



## Building and Development Dispute Resolution Committees—Decision

---

### *Sustainable Planning Act 2009*

**Appeal Number:** 92 - 11

**Applicant:** Compass Consulting Group Pty Ltd

**Assessment Manager:** Gold Coast City Council (Council)

**Concurrence Agency:** N/A  
(if applicable)

**Site Address:** 126-148 Galleon Way Currumbin Waters and described as Lot 101 on SP835729 the subject site

---

### **Appeal**

Appeal under section 532 of the *Sustainable Planning Act 2009* (SPA) against Council's Information Request for the installation of reduced pressure zone (RPZ) valves within utility rooms that contain water marked approved appliances that comply with Section 4.2.6 of Australian/New Zealand (AS/NZS)3500.1. 2003.

---

**Date of hearing:** 11:00am – Wednesday, 21 December 2011

**Place of hearing:** Offices of Building Codes Queensland, level 5/63 George Street Brisbane

**Committee:** Mr. Ian Mac Donald – Chair  
Mr. Jim Graham – Referee

**Present:** Mr. Colin Wheat (Compass Consulting Group Pty Ltd) – Applicant  
Mr. James Carter – Gold Coast City Council  
Mr. Phil Greer – Gold Coast City Council

---

### **Decision:**

The Building and Development Dispute Resolution Committee (Committee), in accordance with Section 564 of the SPA **changes** the Information Request issued by Council on 12 September 2011 and directs Council to delete the original Item 3 ' All fixtures in Utility Rooms (except Basin) to pass through RPZD' and replace with the following Committee's Item 3:

All chemical injection systems connected to the drinking water supply to be installed downstream of a testable backflow prevention device appropriate for the hazard in accordance with AS/NZS 3500.1:2003 clause 4.3 and Table 4.1. The degree of hazard is to be determined from the Material Safety Data Sheets (MSDS) for the chemicals to be connected to the chemical injection systems.

## **Background**

On 19 August 2011 the Applicant lodged a plumbing application with Council for plumbing and drainage alterations for a 4 block RSL hostel upgrade at 126-148 Galleon Way Currumbin Waters.

On 12 September 2011 Council issued an Information Request to the Applicant requiring additional information.

On 9 November 2011 the Applicant provided information to Council in response to the Information Request.

On 16 November 2011 Council issued a Plumbing and Drainage Compliance Permit for the RSL 4 Block Hostel Upgrade PN 169858/04/20(P1) subject to conditions.

On 1 December 2011 the Committee received an application appealing against Council's requirement for all fixtures in the Utility Room (except basin) to pass through Reduced Pressure Zone Devices (RPZD).

The Applicant is disputing Council's interpretation regarding the installation of RPZ valves within utility rooms that contain Watermark approved appliances complying with Section 4.2.6 of AS/NZS 3500.1:2003. In addition the Applicant believes Council have not carried out a risk assessment or perused the relevant documents provided with the application to make the request and Council is applying the informative section of AS/NZS 3500.1:2003 Appendix F rather than the applied provisions of AS/NZS 3500.1:2003 clause 4.2.6.

As the chemical injection equipment is being installed in a hostel for mostly aged and disabled occupants the potential to cause injury, endanger health or cause death in the event of a back syphonage event is relatively high. It is most likely that the subject equipment will be operated and maintained by people with little or no knowledge of backflow and back syphonage occurrences and there is a possibility that other toxic chemical not suitable for a device with an air gap could be used in the future.

## **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 25 November 2011.
2. *Plumbing and Drainage Act 2002* (QLD) Reprint 3B (PDA)
3. Standard Plumbing and Drainage Regulation 2003 Reprint 3A
4. AS/NZS 3500.1:2003 – Water Services (Incorporating amendments 1 & 2).
5. Verbal submission from the Applicant at the hearing.
6. Verbal submissions from Council at the hearing.
7. Email received from SAI Global Client Manager.
8. Instrument of Appointment of Authorised Person for Mr. James Carter, officer of Council to exercise all given powers pursuant to the *Local Government Act 2009*.
9. Instrument of Appointment of Authorised Person for Mr. Phil Greer, officer of Council to

exercise all given powers pursuant to the *Local Government Act 2009*.

10. Material Safety Data Sheets (MSDS) of the chemicals associated with the subject chemical injection equipment.
11. National Construction Code of Australia Volume 3 Plumbing Code of Australia 2011 (PCA).
12. AS 5200.000-2006 Technical Specification for Plumbing and Drainage Products.

## Findings of Fact

The Committee makes the following findings of fact:

- A request for a Compliance Permit in the approved form was received by Council on 19 August 2011 from the Applicant.
- The Information Request to the Applicant on 12 September 2011 issued by Council does not comply with the requirements of Section 85 (4) of the PDA due to the time period exceeding the prescribed 10 day period.
- On or about the 9 November 2011 the Applicant provided to Council the additional information as requested in the Information Request.
- The Committee acknowledged the Applicant provided the information satisfying the information request to obtain a Compliance Permit to allow the work nominated in the Compliance Permit to proceed without delay.
- The Applicant however is appealing Item 3 of the Information Request during the construction period so that the appeal process and the decision coincides with the construction period. Had the Applicant not complied with the Information Request Council would most likely have refused the application entitling the Applicant to be given an Information Notice under the PDA.
- The Compliance Permit of 16 November 2011 issued by Council complies with Section 85 (5) of the PDA.
- The Committee confirms that all the appliances (utensil washer, pan sanitiser and chemical injection systems) proposed to be installed at the hostel have current Watermark approval.
- Council agree with the Applicant that the utensil washers and pan sanitisers proposed to be installed have Watermark level 1 certification and the integral backflow prevention is appropriate for the hazard.
- The backflow risk assessment matrix provided by the Applicant for the utensil washer, pan sanitiser and chemical injection systems proposed to be installed are incomplete as the numerical values have not been provided to determine the risk.
- AS/NZS 3500.1:2003 clause 4.2.6 states '*Where backflow prevention devices are provided as an integral part of an authorised fixture, appliance or apparatus, and are appropriate to the cross connection hazard generated by the fixture, appliance or apparatus, no additional backflow prevention is required upstream of the point of connection to the water supply system.*
- AS/NZS 3500.1:2003 clause 4.3 *CROSS CONNECTION HAZARD RATING* sets out three degrees of hazard namely –
  - (a) *high hazard. Any condition, device or practice that, in conjunction with the water supply system, has the potential to cause death;*

- (b) medium hazard. Any condition, device or practice that, in conjunction with the water supply system, has the potential to endanger health;*
- (c) low hazard. Any condition, device or practice that, in conjunction with the water supply system, constitutes a nuisance but does not endanger health or cause injury.*
- The Committee considered 12 material safety data sheets MSDS for the chemicals proposed to be connected to the Hydron Nova/Ecolab chemical detergent injection systems and found that:
    - (a) four of the chemical products are not classified as hazardous nor classified as dangerous goods;
    - (b) four of the chemicals are classified as hazardous and not classified as dangerous; and
    - (c) four of the chemicals were classified as hazardous and classified as dangerous goods.
  - The Committee considered the email advice requested by the Applicant from SAI Global Client Manager that a Watermarked product is suitable for connection directly to a potable water supply without the need for any further backflow devices apart from the device already approved with the equipment assessed.
  - The response from SAI Global Client Manager confirmed that appliances certified under Watermark complying with ATS 5200.101 and ATS 5200.033 comply with the requirements of backflow prevention devices.
  - The Committee also requested information from SAI Global's Client Manager seeking advice regarding the requirements of an apparatus with level 2 Watermark Certification. In their opinion as specified in Section G of the PCA, all plumbing and drainage material and products of conformity with an integral air gap would be appropriate for use with chemicals of medium or high toxicity.
  - They also advise that the performance requirements for ATS 5200.033 incorporate provisions for an air gap but does not prescribe the hazard in which the device is suitable. However, AS/NZS 3500.1:2003 deems an air gap appropriate for a device with a low hazard use. Therefore the subject chemical injection systems using an integral air gap are suitable for use with low hazard conditions.
  - Table 4.1 contained within AS/NZS 3500.1:2003 lists the backflow prevention devices suitable for each hazard rating and nominates:
    - (a) a device incorporating an air gap as suitable for use with a low hazard;
    - (b) a testable double checkvalve as suitable for medium/low hazards; and
    - (c) an RPZ device as suitable for high/medium/low hazards.
  - The Applicant referred to an earlier appeal against an Enforcement Notice issued by Sunshine Coast Regional Council under Section 117 of the PDA regarding the installation of backflow prevention devices (Decision No. 32-11) however the Committee has not considered that appeal in this decision.

#### **Reasons for the Decision**

- The PCA Deemed to Satisfy provisions for cold water services in Queensland requires that the design, construction, installation, replacement, repair alteration and maintenance of cold water

services must be in accordance with AS/NZS 3500.1:2003 Water Services Amendments 1 and 2.

- The Committee considers the Applicants assumption that equipment with integral backflow prevention that has Watermark approval is correct where the hazard is deemed to be low. However the Deemed to Satisfy provisions of AS/NZS 3500.1:2003 clause 4.2.6 determines that no additional backflow devices are required where the integral backflow device provided in authorised fixtures and appliances is appropriate for the cross-connection hazard.
- The equipment in this case incorporates an air gap as a backflow device which is deemed appropriate for a low hazard. Pursuant to AS/NZS 3500.1:2003 clause 4.3 a device with an air gap is not appropriate for use with chemicals that have the potential to endanger health or cause death i.e. medium and high hazards.
- The Committee considers Council's argument that the detergent/chemical injection systems (Hydron Nova / Ecolab chemical detergent injection system) has Watermark level 2 certification which by definition in the PCA is only suitable for a low hazard is correct.
- The backflow risk assessment matrix provided for each of the appliances used by the Applicant to assess the risk of potential backflow occurrence is incomplete. Item 1 states '*Does the piece of equipment carry any water mark approval*'. Item 2 states '*If supplied with Water Marked approval does this include backflow for the hazard?*' The matrix assessment has been terminated at Item 2 stating '*No further assessment required backflow device not required*'.
- Due to the numerical values having not been provided in the score column for each of the items the Committee could not reference the total score against the type of hazard/device requirements noted on the matrix.
- The MSDS for the chemicals proposed to be used in conjunction with the injection equipment indicates the toxicity of the various chemicals ranges from having the potential to constitute a nuisance but not endanger health or cause injury to having the potential to cause death.
- As the chemical injection equipment is being installed in a hostel for mostly aged and disabled occupants the potential to cause injury, endanger health or cause death in the event of a back syphonage event is relatively high. It is most likely that the subject equipment will be operated and maintained by people with little or no knowledge of backflow and back syphonage occurrences and there is a possibility that other toxic chemical not suitable for a device with an air gap could be used in the future.
- There is a moral obligation and duty of care to provide appropriate protection to the water supply.

---

**Ian Mac Donald**  
**Building and Development Committee Chair**  
**Date:29/02 /2012**

## **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**