A.3 EQ2 – 22 February 2011

The major aftershock on 22 February 2011 was magnitude 6.3 centred 5kms NW of Lyttleton, at depth of only 5kms. The areas that were most severely affected were the CBD and suburbs to the South and East of the city. Many significant buildings in the CBD were severely damaged with 185 deaths and many injuries due to it being the middle of a working day and the collapse of several office buildings. Due to the extent of damage and the unstable state of some major buildings, a large area of the central city was cordoned off, and part of the CBD remains closed.

The shaking intensity was higher than had been recorded for EQ1. GNS reported that peak ground acceleration was 2.2 times the acceleration due to gravity in Heathcote, close to the epicentre.

Damage from shaking affected a great many houses, particularly in the suburbs to the East and SE of the city, including many of those already damaged by EQ1. In addition, landslides and rock falls from cliffs caused damage in the Port Hills, Lyttleton and Sumner. There was further more serious liquefaction, and some associated flooding in vulnerable areas, particularly in riverside areas, including Avonside, Dallington, Avondale and Bexley.

Source: [http://www.canterburyquakelive.co.nz](http://www.canterburyquakelive.co.nz)
Many of the houses were so badly damaged that they were ‘red stickered’ as uninhabitable. In many of the worst affected areas, services were very severely damaged. Without services such as sewerage, many people did not wish to remain in their homes even if the building damage did not appear to be severe.
A.4 **EQ3 – 13 June 2011**

<table>
<thead>
<tr>
<th>Date/Time</th>
<th>13/06/2011 2:20pm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Magnitude</td>
<td>6.41</td>
</tr>
<tr>
<td>Lat</td>
<td>43.570640</td>
</tr>
<tr>
<td>Depth</td>
<td>6.92 km</td>
</tr>
<tr>
<td>Lng</td>
<td>172.737730</td>
</tr>
<tr>
<td>Energy</td>
<td>62 kilo tonnes</td>
</tr>
<tr>
<td>Address</td>
<td>690 metres from Barnett Park Track, Redcliffs, Christchurch 8081, New Zealand</td>
</tr>
<tr>
<td>Distance</td>
<td>The distance from Cathedral Square is 9.2 km. <strong>Want to see how far from your house?</strong></td>
</tr>
<tr>
<td>Mercalli</td>
<td>VIII - Little damage in specially built structures. Considerable damage to ordinary buildings, severe damage to poorly built structures. Some walls collapse.</td>
</tr>
</tbody>
</table>

Source: [http://www.canterburyquakelive.co.nz](http://www.canterburyquakelive.co.nz)

On 13 June 2011 there were two aftershocks of magnitude 5.6 and 6.3 at shallow depth, both centred close to Sumner. These events are referred to in this report as EQ3. The shaking was sufficient to cause further significant damage to already weakened buildings, including many in the still cordoned off area of the CBD.

In the suburbs to the East and SE of the city, there was considerable extra damage to houses. In addition, there was again lateral spreading by the rivers and a great deal more liquefaction in those areas of eastern Christchurch (but not Kaiapoi) previously affected by EQ1 and EQ2, creating even more damage to land in these vulnerable areas.
A.5  EQ4 – 23 December 2011

Source: http://www.canterburyquakelive.co.nz

On 23 December 2011 there were two aftershocks of magnitude 5.8 and 6.0, respectively, at shallow depth centred close to New Brighton. These events are referred to in this report as EQ4. As for EQ3, the shaking was sufficient to cause further significant damage to already weakened buildings, particularly in the suburbs to the East and SE of the city. Once again there was liquefaction in vulnerable areas, but only in those areas previously affected.
A.6 Other aftershock events

On 26 December 2010, there was a swarm of shallow aftershocks with epicentres very close to Christchurch city. The largest of these was magnitude 4.9 at a depth of 12kms, which caused damage to some buildings, particularly in the CBD and as a result some parts of the CBD were closed for a period. Also, further damage was caused in vulnerable areas of the suburbs.

A.7 Residential red zones

Plans for the most severely affected areas had been on hold after the February event, pending decisions from the Government and the Earthquake Commission about how the land could be remediated. Many building repairs were on hold until the land situation stabilised, and the on-going aftershocks were making situations in some places worse.

On 23 June 2011, it was announced that the Government will make offers to purchase property in areas designated as 'red zones' at 2007 rateable values, and the land would be retired. The amounts due from EQC and private insurers in respect to the insurance on those properties would then become payable to the Government. Therefore, there should be no effect on the liabilities of EQC as result of this proposal and whether or not residential property owners take up the Government’s offer.

There are other areas around Christchurch that are currently designated as orange and white zones. The results of engineering and other specialist reports are required before it is decided if any parts of these zones are transferred into the red zone.

As at 21 December 2011, there were 6,592 red zone properties recorded in the CERA database. On 10 February 2012, CERA announced 213 more red-zoned properties, leaving the number of orange-zoned properties at 653, as well as 2,100 white-zoned residential properties in the Port Hills yet to be re-zoned. More properties have been reclassified from orange to red during March.
B  EQC cover provided to insureds

EQC coverage is strictly in accordance with the requirements of the Earthquake Commission Act 1993. Details should be checked by referring to the Act. A summary is available from EQC website.

A brief outline of the coverage and exclusions is given below.

B.1  Perils to which EQC responds

- Earthquake.
- Volcanic eruption.
- Tsunami.
- Hydrothermal events.
- Landslip.
- Land damage caused by storm or floods.
- Fire caused by any of the above.

B.2  General eligibility for Cover

Cover is only given in relation to land, building and contents where:

- The building is a residential dwelling, and
- The property (land / building / contents) is covered by insurance with a private insurer against natural disaster (land) and/or fire for buildings and/or contents. Alternatively, there is provision for voluntary insurance to be sought directly with EQC.

General exclusions are:

- Vehicles and vessels of all types.
- Plants of all types, landscaping.
- Dams, breakwaters, fences, walls etc. not integral to the building.
- Reservoirs, swimming and spa pools, tanks etc. not integral to and within the building or forming part of the storage or supply system.
- Septic tanks.
- Jetties etc.
- Any paved or other artificial surface (including the surface of the access way).
- Certain specified types of valuables (including jewellery, stamps, works of art, securities etc.).
B.3 Property covered (including excess and limits)

B.3.1 Land

- Cover applies to land on which the residential building stands; land within 8m of the building, land constituting the main access way up to 60m of the building (including bridges and culverts) and retaining walls and support systems within 60m of the building that are necessary to support the building.
- Cover is limited to the lesser of the cost of repair or indemnity value, subject to a maximum of the value of the land damaged (further limited to an area of 4000m² or the minimum lot size for that property, which is smaller).
- Excess: the greater of $500 per dwelling or 10% of land value, subject to $5,000 max.

B.3.2 Residential Buildings

- Eligibility and Exclusions: as above. Any exclusions under the policy with the private insurer apply also to EQC coverage. There is no EQC cover for temporary accommodation costs.
- Cover includes all water supply, drainage, sewerage, gas, electrical and telephone services serving the dwelling, within 60m of the dwelling and owned by the owner of the land or dwelling.
- Cover is limited to replacement value and is subject to a maximum of the lesser of the sum insured under the private insurance policy or $100k plus GST per dwelling (see discussion of conditions for reinstatement of this $ amount for second and subsequent events).
- Excess: 1% of value with a minimum of $200 per dwelling.

B.3.3 Contents (Personal Property)

- Eligibility and Exclusions: as above. Any exclusions under the policy with the private insurer apply also to EQC coverage.
- Cover is on a Replacement value basis (unless the private insurance is on a less favourable basis) and is limited to the lesser of the sum insured under the private insurance policy or $20k plus GST.
- Excess: $200 deducted from claim for contents only (otherwise the excess noted above for a building claim will apply for a claim for building and contents).

B.4 Reinstatement of cover limits

Following the High Court’s declaratory judgement on 2 September 2011 (EQC vs. the Insurance Council / Vero / IAG, and separately with TOWER Insurance) the issue of the reinstatement of EQC’s cover after an event has now been clarified.

In summary, EQC is liable for up to $100k plus GST for each building claim and $20k plus GST for each contents claim; i.e. there is immediate reinstatement of cover after each natural disaster event as long as the contract of fire insurance is in force.
C EQC operations

In order to fulfil its responsibilities as described in Section 2.2, EQC had a normal “BAU” staff of 22 based at its head office in Wellington.

Canterbury earthquake claims are managed out of Wellington, Christchurch field offices and via Gallagher Basset in Brisbane. Further details of the claims management process are provided in Appendix D.

EQC staff totalled 668 as at December 2011 with a further 80 employed by Gallagher Basset in Brisbane. Previously staff numbers had peaked at 1,820 (including Gallagher Basset) in October 2011.

Systems supporting EQC’s activities are described in more detail in Appendix E.

The operational units supporting these activities may be summarised as:

- Corporate Head Office - Wellington:
  - Executive.
  - Finance.
  - Information technology.
  - Internal audit.
  - HR.
  - External relations.
  - Communications.
  - Business intelligence (BIU).
  - Operations:
    - Claims operations.
    - Call centre.
    - Training.
- Gallagher Basset Claims Management – Brisbane.
- Canterbury claims operations - Christchurch:
  - Main claims office.
  - Field offices.
- Fletcher Construction PMO / EQR.