

## **Determination 2007/53**

### **A dispute in relation to the waiving of the requirement to provide tempered hot water in a house alteration at 10 Camellia Court, Grey Street, Palmerston North**

#### **1. The matter to be determined**

- 1.1 This is a determination under Part 3 Subpart 1 of the Building Act 2004<sup>1</sup> (“the Act”) made under due authorisation by me, John Gardiner, Manager Determinations, Department of Building and Housing (“the Department”), for and on behalf of the Chief Executive of that Department. The applicant is Mr M Morresey (“the applicant”). The other party is the Palmerston North City Council (“the territorial authority”).
- 1.2 This determination arises from the decision of the territorial authority not to issue a waiver in respect of 3-year old alterations (“the alterations”) to an existing house that is approximately 20 years old.
- 1.3 The matter to be determined is whether the territorial authority should issue a waiver regarding the provision of tempered hot water in the bathroom of the alteration in accordance with the provisions of the Building Code<sup>2</sup> (First Schedule, Building Regulations 1992).
- 1.4 In making my decision, I have considered the submissions of the parties, the report of the independent expert commissioned by the Department to advise on this dispute (“the expert”), and the other evidence in this matter.
- 1.5 In this determination, unless otherwise stated, references to sections are to sections of the Act and references to clauses are to clauses of the Building Code.

#### **2. The building work**

- 2.1 The building work in question concerns the alterations to the upper floor of a two-storey detached house. The alterations mainly involved the installation of a new bathroom to replace the existing bathroom, together with its associated plumbing.

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<sup>1</sup> The Building Act 2004 is available from the Department’s website at [www.dbh.govt.nz](http://www.dbh.govt.nz)

<sup>2</sup> The Building Code is available from the Department’s website at [www.dbh.govt.nz](http://www.dbh.govt.nz)

The hot water system is fed from a gas-fired hot water cylinder situated at the upper level. The cylinder is fed by a cold water supply controlled by a pressure-reducing inlet valve. The hot water from the cylinder is supplied to the sanitary fixtures at low pressure through copper piping. The sanitary fixtures in the bathroom consist of a bath, a shower, and a wash-hand basin.

### 3. Sequence of events

3.1 The territorial authority issued a building consent for the alterations on 17 October 2003. None of the plumbing details mentioned above were shown on the plans and specifications submitted for building consent. The consent was issued under the Building Act 1991. It specifically required the installation of smoke-detectors not shown in the plans and specifications, but did not include any specific requirements as to plumbing details not shown. The consent also included the following note:

Where building work is to be undertaken to which this Building Consent relates, and is not shown in detail on the approved plans and specifications, such building work is to be completed to acceptable building standards and to the requirements of the New Zealand Building Code.

3.2 The territorial authority carried out various inspections during the course of construction. According to the applicant, a territorial authority official inspected the plumbing prior to the installation of the wall linings and carried out a “follow-up” inspection in early 2005. I have seen no documentary evidence of those inspections.

3.3 The applicant advised the territorial authority that the building work was complete on 13 April 2004.

3.4 The territorial authority issued a “Building Site Instruction Notice” dated 4 February 2005, which stated:

A means of providing safe hot water at personal hygiene fixtures of no greater than 55° C ie a tempering valve shall be installed.

3.5 Various correspondence and attached information passed between the parties from February 2005 to September 2006, including a letter to the applicant from the territorial authority’s legal advisers. In summary, the applicant’s position was:

- The water tempering requirements were deliberately excluded from the specifications and the applicant was of the opinion that the territorial authority had issued a consent reflecting this omission.
- The applicant had intended to seek a waiver regarding water tempering but the late notification that a tempering valve was required had removed this option.
- The applicant submitted that “there is no legal bar to a waiver being approved at any time”.
- The hot water system in the bathroom is safe and is similar to the one that was replaced and if the alteration had not been carried out, there would not have been a water-tempering requirement.
- The cost of removing and replacing the wall linings “is totally exorbitant and is a totally unreasonable requirement at this late stage”.

3.6 The territorial authority’s responses to the applicant can be summarised as;

- The maximum temperature that the territorial authority considered to be safe in terms of hot water to sanitary fixtures and appliances is 55° C.
- The consent specification made reference to clause G12 (of the Building Code) that requires the delivery of hot water at a safe temperature that avoids the likelihood of scalding.
- There are ways to achieve the safe delivery of hot water that do not require the installation of a tempering valve.
- The territorial authority was of the opinion that the Act prevented the territorial authority from issuing a waiver from the requirements of clause G12.3.6 once the building consent had been issued and the work completed.

3.7 The application for a determination was received by the Department on 9 October 2006.

## **4. The submissions**

4.1 In a detailed submission, the applicant noted that he wished to have a waiver in accordance with the Act in regard to the installation of hot water temperature restrictions to the property. The applicant was of the opinion that there were no new issues of public safety or health, that a waiver could have legally been granted by the territorial authority, and in reaching its decision the territorial authority did not “use their discretion with due diligence”. It was also pointed out that the property has a “low-pressure system”, which is similar to that originally installed in the building. The applicant also fully described the background to the dispute, emphasising that the notification from the territorial authority was issued after the wall linings had already been installed. Subsequent removal and replacement of these would be extremely costly.

4.2 The applicant supplied copies of:

- the plans
- the building consent
- the correspondence with the territorial authority
- the Building Site Instruction Notice
- the completion of work advice
- some Building Industry Authority (BIA) publications (“BIA News”).

4.3 The territorial authority did not make a formal submission to the Department.

## **5. The expert’s report**

5.1 The expert, who was appointed because of his knowledge of plumbing matters, was asked by the Department to examine the hot water system and to provide the answers to two questions; these were:

1. How easy would it have been to provide tempered water at the time the new bathroom was installed, and, are water supply pressures a limiting factor?

2. How easy is it now to provide tempered water to the new bathroom?

5.2 The expert inspected the property on 15 December 2006 and furnished a report, complete with photographs, dated 18 January 2007. The expert described the hot water delivery system and answered the two questions asked by the Department. The questions and answers are summarised below:

5.3 **Question 1: Was provision of tempered water viable at time of installation?**

5.3.1 In view of the following, provision of tempered water would have been viable at the time of installation. Water pressures were not a limiting factor:

- Tempered hot water was able to be provided, either
  - with the hot-water cylinder in its current configuration providing low pressure hot water, or
  - with the cylinder converted to mains pressure.

(The expert noted that the hot-water cylinder was capable of being installed as a mains-pressure cylinder. This could have been ascertained at the time of its installation.)

- The existing pipework could have been assessed and a tempered hot water supply provided to the alterations only.
- The provision of tempered hot water could have been carried out with a minimum of additional work.

5.4 **Question 2: How easy is it to provide tempered water now?**

5.4.1 Retrofitting of a tempered water supply to the new bathroom fixtures only, would be difficult to achieve without a certain degree of modification to the existing water services and the associated building elements.

5.5 A copy of the expert's report was forwarded to the parties on 24 January 2007. The territorial authority did not make a response.

5.6 The applicant wrote to the Department on 31 January 2007. While the applicant considered the report to be accurate and factual, he was of the opinion that it did not address the matters to be determined. The report did not cover issues of health and safety and the house has been "quite safe" since 1998. It was "no more dangerous" than neighbouring properties that had been built at the same time as the original house in question. The applicant submitted that the matter was an appropriate case for a waiver.

## 6. The draft determination

6.1 A copy of a draft determination was forwarded to each of the parties on 1 March 2007.

6.2 In response to the draft determination the applicant forwarded a detailed submission to the Department, dated 12 March 2007. The applicant did not agree with the draft. In his submission, the applicant set out various concerns, which are summarised as follows:

- There are some factual errors in the draft.
- The territorial authority has made a decision that is legally wrong and the reasoning in the draft is not “legally factual”.
- The expert’s report did not address any legal issues, nor did it provide any cost estimates.
- The territorial authority did not raise the issue of water-tempering until final inspection. If it had done so, the matter could have been resolved without the need for substantial and expensive alterations.
- While accepting that the installation does not comply with clause G12, the clause itself can be subject to a waiver. In granting waivers, the territorial authority must ensure that the health and safety of persons are safeguarded and must act reasonably in all cases.
- The property was not subject to a change of use and is as safe now as it was before the alterations took place, and these “...have not added to or increased the danger in any way”.
- The applicant also referred to items published in the BIA News to support his submission.

6.3 The territorial authority accepted the draft determination and in a separate letter to the Department dated 21 March 2007, commented on the applicant’s response to the draft. The comments are summarised as follows:

- The building consent application stated that there would be compliance with clause G12. It was not the territorial authority’s responsibility to fully monitor trades people who should be well aware of the territorial authority’s hot water system requirements.
- The installation of a tempered water supply satisfies the requirements to safeguard against accidental scalding.
- The Act’s “change of use” provisions do not apply in this case and the requirement for tempered water is a result of new building work being undertaken.
- A waiver in this case would establish a dangerous precedent.

6.4 I have amended the draft determination in the light of the comments from the applicant and the territorial authority.

## 7. Evaluation for code compliance

7.1 The relevant provisions of the building code are:

**G12.1** The objective of this provision is to:

- (c) Safeguard people from injury . . . from contact with excessively hot water.

**G12.3.6** If hot water is provided to *sanitary fixtures* and *sanitary appliances*, used for personal hygiene, it shall be delivered at a temperature which avoids the likelihood of scalding.

7.2 Section 436 of the Building Act 2004 applies to building work carried out under a building consent granted under section 34 of the Building Act 1991 (“the 1991 Act”). Subsection 436(2) states:

An application for a code compliance certificate in respect of building work to which this section applies must be considered and determined as if this Act had not been passed.

However, section 43(2) of the 1991 Act must be read as if the “building work concerned complies with the building code that applied at the time the building consent was granted”.

7.3 Section 38 of the 1991 Act provides that:

No building consent shall be granted for the alteration of an existing building unless the territorial authority is satisfied that after the alteration the building will -

- (a) Comply with [certain provisions of the building code not including G12] as nearly as is reasonably practicable to the same extent as if it were a new building; and
- (b) Continue to comply with the other provisions of the building code to at least the same extent as before the alteration.

## 8 Discussion

8.1 The installation of the new bathroom comes within the definition of “building work” in section 2 of the 1991 Act. It is also part of an alteration to the building concerned.

8.2 I take the view that:

- (a) Although the building work constitutes an alteration to the existing house, section 38 of the 1991 Act, which requires certain upgrading of buildings as a whole when they are being altered, does not require upgrading of the water supply; but
- (b) The installation of the new plumbing is new building work and section 7(1) of the 1991 Act requires such work to comply with the building code subject to any properly granted waiver or modification.

8.3 Thus the new sanitary fixtures (the bath, shower, and the wash-hand basin) are required to deliver water at a temperature which avoids the likelihood of scalding in accordance with clause G12.3.4 of the building code, but subject to any properly granted waiver or modification. In other words, the matter for determination is whether it is appropriate to grant a waiver of clause G12.3.6 in respect of the new plumbing.

8.4 The applicant made various submissions to the effect that such a waiver should be granted and cited various articles from BIA News published by the Building Industry Authority. Those articles are of a general nature and, when they do mention hot water temperatures do so in the context of change of use, which is not relevant to this determination. I conclude that they do not assist the applicant.

8.5 The applicant’s contentions, as I understand them, and my responses, are:

- (a) That the territorial authority had “misinterpreted [its] position and the law” when it said that it had no power to “issue a waiver or modification once the building consent has been granted”.

I take the territorial authority's statement to represent the territorial authority's interpretation of section 436 of the Building Act 2004. Strictly speaking, that is a matter of law that I cannot determine. However, for the reasons set out in Determination 2006/85, I take the view that the territorial authority does in fact have the power, on application, to amend a building consent so as to incorporate a waiver or modification. However, the fact that the territorial authority had the power to grant a waiver does not mean that it was under any obligation to do so.

I do not accept that contention as justifying the granting of a waiver.

- (b) That the alteration "did not add to or increase the danger . . . in any way whatsoever".

The fact that the new plumbing is to be installed in a 20 year old house does not mean that it only needs to comply with whatever safety requirements applied 20 years ago.

I do not accept that contention as justifying the granting of a waiver.

- (c) That it would be reasonable to grant a waiver because the territorial authority did not tell the applicant what was required until the building work had been completed to the point where it would be unreasonably expensive to remedy the situation. The expert's opinions conclude that a tempered water system would have been viable at the time of installation and that any subsequent retrofitting of a tempered water supply, to the new bathroom fixtures only, would be difficult to achieve. However, while I accept that the cost involved in making the hot water system code compliant is a factor, I am of the opinion that this is outweighed by the health and safety requirements of the Building Code, and in particular clause G12.3.6.

I recognise that the territorial authority waited until after the final inspection before addressing the question of a tempering valve. It would have been preferable for this matter to have been raised with the applicant or his plumber when the system was inspected prior to the closing in of the pipework. However, I do not think that the any administrative shortcomings on the part of the territorial authority outweighs the health and safety requirements of clause G12.3.6. I do not have the jurisdiction to decide whether there was in fact such a shortcoming, and if so, whether the applicant is entitled to claim recompense from the territorial authority.

- 8.6 I conclude therefore that the bathroom hot water system as installed does not comply with clause G12 and should be amended so as to meet the requirements of that clause. Compliance Document G12/AS1 requires that the temperature of the water delivered at a sanitary fitting in the types of building concerned shall be controlled, by the use of a tempering valve complying with NZS 4617, so as not to exceed 55°C. However, I recognise that the acceptable solution is only a bench-mark or guideline, it is not the Building Code. Accordingly, as recognised by the territorial authority, the installation of a tempering valve is not the only method by which code compliance can be achieved.

## **9 The Decision**

9.1 In accordance with section 188 of the Building Act 2004, I hereby determine that:

- the hot water system to the new bathroom does not comply with clause G12 of the Building Code
- I confirm the territorial authority's decision to refuse to issue a waiver in respect of clause G12 of the Building Code.

Signed for and on behalf of the Chief Executive of the Department of Building and Housing on 25 May 2007.

John Gardiner  
**Manager Determinations**