Ltd

Site Address: 797-809 Ingham Road, Bohle QLD 4009 and described as Lot 30 on

SP222397 (the subject site)

Appeal

Appeal under section 528 of the *Sustainable Planning Act 2009* (SPA) by the Queensland Fire and Rescue Service (QFRS) against the Development Approval (DA) for building works issued by the Assessment Manager, Innovative Certifiers Pty Ltd. The Appeal on behalf of the QFRS is stated on the grounds that;-

- 1. 'The decision (Refer Approval condition 7) that natural smoke venting is not to be considered to be part of a smoke and heat venting system and therefore it is not a special fire service'
- 2. That Mr Shephard disregarded the QFRS advice provided on the natural smoke venting system (being in QFRS's view a smoke and heat venting system and therefore a special fire service). In QFRS's opinion the natural smoke venting system design is inadequate and does not comply with the BCA (Building Code of Australia 2010.).'

Date of hearing: 11am on 19 September 2011

Place of hearing: Room 5c, Level 5, 63 George Street, Brisbane QLD 4000

Building and Development Dispute Resolution Committees' Office

Committee: David Mansell – Chairperson

Garry Leis - General Referee

Present: Queensland Fire & Rescue Service — Ian Shepherd

Queensland Fire & Rescue Service — Jamie Ryder
Queensland Fire & Rescue Service — Stephen Knight
Innovative Certifiers Pty Ltd — Bruce Shephard
McNab Constructions (Builder) — Mark McNab

Decision:

The Committee, in accordance with section 564(2)(B) of the SPA **changes the decision** and makes the following directions:-

Within 20 business days of this decision taking effect, the Assessment Manager must amend Condition 7 of the DA (20110220) Decision Notice and re-issue as follows.

7A - QFRS Requirements

The building works must comply with the requirements of the QFRS Referral Agency advice dated 7 July 2011 and attached (QFRS Advice) except for the following exclusion: the Applicant need have no regard for the QFRS comments under the heading titled 'Smoke and Heat Venting Systems'.

7B – Natural Smoke Venting System

Natural Smoke Venting must be provided in accordance with Table E2.2a – Large Isolated Buildings Subject to C2.3 – Option (a)(iv) of the BCA 2010. The ventilation openings must be distributed as evenly as practicable and comprise permanent openings at roof level with a free area of not less than 1.5% of the floor area and low level openings which may be permanent or readily openable with a free area of not less than 1.5% of the floor area.

The low level openings must consist of permanent openings that sum to not less than 60% of the required low level area (1.5% of the floor area) and other openings which must be readily openable.

The proposed roller doors must be openable electrically by a control adjacent to the door and manually (in the event of power failure) to the satisfaction of the Building Certifier.

The roller doors have been deemed readily openable only for the portion of area not otherwise afforded by the permanent low level openings. The roller doors have been deemed readily openable based on the proposed use and other characteristics of the building. The use and other characteristics include;

- (a). The proposed building is a Transfer Facility and not a Storage Facility. The amount of fire load proposed to be stored within the building is relatively low compared with typical warehouse/storage facilities.
- (b). The proposed hours of operation for the Facility/Building are 24 hours a day, 7 days a week. The Facility/Building will be closed Christmas Day and Good Friday.
- (c). The Facility is operated with all roller doors open whilst the building is occupied.
- (d). There are no special hazards proposed to be accommodated within the building that would otherwise require consideration under Clause E1.10 of the BCA 2010.
- (e). Trucks are not proposed to be stored within the building.

The Certificate of Classification issued for the development must include a restriction stating:-

The building must only be used in accordance with the relevant Development Permits (and other statutory approvals) that apply to the Development. The Natural Smoke Venting system has been specifically designed and approved based on the buildings proposed use and other characteristics including;-

- a) The building is intended for use as a Goods Transfer Facility and not as a long term Storage Facility. The amount of fire load to be stored within the building is relatively low compared with typical warehouse/storage facilities.
- b) The intended hours of operation for the Facility/Building are 24 hours a day, 7 days a week and is only intended to be closed Christmas Day and Good Friday.

- c) The Facility is required to be operated with all roller doors open whilst the building is lawfully occupied.
- d) This building is not approved to accommodate any materials that could cause special problems for fighting a fire because of the nature or quantity of materials stored, displayed or used in the building or on the allotment (Clause E1.10 of the BCA 2010.

Background

Based on information made available, the background to this appeal can be summarised as follows;

- On 6 April 2011, the QFRS received an application as a Referral Advice Agency under the SPA for the assessment of special fire services.
- On 10 May 2011, the QFRS subsequently carried out their assessment of the application concluding that
 the special fire services were non-compliant as there was insufficient information suppled for the fire
 mains and the fire detection system.
- On 29 June 2011, the QFRS received an email from the Assessment Manager with documents proposing a natural smoke venting system in lieu of the previously proposed fire detection system.
- On 7 July 2011, the QFRS assessed the documents received by e-mail on 29 June 2011 and issued advice to the Assessment Manager stating the smoke and heat venting system is non-compliant.
- On 11 July 2011, a meeting was held with representation from the QFRS, the Assessment Managers and McNab Construction. Matters discussed at the meeting included whether roller shutters/doors could act as low level openings for the natural smoke venting system and whether natural smoke venting is a Special Fire Service listed under Schedule 8 Part 1 of the Sustainable Planning Regulation 2009 (SPR).
- On 12 July 2011, the Assessment Manager in deciding the DA included the following condition (condition 7) in the Decision Notice stating:-

7. QFRS Requirements

Approval is subject to the requirements of Queensland Fire and Rescue Service (QFRS) as noted in the attached QFRS assessment report, except where otherwise excluded or modified below.

Exclusions

The section of the QFRS assessment report headed "Smoke and Heat Vent Systems" does not form part of the conditions of this building development permit. As this building is equipped with natural smoke vents provided in accordance with the BCA DTS provision there will be no smoke and heat vent system installed.

- On 20 July 2011, the QFRS received the above-mentioned DA Decision Notice.
- On 3 August 2011 the QFRS lodged an appeal under section 528 of the SPA.

Material Considered

The material considered in arriving at this decision comprises:

- 1. 'Form 10 Appeal Notice', grounds for appeal and correspondence accompanying the appeal lodged with the Registrar on 3 August 2011. The accompanying correspondence is generally described as:
 - a) A QFRS letter dated 25 July 2011 with no addressee outlining matters relevant to the Appeal.

- b) An Appeal covering letter dated 3 August 2011 addressed to The Chairperson Building and Development Committee.
- c) The QFRS referral adjacency advice dated 7 July 2011.
- d) The QFRS Application for Special Fire Services dated 29 June 2011.
- e) Email dated 30 June 2011 from QFRS Townsville to Assessment Manager.
- f) Email dated 29 June 2011 from Assessment Manager to QFRS.
- g) Email dated 29 July 2011 between QFRS staff.
- h) Email dated 28 June 2011 from McNab Construction to Assessment Manager.
- i) Email dated 27 July 2011 from Building Codes Queensland (BCQ) to QFRS.
- j) Email dated 27 July 2011 between BCQ staff.
- k) Innovative Certifiers Development Application Decision Notice dated 12 July 2011.
- 2. Committee Registrar email to QFRS and Innovative Certifiers dated 9 August 2011.
- 3. QFRS responding e-mail to the Committee Registrar dated 15 August 2011.
- 4. Innovative Certifiers responding letter dated 11 August 2011 and correspondence accompanying the letter including:
 - a) Sustainable Planning Regulation 2009 (SPR) extract Schedule 8.
 - b) QFRS Application Forms.
 - c) Email dated 29 June 2011 from Assessment Manager to QFRS Townsville
 - d) Email dated 28 June 2011 from McNab Construction to Assessment Manager.
 - e) Design information referred 29 June 2011 to QFRS for assessment.
 - I) Innovative Certifiers Development Application Decision Notice dated 12 July 2011.
 - m) Email dated 12 July 2011 between BCQ staff.
 - f) Architectural design drawings and floor areas calculated.
- QFRS Document Community Safety Operations Program Office CSO ICT Project Phase 1 (People, Process and Business Improvement Phase).
- 6. Building Act 1975 (BA) and the SPA and relevant subordinate legislation.
- 7. The Guide to the Building Code of Australia 2010.

Findings of Fact

The Committee makes the following findings of fact:

- 1. It is the Assessment Manager's opinion that natural smoke venting as required by the BCA is not a special fire service with regard to Schedule 8 of the SPR.
- 2. QFRS confirmed at the appeal hearing that the referral (of the Special Fire Service Designs) by the Assessment Manager to the QFRS Referral Agency (Advice) is not a matter of dispute.
- 3. The Parties agree that the Development:-

- a) was assessed and decided under BCA 2010,
- b) consists of BCA 2010 Class 5 (office) & Class 7b (warehouse),
- c) has 2 Storeys as defined by the BCA 2010,
- d) has a rise in Storeys of 2 as defined by the BCA 2010,
- e) is a Large Isolated Building under BCA C2.3,
- f) is proposed to comply with Table E2.2a Large Isolated Buildings Subject to C2.3 Option (a)(iv) Natural Smoke Venting of the BCA 2010; and
- g) is required to comply with BCA 2010 for Type C Construction.
- 4. The representative for McNab Constructions confirmed at the appeal hearing that:
 - e) The proposed building is a Transfer Facility and not a Storage Facility. The amount of fire load proposed to be stored within the building is relatively low compared with typical warehouse/storage facilities.
 - f) The hours for operation of the facility/building are 24 hours a day, 7 days a week. The facility/building will be closed Christmas Day and Good Friday.
 - g) The facility is operated with all roller doors open whilst the building is occupied.
 - h) There are no special hazards proposed to be accommodated within the building that would otherwise require consideration under Clause E1.10 of the BCA 2010.
 - i) Trucks are not proposed to be stored within the building.
- 5. The QFRS confirmed at the appeal hearing the compliance and/or adequacy of the ventilation openings at roof level is not a matter of dispute.
- 6. The representative for McNab Construction initially proposed fire detection systems to the QFRS as a method of satisfying the BCA smoke hazard management provisions but was unable to satisfy QFRS that the design would not cause unwanted alarms or that thermal detectors would activate in a timely manner during a fire event.
- 7. The QFRS in their capacity as a Referral Agency (Advice) under the SPA provided advice to the Assessment Manager that the design of the proposed smoke and heating venting system is 'non-compliant'.
- 8. The Assessment Manager has advised that the building's floor area to be naturally smoke vented sums to 4350m² and 1.5% of the building's floor area sums to 65.25m² (Note: the floor area of the building and its parts has not been calculated by the Committee). The representative for McNab Construction confirmed at the hearing that the currently proposed low level openings consist of:
 - a) A permanent 50mm deep opening located between the top of the concrete tilt dado panels and metal cladding around the entire warehouse with a permanent openable area of 7.7m² (permanent opening).
 - b) Perforated roller shutters with apertures summing to an area of 35m² (permanent opening).
 - c) Warehouse personnel exit doors with an area summing to 6m² (readily openable).
 - d) Impervious roller shutters with a readily openable area well in excess of 16.55m² (readily openable manually and electrically).
- 9. The BCA requires Natural Smoke Venting to be provided in accordance with Table E2.2a Large Isolated Building Subject to C2.3 Option (a)(iv) of the BCA 2010. The ventilation openings must be distributed as evenly as practicable and comprise permanent openings at roof level with a free area of not less than 1.5% of the floor area and low level openings which may be permanent or readily openable with a free area of not less than 1.5% of the floor area.
- 10. Although not specifically stated in the QFRS' Referral Agency advice of 7 July 2011, the Assessment Manager was made aware that QFRS does not accept that the proposed impervious Roller Shutters can be considered 'readily openable' as required by Table E2.2a of the BCA 2010.

11. The QFRS consider their Building Approval Handbook to be a 'policy' for the purposes of Section 282 of the SPA. The QFRS Building Approval Handbook – Module 8: Interpretations – Version 1 includes a Business Rule that states in part;-

As an advice agency, the QFRS advises that translucent sheets are not acceptable as a means of providing permanent openings at roof level in a natural smoke venting system. QFRS considers ridge vents an acceptable means of providing permanent openings at roof level.

The QFRS also advises that openable roller doors are not acceptable as a means of providing permanent or readily openable low level openings for make-up air. The QFRS considers open ventilation grills or slots in roller doors, or fixed open grilles in walls to be acceptable means of providing make-up air for a natural smoke venting system.

- 12. QFRS Officer Mr Ian Shepherd confirmed at the hearing that impervious flush panel doors are accepted by the QFRS as a means of providing permanent or readily openable low level openings for make-up air.
- 13. The Assessment Manager issued a DA Decision Notice with a condition that is intended to exclude the need for the Applicant of the Decision Notice to have regard to the QFRS's advice on the proposed Natural Smoke Venting system and whereby the QFRS states the smoke and heating venting system as 'non-compliant'.

Reasons for the Decision

A Natural Smoke Venting System is a Special Fire Service

The Committee has determined that a Natural Smoke Venting System as required to comply with Table E2.2a – Large Isolated Buildings Subject to C2.3 – Option (a)(iv) of the BCA 2010 is a smoke and heat venting system and therefore a Special Fire Service for the purposes of SPR Schedule 8.

The reasons for the decision are as follows;

- 1. The intent of a natural smoke venting system is to vent smoke and heat emanating from a fire and therefore natural smoke venting can reasonably be defined as one of the various types of smoke and heat venting systems.
- It is reasonable that QFRS should be given referral jurisdiction over a natural smoke venting system, as such a system has a direct relationship to QFRS operations and their ability to carry out those operations efficiently and effectively.

Roller Doors Are Deemed Readily Openable For This Specific Building

The Committee has determined the roller doors as proposed for this particular building/design are readily openable for the purposes of complying with Table E2.2a – Large Isolated Buildings Subject to C2.3 – Option (a)(iv) – Natural Smoke Venting of the BCA 2010.

The reasons for the decision are as follows;

1. 'Readily openable' is not a BCA 2010 defined term. 'Readily' is generally defined in dictionaries as being 'in a prompt or timely manner'.

2. The Guide to BCA 2010 states:-

'Roller shutters and doors can be used for smoke venting purposes in accordance with the table if they are "readily openable". A building proponent must satisfy the appropriate authority that such roller shutters and doors achieve the "readily openable" requirement.' It is important to note that the BCA does not state that roller shutters or doors must open automatically in the event of a fire.

- 3. The proposed roller doors can be opened electrically by a control adjacent to the door and manually (in the event of power failure). The proposed roller doors during normal day to day usage of the building are therefore generally openable in a prompt or timely manner.
- 4. The roller doors are required to be not only 'readily openable' for every day usage but also 'readily openable' in the event of a fire.
- 5. There is the potential for roller doors to warp and buckle when exposed to fire conditions and therefore potentially cause them to fail the requirement to be readily openable. However in this particular design, there are many roller doors that are relatively uniformly distributed around the perimeter of the building. Only one or two of these roller doors are required to be readily openable to satisfy the openable area provisions of the BCA (taking into account the other proposed low level permanent openings). Given the proposed building usage, during the majority of credible fire scenarios it is unlikely that all roller shutters would be affected by a fire to the extent that they are not readily openable.
- 6. More than 65 per cent of the required low level openings are proposed to be permanently open and a further 9 per cent of the required low level openings are afforded by personnel exit doors accepted by the QFRS as being 'readily openable'.
- 7. The proposed building could have been designed, assessed and approved to comply with BCA 2010 Type A construction and subsequently would not be a large isolated building nor require any smoke hazard management systems.

David Mansell Building and Development Committee Chair

Date: 21 October 2011

Appeal Rights

Section 479 of the *Sustainable Planning Act 2009* provides that a party to a proceeding decided by a Committee may appeal to the Planning and Environment Court against the Committee's decision, but only on the ground:

- (a) of error or mistake in law on the part of the Committee or
- (b) that the Committee had no jurisdiction to make the decision or exceeded its jurisdiction in making the decision.

The appeal must be started within 20 business days after the day notice of the Committee's decision is given to the party.

Enquiries

All correspondence should be addressed to:

The Registrar of Building and Development Dispute Resolution Committees Building Codes Queensland
Department of Local Government and Planning
PO Box 15009
CITY EAST QLD 4002
Telephone (07) 3237 0403 Facsimile (07) 3237 1248