

31 October 2011

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Dear Sara

## **CANTERBURY EARTHQUAKE ROYAL COMMISSION**

Please find Porirua City Council's response to your request dated 27 October 2011.

*1. Has your Council taken any steps to review any aspect of its earthquake prone building policy since the Canterbury earthquake?*

Yes, Porirua City Council has reviewed its Earthquake Prone Building Policy.

- a. N/A
- b. In accordance with 132(4) of the Building Act 2004 the Porirua City Council reviewed and updated its Earthquake Prone Building Policy. Three amendments made to the policy:
  - i. The policy was amended to identify the Council as being the appropriate authority responsible for granting or refusing to grant exemptions on applications which do not comply with the provisions of the Council's Earthquake-Prone Buildings Policy.  
  
Prior to the amendment the General Manager Environment & Regulatory responsible for granting or refusing to grant exemptions
  - ii. The policy was amended to include a new provision that requires re-assessment of all buildings, which were already categorised by Council as being Earthquake Prone buildings via the desktop assessment, after a moderate or strong seismic event.  
  
Previously there was no provision to require reassessment after a significant seismic event.
  - iii. The amended policy included a new section which outlines the dispute procedure for owners who disagree with the earthquake prone classification of their building. An owner may make an application for determination to the Chief Executive of the Department of Building and Housing, as outlined in the Building Act 2004.

*2. If your Council has taken steps in relation to its Earthquake Prone Policy since the Canterbury Earthquakes, or intends to do so, please advise to what extend your Council has or intend to consult with the following groups:*

*a. Property Owners*

The Council notified changes through the local newspaper, requesting feedback on the policy. The Council's website also notified of the consultation on the proposed changes to the Earthquake Prone Building Policy. .

*b. Tenants*

As above

*c. The community generally*

As above

*3. The Royal Commission would also like to receive any information you may have, bearing on whether insurers are taking a more demanding approach to the earthquake strengthening of existing building following the Canterbury Earthquakes.*

Porirua City Council is not aware of any specific change to insurers approach in relation to strengthening of existing building following the Canterbury Earthquakes.

### **Earthquake Prone Building Policy**

Currently, Territorial Authorities have a degree of discretion in formulating and administering Earthquake Prone Building Policies. This flexibility is desirable as some territorial authorities have many buildings in their district which are earthquake prone whilst others have few buildings.

For Territorial Authorities that have many buildings in their area a flexible approach permits them to develop and administer a policy in a controlled and achievable manner. Porirua City Council is fortunate in that it has very few buildings, which have been identified under its present policy which must be strengthened.

Whilst Porirua City Council supports a review of the definition of a moderate earthquake to increase requirements for seismic strengthening of earthquake prone buildings, any increase in minimum requirements will result in significant compliance costs for building owners and administration costs for Territorial Authorities.

For example, in Porirua City Council's district there are few buildings identified as earthquake prone. An increase to 67% National Building Code would result in a number of buildings being deemed earthquake prone. The Council would have to engage an engineer to undertake preliminary research to identify buildings that are potentially earthquake prone, and then undertake desktop reviews using the New Zealand Society for Earthquake Engineering guidelines.

We have supported the policy position of Local Government New Zealand on this matter.

Finally, the Porirua City Council is supportive of any changes to increase requirements to make buildings safe for building users. The Council also supports uniform requirements which will help minimise compliance costs for building owners and Territorial Authorities.

Yours sincerely



Shane Taane  
**MANAGER BUILDING COMPLIANCE**  
 Environment & Regulatory Services

# **ATTACHMENT 1**

**Porirua City Council:**

***Earthquake-Prone Buildings Policy***  
***2011***

**(Please Note: the italics and underlining the text indicate proposed changes to the current policy).**

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## **A EXPLANATION**

Building Act 2004 and the requirement on Council to adopt policies on earthquake-prone, dangerous and insanitary buildings can be best understood as part of the Government's reaction to a concern that some buildings would not withstand a moderate sized earthquake and that the general public need to be assured that buildings are not dangerous or insanitary.

Council's statutory role is to implement Government policy by classifying and responding to the classification of earthquake-prone buildings. Council's discretion in this regard is limited to two key areas. Council may (in the first case) determine a process for identifying earthquake-prone buildings (see Part F) and in the second case determine policies and processes (within certain limits) for dealing with earthquake-prone buildings once identified (see Parts G, H and I).

## **B INTRODUCTION**

Building Act 2004: s131 requires (for the first time) Territorial Local Authorities to develop policy to identify and respond to Earthquake-prone buildings. This policy describes Porirua City Council's approach to and priorities in dealing with Earthquake-prone buildings. This policy also describes how Council will deal with buildings with significant heritage values that are Earthquake-prone.

## **C SCOPE**

Earthquake-prone buildings are buildings in Porirua that would be likely to collapse and cause personal injury or property damage during a moderate earthquake (this excludes single and most two storey buildings used for residential purposes).<sup>1</sup>

## **D PURPOSE**

The purpose of this policy is to provide a transparent, reasonable and certain framework within which Council and its partners can help ensure the safety of people and the protection of property in and around earthquake-prone buildings while being mindful that there are certain risks in relation to earthquake-prone buildings that people in Porirua are willing to take.

## **E PORIRUA'S LOCAL CONTEXT**

A *Seismic Hazard Study* (May1993) undertaken by Works Consultancy Services identified some structures in Porirua which may be vulnerable to earthquake. The

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<sup>1</sup> Building Act 2004: s122(2) says that the definition of earthquake-prone building "does not apply to a building that is used wholly or mainly for residential purposes unless the building: (a) comprises 2 or more storeys ; and (b) contains 3 or more household units.

study noted that as a younger City, most buildings in Porirua have been built in accordance with modern earthquake standards. As a result, Earthquake-prone buildings in Porirua are not expected to become significant problems for public safety in the near future. It is estimated that about 10 buildings in the City will be Earthquake-prone. Council will work with the owners of Earthquake-prone buildings to ensure any risks to public safety are efficiently and effectively minimised.

## **F APPROACH TO CLASSIFYING BUILDINGS AS EARTHQUAKE-PRONE**

Council will undertake a ‘desk top’ assessment<sup>2</sup> for the purpose of listing buildings within the district that could be Earthquake-prone. Once this assessment is complete, Council will suggest an importance category (as defined in appendix 2) that each listed building may belong to. Council will then contact the owners of the buildings and provide them with 40 days to provide evidence that their building (1) may not be Earthquake-prone and or (2) may not belong to the importance category suggested. The list will be amended according to the outcome of these consultations. Details of the amended list will appear on future LIMs or PIMs of any listed building.

The owners of buildings remaining on the list of potentially Earthquake-prone buildings will then be required by Council to produce a report from an appropriately qualified structural engineer<sup>3</sup> (‘structural engineer’) recommending whether or not the owners building is in fact Earthquake-prone. Council will assist owners to find a suitable structural engineer. A structural engineers report will be required to be produced within 1, 2, 3 or 5 years (see appendix 3). In accordance with the recommendations of structural engineers, Council will classify buildings as Earthquake-prone. The Earthquake-prone classification of any building will be included on any future LIM or PIM relating to that building.

## **G APPROACH TO DEALING WITH BUILDINGS CLASSIFIED AS EARTHQUAKE-PRONE**

Council will require owners of Earthquake-prone buildings to produce within 5, 15, 20 or 30 years (see appendix 3) a second report from a structural engineer recommending that their building is no longer Earthquake-prone.<sup>4</sup> In accordance with

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<sup>2</sup> Due to varying degrees of information available in relation to each building, the ‘desk-top’ assessment will vary from case to case. Owners will have the opportunity to support Council by providing relevant information that they have or can find in relation to their building. Overall, the objective of the ‘desk-top’ assessment is to gather information tending to show whether or not buildings present a degree of risk such that it would be prudent to investigate more thoroughly.

<sup>3</sup> Appropriately qualified structural engineers must be Chartered Professional Engineers registered under the Chartered Professional Engineers of New Zealand Act 2002 and must be experienced and have a good reputation in the earthquake engineering of buildings of the type to be examined.

<sup>4</sup> In most cases structural engineers will only recommend that a building is no longer Earthquake-prone when sufficient structural building work has been undertaken. It is

the recommendations of structural engineers, Council will de-classify formerly Earthquake-prone buildings. Future LIMs and PIMs will reflect this de-classification.

In some cases, Council may determine that an Earthquake-prone building presents immediate danger to public safety. In these cases Council may attach a warning notice to the building or place a fence or hoarding around the building.

## **H DISPUTE OF EARTHQUAKE-PRONE CLASSIFICATION OF BUILDING**

*Should an owner dispute the classification of their building as earthquake-prone, application for a 'Determination' may be made to the Chief Executive of the Department of Building and Housing. This procedure is set out in the Building Act 2004. The determination of the Chief Executive of the Department of Building is binding on the Council and building owner.*

## **I POLICY ON TIMEFRAME EXTENSIONS/RETRACTIONS**

The timeframes presented in appendix 3 of this policy are maximum timeframes within which both of the recommendations (described above) from structural engineers must be received by Council.

There will be some cases where notices to owners will contain timeframes shorter than the maximum allowable under this policy. In these cases, Council will provide the owner with reasons why their notice does not contain the maximum allowable timeframe. In general, Council will require a recommendation as to the earthquake-prone status of a building within less than the maximum allowable timeframe where the danger to safety that the building would create during an earthquake would be unacceptably large.

Owners of earthquake-prone buildings may apply *to the Council for an* extension of either timeframe within which a recommendation from a structural engineer must be received by Council. Where extensions are granted, owners will have shown that they:

- (1) have not been a cause of any unreasonable delay,
- (2) dangers to public safety would not unreasonably increase and,
- (3) that it is in the interest of the Community for the extension to be granted.

Where Council is notified of a Change of Use or Subdivision affecting a building that could be or is classified as earthquake-prone, Council will (in accordance with the Act) require that the building be strengthened. This may have the effect of shortening either timeframe within which a recommendation from a structural engineer must be received by Council.

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likely therefore that in most cases building consents to reduce or remove the danger an Earthquake-prone building presents will be required.

The Council reserves the right to reclassify buildings after a moderate to strong seismic event and where appropriate require strengthening, or other actions, within a much shorter timeframe. Such decisions would be based on use of the building and potential impact from further seismic events.

## **J APPROACH TO DEALING WITH EARTHQUAKE-PRONE BUILDINGS WITH SIGNIFICANT OR POTENTIALLY SIGNIFICANT HERITAGE VAULES**

Earthquake-prone buildings that significantly contribute to the heritage values of the City<sup>5</sup> will in part be excluded from the process described above. Before any building and or resource consent will be granted for work to be undertaken, appropriate consultations regarding the sustainable management of the heritage values associated with the building must have been undertaken (this will include consultation with and consideration of advice provided by New Zealand Historic Places Trust).

Earthquake-prone buildings that may (in the opinion of the General Manager, Strategic Policy) significantly contribute to the heritage values of the City (but are not currently recognised as such) will be excluded from the process described in part G of this policy until this policy is reviewed.<sup>6</sup>

## **K EXEMPT ORGANISATIONS**

There are certain public organisations that are responsible for buildings that could be or are earthquake-prone. Some of these organisations already have or are developing plans for the assessment and maintenance of buildings in terms of current earthquake standards.

The following publicly accountable organisations will be exempt from compliance with the reporting timeframes set under Parts F and G and the ‘desk-top’ assessment:

- Transit New Zealand Ltd

Council, by resolution may from time to time exempt other publicly accountable organisations from compliance with the reporting timeframes set under Parts F and G.

## **L EARTHQUAKE-PRONE BUILDINGS POLICY REVIEW**

Building Act 2004: s132(2) requires Council to review this policy within five years of the date that it is adopted.

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<sup>5</sup> Buildings which significantly contribute to the heritage values of the City are defined here as those buildings listed on the District Plan Heritage Register and those buildings registered in accordance with Historic Places Act 1993.

<sup>6</sup> This particular policy is precautionary - some Earthquake-prone buildings with significant heritage values may not currently be recognised.





**APPENDIX 1:****STATUTORY FRAMEWORK****The Requirement to Adopt a Policy on Earthquake-prone Buildings**

Building Act 2004: s131 requires all Territorial Local Authorities (TLA's) to adopt a policy on the intended performance of its statutory functions in relation to Earthquake-prone buildings by 31 May 2006 and to review this policy at least every 5 years. The policy must specify Porirua City Council's:

- approach towards performing its functions in relation to Earthquake-prone buildings
- priorities in performing those functions
- application of the policy to Heritage Buildings

**Definition of Earthquake-prone Building**

Building Act 2004: s122 defines Earthquake-prone building as:

“... having regard to its condition and to the ground on which it is built, and because of its construction, the building –

- (a) will have its ultimate capacity exceeded in a *moderate earthquake* (as defined in the regulations); and
- (b) would be likely to collapse causing –
  - (i) injury or death to persons in the building or to persons on other property; or
  - (ii) damage to any other property”

The above definition does not include “... a building that is used wholly or mainly for residential purposes unless the building –

- (a) comprises 2 or more storeys; and
- (b) contains 3 or more household units”

Building (Specified Systems, Change of Use, and Earthquake-prone Buildings) Regulation 2005: cl7 defines a *moderate earthquake* as:

“... in relation to a building, an earthquake that would generate shaking at the site of the building that is of the same duration as, but that is one-third as strong as, the earthquake shaking ... that would be used to design a new building at that site”

A moderate earthquake is legally defined as:<sup>7</sup>

In relation to a building, an earthquake that would generate shaking at the site of the building that is of the same duration as, but that is one-third as strong as, the earthquake shaking (determined by normal measures of acceleration, velocity and displacement) that would be used to design a new building at the site.

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<sup>7</sup> Defined in the Building (Specified Systems, Change The Use And Earthquake-Prone Buildings) Regulations 2005.

**APPENDIX 2:****CATEGORIES OF BUILDINGS**

This policy shall divide buildings in the district up into the following four categories:

- **Category 1** – Buildings that are essential to post-disaster functions (includes examples in NZS 1170.02002, Section 3, Importance Level 4, table 3.2 and all buildings falling into the definition of ‘essential activity’ in the District Plan).
  - Buildings in this category (for example fire stations) are regarded as the most significant (and therefore first priority) in the district - if a natural disaster occurs, such buildings must remain in good working order for the district to respond and recover.
- **Category 2** – Buildings with a high level of day to day occupancy (includes examples in NZS 1170.02002, Section 3, Importance Level 3, table 3.2).
  - Buildings in this category (for example shopping malls) are regarded as the second most significant in the district – if an earthquake occurs, the collapse of such buildings could have catastrophic consequences to life.
- **Category 3** – Buildings with significant heritage values. Defined here as buildings listed in the District Plan Heritage Register, buildings registered in accordance with Historic Places Act 1993 as Historic Places or buildings designated for the purpose of this policy by the General Manager, Strategic Policy.
  - Buildings in this category are regarded as the third most significant in the district – if an earthquake occurs, collapse of such buildings can undermine the ability of future generations to experience the cultural artefacts of its past.
- **Category 4** – Other buildings (defined as buildings not in categories 1, 2 or 3).

In situations where a building is captured by more than one of the above categories or it is unclear which category a certain building falls into, the General Manager, Environment and Regulatory Services will decide the appropriate category for the purposes of this Policy.

**APPENDIX 3:****COMPLIANCE TIMEFRAMES**

<b>Category of building</b> (defined in appendix 2)	<b>Timeframes</b> (described below)	
	<i><u>Producing a Part F recommendation</u></i>  (see Part F)	<i><u>Producing a Part G recommendation</u></i>  (see Part G)
<b>1</b> (post-disaster importance)	1 Year	5 Years
<b>2</b> (high occupancy)	2 Years	15 Years
<b>3</b> (heritage values)	3 Years	20 Years
<b>4</b> (other)	5 Years	30 Years