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**VALUATION OF  
ASBESTOS RELATED DISEASE LIABILITIES  
OF FORMER JAMES HARDIE ENTITIES  
("THE LIABLE ENTITIES")  
TO BE MET BY THE AICF TRUST**

**EFFECTIVE AS AT 31 MARCH 2007**

**PREPARED FOR ASBESTOS INJURIES COMPENSATION  
FUND LIMITED (AICFL)**

**28 May 2007**



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28 May 2007

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Chairman of the Board  
Asbestos Injuries Compensation Fund Limited  
Level 3, 22 Pitt Street  
Sydney NSW 2000

Cc Russell Chenu, Chief Financial Officer, James Hardie Industries NV  
Leigh Sanderson, Deputy-Director General (Legal), The State of New South  
Wales, c/- The Cabinet Office

**TO THE BOARD OF DIRECTORS**

**Valuation of asbestos-related disease liabilities of former James Hardie entities  
("The Liable Entities") to be met by the AICF Trust**

We are pleased to provide you with our actuarial valuation report relating to the asbestos-related disease liabilities of the Liable Entities which are to be met by the AICF Trust.

This report is effective as at 31 March 2007 and has taken into account claims data and information provided to us by AICFL as at 31 March 2007.

If you have any questions with respect to the contents of this report, please do not hesitate to contact us.

Yours sincerely

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## EXECUTIVE SUMMARY

### **Important Note: Basis of Report**

This valuation report ("the Report") has been prepared by KPMG Actuaries Pty Limited (A.B.N. 77 002 882 000) ("KPMG Actuaries") in accordance with an "Amended and Restated Final Funding Agreement in respect of the provision of long-term funding for compensation arrangements for certain victims of Asbestos-related diseases in Australia" (hereafter referred to as "the Amended Final Funding Agreement") between James Hardie Industries NV ("JHINV"), James Hardie 117 Pty Limited, the State of New South Wales and Asbestos Injuries Compensation Fund Limited ("AICFL") which was signed on 21 November 2006.

This Report is intended to meet the requirements of the Amended Final Funding Agreement and values the asbestos-related disease liabilities of the Liable Entities to be met by the AICF Trust.

This Report is not intended to be used for any other purpose and may not be suitable, and should not be used, for any other purpose. Opinions and estimates contained in the Report constitute our judgement as of the date of the Report.

In preparing the Report, KPMG Actuaries has relied on information supplied to it from various sources and has assumed that that information is accurate and complete in all material respects. KPMG Actuaries has not independently verified the accuracy or completeness of the data and information used for this Report.

Except insofar as liability under statute cannot be excluded, KPMG Actuaries, its directors, employees and agents will not be held liable for any loss or damage of any kind arising as a consequence of any use of the Report or purported reliance on the Report including any errors in, or omissions from, the valuation models.

The Report must be read in its entirety. Individual sections of the Report, including the Executive Summary, could be misleading if considered in isolation. In particular, the opinions expressed in the Report are based on a number of assumptions and qualifications which are set out in the full Report.

## Introduction

The Amended Final Funding Agreement requires the completion of an Annual Actuarial Report evaluating the potential asbestos-related disease liabilities of the Liable Entities to be met by the AICF Trust. KPMG Actuaries has been retained by AICFL to provide this actuarial valuation report as required under the Amended Final Funding Agreement.

The Liable Entities are defined as being the following entities:

- Amaca Pty Ltd (formerly James Hardie & Coy);
- Amaba Pty Ltd (formerly Jsekarb, James Hardie Brakes and Better Brakes);  
and
- ABN60 Pty Ltd (formerly James Hardie Industries Ltd).

In addition, the Board of JHINV agreed that Personal Asbestos Claims arising out of mining activities at Baryulgil would also be met by the AICF Trust (these liabilities are referred to in the Amended Final Funding Agreement as liabilities in relation to Marlew Claims and they are deemed to be liabilities of Amaca).

Our valuation is on a central estimate basis and is intended to be effective as at 31 March 2007. It has been based on claims data and information as at 31 March 2007 provided to us by AICFL.

## Overview of Recent Claims Experience

### *Claim Numbers*

Claims reporting for mesothelioma has shown a second annual fall. There were 202 claims reported in 2006/07 (being the year ending 31 March 2007) compared with 212 claims in 2005/06 and 263 claims in 2004/05.

The most significant source of this reduction has been the level of claims activity in NSW where claims reporting has fallen from 98 claims in 2005/06 to 84 claims in 2006/07.

At the same time, asbestosis has shown a significant increase in activity, from 102 claims in 2005/06 to 155 claims in 2006/07. The majority of the increase has arisen in NSW and Queensland.

The increased number of asbestosis claims and the lower number of mesothelioma claims in 2006/07 have been systemic to known overall Australian experience rather than specifically related to the experience of the Liable Entities.

However, it is not clear what the drivers are that have given rise to this somewhat unexpected trend.

Overall, there were 464 claims reported in 2006/07, up from 399 in 2005/06. However, claims reporting activity has still not returned to the levels seen in 2004/05, when there were 508 claims reported.

#### *Average Claim Awards*

Claim awards for mesothelioma have shown a degree of stability in the last three years. For other disease types, average claim awards have exhibited greater volatility, which is not unexpected given the smaller numbers of claim settlements of those disease types.

There have been five large mesothelioma claim settlements (being claims in excess of \$1m) in 2006/07, slightly higher than our previous expectation of 3 to 4 large claims.

Average defence legal costs incurred by the Liable Entities have continued to show some reduction over the last 6 months. This is partly due to internal cost saving initiatives by Amaca Claims Service (“ACS”) and partly due to the continuing impact of the NSW Dust Diseases Tribunal reforms.

#### *Recoveries*

Recoveries (being cross-claim recoveries and insurance recoveries) have stabilised since January 2006. In the 2006/07 financial year, recoveries were \$18m, with around \$15m arising from collections from insurers of the Liable Entities and \$3m arising from cross-claim recoveries.

Some of the insurance-related recoveries have resulted from schemes of arrangement and represent full and final settlement of the potential future liabilities of certain solvent and insolvent insurers of the Liable Entities. This is, in effect, an acceleration of payments that would ultimately have been made to the Liable Entities over the next 40 years.

However, ongoing collections from solvent, trading insurers continues to be a significant component of the collection activity with the main sources being Equitas and ACE Insurance.

Cross-claim recoveries from third parties have shown a significant increase in the last two years, with notable contributions from CSR, both directly and as a result of the Hardie-BI Joint Venture. Cross-claim recoveries over the last two financial years have totalled more than \$9m.

### **Projected timing of peak incidence in mesothelioma claims reporting**

We have read the paper “Actuarial projections for mesothelioma: an epidemiological perspective” by Clements, Berry and Shi (“Clements et al” or “the Clements paper”) presented at the XI<sup>th</sup> Accident Compensation Seminar in Melbourne on 2 April 2007.

The Clements paper presents a model for projecting the incidence of mesothelioma in Australia and asserts the peak incidence of mesothelioma will arise in 2017 in Australia and 2014 in NSW.

In the paper, Clements et al applied the KPMG Actuaries model (as contained within this and previous valuation reports) to a national incidence projection, implying KPMG Actuaries assumed a peak of incidence of mesothelioma in Australia of 2010 and that the number of deaths we projected would arise from mesothelioma would be half the level that was estimated by Clements et al.

For reasons outlined in Section 7.8.4 of this valuation report, we do not believe the projections contained within the Clements paper are currently appropriate for the Liable Entities’ population of potential claimants.

### **Liability Assessment**

At 31 March 2007, our central estimate of the liabilities of the Liable Entities (the Discounted Central Estimate) to be met by the AICF Trust taking credit for the anticipated cost savings from the implementation of procedural reforms resulting from the NSW Dust Diseases Tribunal reforms is \$1,355.1m (September 2006: \$1,554.8m).

Within that assessment, we have estimated the future cost savings arising from the procedural reforms in NSW as being \$29.5m (September 2006: \$35.2m). The reduction is partly due to a reduction in the gross liabilities and partly due to some of the previously projected savings having now been crystallised.

We have also estimated the savings that could arise if similar reforms were introduced (where applicable) across the other States. We estimate this potential saving at \$19.6m (September 2006: \$23.3m).

All of the above liability figures are discounted and are net of cross-claim recoveries and Insurance Recoveries.

We have not allowed for the future Operating Expenses of the AICF Trust or the Liable Entities in the liability assessments.

The following table shows a summary of our central estimate liability assessment and compares the current assessment with our previous valuation.

**Table E.1: Comparison of central estimate of liabilities**

	March 2007			September 2006	March 2006
	\$m			\$m	\$m
	Gross of insurance recoveries	Insurance recoveries	Net of insurance recoveries	Net of insurance recoveries	Net of insurance recoveries
Total projected cashflows (uninflated)	1,489.3	216.3	1,273.0	1,442.3	1,401.7
Future inflation allowance	1,809.6	271.8	1,537.8	1,726.6	1,677.4
Total projected cash-flows with inflation	3,298.9	488.1	2,810.8	3,168.9	3,079.2
Discounting allowance	(1,727.8)	(272.1)	(1,455.6)	(1,614.0)	(1,562.2)
<b>Net present value liabilities</b>	<b>1,571.2</b>	<b>216.0</b>	<b>1,355.1</b>	<b>1,554.8</b>	<b>1,517.0</b>

*Note: This table has been restated compared with previous valuation reports. Our base scenario is now "net of NSW cost savings". Previously, the base scenario was "before NSW cost savings". Accordingly the figures for 30 September 2006 and 31 March 2006 have changed compared with those disclosed in previous valuation reports.*

### **Comparison with previous valuation**

In the absence of any change to the claim projection assumptions from our 30 September 2006 valuation, other than allowing for the changes in the discount rate, we would have projected a Discounted Central Estimate liability of \$1,504.6m (net of NSW cost savings) as at 31 March 2007.

Consequently, our revised assessment at 31 March 2007 represents a decrease of \$149.5m from that assessment.

The decrease in that net liability estimate is principally a consequence of:

- A reduction in the projected number of future mesothelioma claims recognising the lower reporting activity in the last two years;
- A reduction in average claim awards and legal costs for some disease types;
- An increase in the assumed rate of recovery from cross-claims; and
- Actual experience in the 6-month period being better than forecast, with fewer claims reported at a lower cost as well as savings being achieved on claims which were not settled as at 30 September 2006;

offset by

- An increase in the projected number of future asbestosis claims recognising the experience in the last twelve months; and
- An increase in the assumed future incidence of large (>\$1m) mesothelioma claims.

The following table shows an analysis of the change in our liability assessments from September 2006 to March 2007.

For comparison, we have also shown the change in our liability assessment over the previous six month period to 30 September 2006 and the total change over the last financial year.



**Table E.2: Analysis of change: March 2006 to September 2006 and March 2007**

	<b>March 2006 to Sept 2006 \$m</b>	<b>Sept 2006 to March 2007 \$m</b>	<b>March 2006 to March 2007 \$m</b>
<b>Net liability at start of valuation period allowing for cost savings in NSW only</b>	<b>1,517.0</b>	<b>1,554.8</b>	<b>1,517.0</b>
Expected net claims payments	(35.1)	(33.2)	(68.3)
Unwind of discount / interest charge	41.0	45.7	86.7
<b>Expected liability at end of valuation period</b>	<b>1,522.9</b>	<b>1,567.3</b>	<b>1,535.4</b>
Change in discount rate	(0.4)	(62.7)	(63.1)
<b>Expected net liability at end of valuation period adjusted for discount rate</b>	<b>1,522.5</b>	<b>1,504.6</b>	<b>1,472.3</b>
Impact of Change in valuation bases:			
- Claim numbers	62.6	(90.9)	(28.3)
- Nil settlement rate	(8.5)	3.2	(5.3)
- Average claims costs and legal costs	(50.2)	(34.7)	(84.9)
- Claim inflation	43.4		43.4
- Cross claim recoveries		(14.4)	(14.4)
- Insurance recoveries (bad debt allowance)		(2.6)	(2.6)
- Emerging experience on reported claims and pending claims	(15.0)	(10.1)	(25.1)
<b>Total development in net liability</b>	<b>32.3</b>	<b>(149.5)</b>	<b>(117.2)</b>
<b>Net liability at end of valuation period allowing for cost savings in NSW only</b>	<b>1,554.8</b>	<b>1,355.1</b>	<b>1,355.1</b>

### **Amended Final Funding Agreement calculations**

The Amended Final Funding Agreement sets out the basis on which payments will be made to the AICF Trust.

Additionally, there are a number of other figures specified within the Amended Final Funding Agreement that we are required to calculate. These are<sup>1</sup>:

- Discounted Central Estimate;
- Term Central Estimate; and
- Period Actuarial Estimate.

**Table E.3: Amended Final Funding Agreement calculations (\$m)**

\$m	
Discounted Central Estimate (net of cross-claim recoveries, Insurance and Other Recoveries)	1,355.1
Period Actuarial Estimate (net of cross-claim recoveries, gross of Insurance and Other Recoveries) comprising:	229.8
Discounted value of cashflow in 2007/08	73.8
Discounted value of cashflow in 2008/09	76.8
Discounted value of cashflow in 2009/10	79.1
Term Central Estimate (net of cross-claim recoveries, Insurance and Other Recoveries)	1,352.6

It should be noted that the actual funding required at a particular date will depend upon a number of factors, including:

- the net asset position of the AICF Trust at that time;
- the free cash flow amount of the JHINV Group in the preceding financial year; and
- the Period Actuarial Estimate in the latest Annual Actuarial Report.

<sup>1</sup> See Glossary of Terms in Appendix J for description of these items

## **Uncertainty**

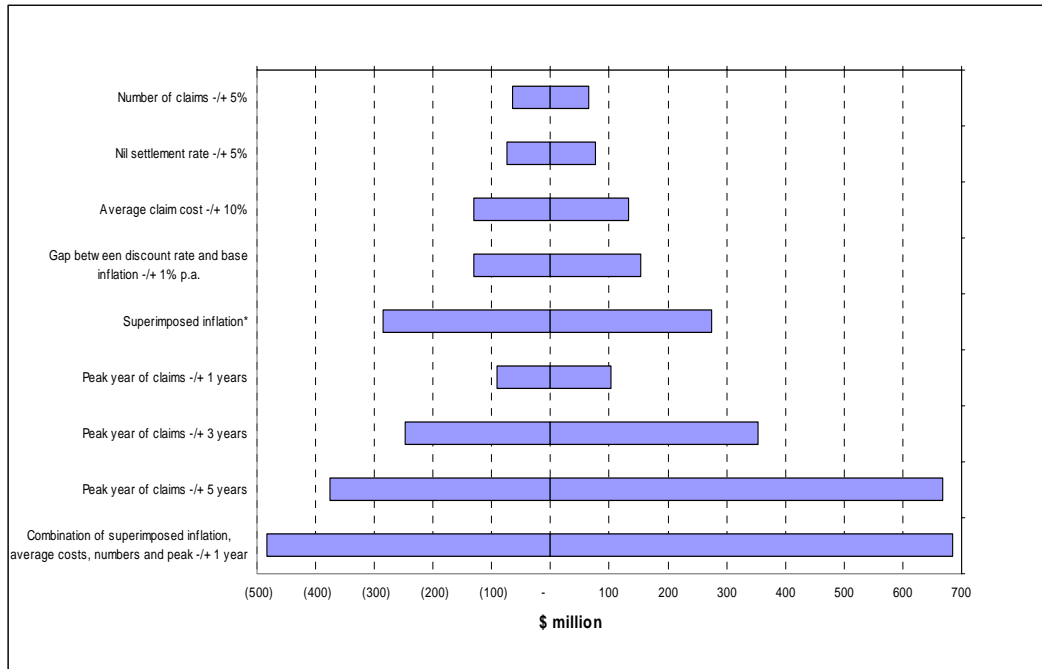
Estimates of asbestos-related disease liabilities are subject to considerable uncertainty. This includes uncertainty due to:

- The difficulty in quantifying the extent and pattern of past asbestos exposures and the number and incidence of the ultimate number of lives that may be affected by asbestos related diseases arising from such past asbestos exposures;
- The propensity of individuals affected by diseases arising from such exposure to file common law claims against defendants;
- The extent to which the Liable Entities will be joined in such future common law claims;
- The fact that the ultimate severity of the impact of the disease and the quantum of the claims that will be awarded will be subject to the outcome of events that have not yet occurred, including:
  - medical and epidemiological developments;
  - court interpretations;
  - legislative changes;
  - changes to the form and range of benefits for which compensation may be awarded (“heads of damage”);
  - public attitudes to claiming;
  - the potential for future procedural reforms in NSW and other States affecting the legal costs incurred in managing and settling claims;
  - potential third-wave exposures; and
  - social and economic conditions such as inflation.

It should therefore be expected that the actual emergence of the liabilities will vary from any estimate. As indicated in Figure E.1, depending on the actual out-turn of experience relative to that currently forecast the variation could potentially be substantial. Thus, no assurance can be given that the actual liabilities of the Liable Entities to be met by the AICF Trust will not ultimately exceed the estimates contained in this report and any such variation may be significant.

Given this, we provide the following sensitivity tests of the actuarial assessment of the liabilities to changes in some key assumptions.

**Figure: E.1 Sensitivity testing results – Impact around the Discounted Central Estimate (in \$m)**



\* The superimposed inflation sensitivity tests are for 6.25% per annum for 5 years reducing to 2.25% per annum; and 2.25% per annum for 5 years reducing to -2% per annum.

The above chart implies that the single most sensitive assumption is potentially the peak year of mesothelioma claims reporting against the Liable Entities. Shifting the peak year of mesothelioma claims reporting by 5 years from 2010/11 to 2015/2016 for mesothelioma would imply an increase in the future number of mesothelioma claims reported of around 50%.

**Table E.4: Summary results of sensitivity analysis**

	Undiscounted	Discounted
Central estimate	\$2.81bn	\$1.36bn
Range around the central estimate	-\$1.2bn to +\$2.3bn	-\$0.5bn to +\$0.7bn
Range of liability estimates	\$1.6bn to \$5.1bn	\$0.9bn to \$2.0bn

Whilst the table above indicates a range around the discounted central estimate of liabilities of -\$500m and +\$700m, the actual cost of liabilities could fall outside that range depending on the out-turn of the actual experience.

### **Data, Reliances and Limitations**

We have been provided with the following information by AICFL:

- Claims database at 31 March 2007 with individual claims listings;
- Accounting database at 31 March 2007 (which includes individual claims payment details);
- Monthly Management Information Reports to 31 March 2007;
- Home Renovator Reports at various dates; and
- Detailed insurance bordereaux information (being a listing of claims filed with the insurers of the Liable Entities) produced by Capita Insurance Services (London) as at 31 March 2007.

While we have tested the consistency of the various data sets provided, we have not otherwise verified the data nor have we undertaken any auditing of the data at source. We have relied on the data provided as being complete and accurate in all material respects. Consequently, should there be material errors or incompleteness in the data, our assessment could be affected materially.

### **Executive Summary Not Report**

Please note that this executive summary is intended as a brief overview of our report. To properly understand our analysis and the basis of our liability assessment requires examination of our report in full.

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## 1 SCOPE AND PURPOSE

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### **Important Note: Basis of Report**

This valuation report ("the Report") has been prepared by KPMG Actuaries Pty Limited (A.B.N. 77 002 882 000) ("KPMG Actuaries") in accordance with an "Amended and Restated Final Funding Agreement in respect of the provision of long-term funding for compensation arrangements for certain victims of Asbestos-related diseases in Australia" (hereafter referred to as "the Amended Final Funding Agreement") between James Hardie Industries NV ("JHINV"), James Hardie 117 Pty Limited, the State of New South Wales and Asbestos Injuries Compensation Fund Limited ("AICFL"), which was signed on 21 November 2006.

This Report is intended to meet the requirements of the Amended Final Funding Agreement and values the asbestos-related disease liabilities of the Liable Entities to be met by the AICF Trust.

This Report is not intended to be used for any other purpose and may not be suitable, and should not be used, for any other purpose. Opinions and estimates contained in the Report constitute our judgement as of the date of the Report.

In preparing the Report, KPMG Actuaries has relied on information supplied to it from various sources and has assumed that that information is accurate and complete in all material respects. KPMG Actuaries has not independently verified the accuracy or completeness of the data and information used for this Report.

Except insofar as liability under statute cannot be excluded, KPMG Actuaries, its directors, employees and agents will not be held liable for any loss or damage of any kind arising as a consequence of any use of the Report or purported reliance on the Report including any errors in, or omissions from, the valuation models.

The Report must be read in its entirety. Individual sections of the Report, including the Executive Summary, could be misleading if considered in isolation. In particular, the opinions expressed in the Report are based on a number of assumptions and qualifications which are set out in the full Report.

## **1.1 Introduction**

### *1.1.1 Chronology of events*

In February 2001, the Medical Research & Compensation Foundation (“MRCF”) was established as a charitable trust to meet the asbestos-related liabilities of two former subsidiaries of the James Hardie Group of Companies, namely Amaca Pty Ltd and Amaba Pty Ltd.

In February 2004, the NSW Government established the Special Commission of Inquiry into the Establishment of the MRCF. In September 2004, one of the findings of the Inquiry was that the MRCF was under-funded insofar as it would not have sufficient assets to meet its expected future liabilities.

During the Special Commission of Inquiry, JHINV made an offer to fund the liabilities of the Liable Entities subject to certain conditions and shareholder approval. Subsequent to the Special Commission of Inquiry’s findings, negotiations began to establish the basis on which the funding may take place.

A “Heads of Agreement” was signed on 21 December 2004 between JHINV, the ACTU, a representative of the Asbestos Victims Groups, UnionsNSW and the NSW Government. This was a non-binding agreement which set out the principles upon which the Final Funding Agreement would be based.

The Final Funding Agreement was signed by JHINV and the NSW Government on 1 December 2005.

On 21 November 2006 the parties executed the Amended Final Funding Agreement.

On 7 February 2007, at an Extraordinary General Meeting held in Amsterdam, JHINV security holders approved the Amended Final Funding Agreement and the voluntary funding proposal.

On 9 February 2007, an initial payment of \$184.3m was made by JHINV.

### *1.1.2 Liability assessments undertaken by KPMG Actuaries*

KPMG Actuaries was retained by JHINV and Allens Arthur Robinson (“AAR”) during the Special Commission of Inquiry to provide an assessment of the asbestos-related disease liabilities of the MRCF at 30 June 2003.

Within the valuation as at 30 June 2003, KPMG Actuaries estimated the discounted value of the quantifiable liabilities of the MRCF on a “central estimate” basis as \$1,573.4m (equivalent to an undiscounted estimate of \$3,403.1m), based on the then current economic and legal environment, net of insurance recoveries and after allowance for claims-related legal costs.

Since that time, KPMG Actuaries has been retained to provide updated assessments of the liabilities at various dates.

The following table shows the previous valuation assessments made by KPMG Actuaries.

**Table 1.1: Summary of valuation assessments by KPMG Actuaries**

Valuation Date	Based on data as at	Report release date	Discounted Central Estimate (\$m)	Undiscounted central estimate (\$m)
30/06/03	30/06/03	07/06/04	1,573.4	3,403.1
30/06/04	18/10/04	21/11/04	1,536.0	3,585.6
31/03/05	31/03/05	14/05/05	1,684.9	3,603.7
30/06/05 <sup>(a)</sup>	24/06/05	01/12/05	1,568.4	3,131.0
31/03/06 <sup>(a)</sup>	28/02/06 <sup>(b)</sup>	15/05/06	1,517.0	3,079.2
30/09/06 <sup>(a)</sup>	30/09/06	13/11/06	1,554.8	3,168.9
31/03/07 <sup>(a)</sup>	31/03/07	28/05/07	1,355.1	2,810.8

Notes:

(a) The valuations since 30 June 2005 have included an allowance for cost savings in NSW.

(b) The valuation at 31 March 2006 included supplemental claims and accounting information to 31 March 2006.

The precise scope of the liability assessment of the various historic reports has varied, including varying from the scope of this Report which quantifies the liabilities which are to be met by the AICF Trust as set out in the Amended Final Funding Agreement. The reports at 30 June 2005, 31 March 2006 and 30 September 2006 were prepared in accordance with the Final Funding Agreement.

Accordingly, comparison between the various estimates of liabilities requires some care and should be regarded as indicative only.

## **1.2 Purpose of this report**

The Amended Final Funding Agreement requires the completion of an Annual Actuarial Report evaluating the potential asbestos-related disease liabilities of the Liable Entities to be met by the AICF Trust.

### *1.2.1 Liable Entities*

The Liable Entities are defined as being the following entities:

- Amaca Pty Ltd (formerly James Hardie & Coy);
- Amaba Pty Ltd (formerly Jsekarb, James Hardie Brakes and Better Brakes); and
- ABN60 Pty Ltd (formerly James Hardie Industries Ltd).

In addition, the Board of JHINV agreed that Personal Asbestos Claims arising out of mining activities at Baryulgil would also be met by the AICF Trust (these liabilities are referred to in the Amended Final Funding Agreement as liabilities in relation to Marlew Claims and are deemed to be liabilities of Amaca).

### *1.2.2 Personal asbestos claims*

Under the Amended Final Funding Agreement, the liabilities to be met by the AICF Trust relate to personal asbestos-related disease liabilities of the Liable Entities.

Such claims must relate to exposure which took place in Australia and which have been brought in a Court in Australia.

The precise scope of the liabilities is detailed in Section 1.3 and in Appendix J.

### *1.2.3 Purpose of report*

KPMG Actuaries has been retained by AICFL to provide an actuarial valuation report as required under the Amended Final Funding Agreement. The prior written consent of KPMG Actuaries is required for any other use of this report or the information contained in it.

Our valuation is intended to be effective as at 31 March 2007 and has been based on claims data and information as at 31 March 2007 provided to us by AICFL.

### **1.3 Scope of report**

We have been requested to provide an actuarial assessment as at 31 March 2007 of the asbestos-related disease liabilities of the Liable Entities to be met by the AICF Trust, consistent with the terms of the Amended Final Funding Agreement.

The assessment is on a central estimate basis and is based on the claims experience as at 31 March 2007.

A "central estimate" liability assessment is an estimate of the expected value of the range of potential future liability outcomes. In other words, if all the possible values of the liabilities are expressed as a statistical distribution, the central estimate is an estimate of the mean of that distribution.

In broad terms, the central estimate is a liability value such that there is an equal chance that the actual outcome of experience will be higher or lower than the estimate.

It is of note that our liability assessment:

- Relates to the Liable Entities and Marlew (in relation to Marlew Claims arising from asbestos mining activities at Baryulgil).
- Is intended to cover:
  - The amount of settlements, judgments or awards for all Personal Asbestos Claims.
  - Claims Legal Costs incurred by the AICF Trust in connection with the settlement of Personal Asbestos Claims.
- Is not intended to cover:
  - Personal injury or death claims arising from exposure to asbestos which took place outside Australia.
  - Personal injury or death claims, arising from exposure to Asbestos, which are brought in Courts outside Australia.
  - Claims for economic loss, other than any economic loss forming part of an award for damages for personal injury and/or death.
  - Claims for loss of property, including those relating to land remediation.



- The costs of asbestos or asbestos product removal relating to asbestos or asbestos products manufactured or used by or on behalf of the Liable Entities.
- Includes an allowance for:
  - Compensation to the NSW Dust Diseases Board or a Workers Compensation Scheme by way of a claim by such parties for contribution or reimbursement from the Liable Entities, but only to the extent that the cost of such claims is less than the limits of funding for such claims as outlined within the Amended Final Funding Agreement.
  - Workers Compensation claims, being claims from current and former employees of the Liable Entities, but only to the extent that such liabilities are not met by a Workers Compensation Scheme or Policy (see section 1.3.1).
- Assumes that the product and public liability insurance policies of the Liable Entities will continue to respond to claims as and when they fall due. We have not made any allowance for the impact of any disputation concerning Insurance Recoveries nor of any legal costs that may be incurred in resolving such disputes.
- Makes no allowance for potential Insurance Recoveries that could be made on product and public liability insurance contracts placed from 1986 onwards which were placed on a “claims made” basis.
- Makes no allowance for the future Operating Expenses of the Liable Entities or the AICF Trust. Separate allowance for future Operating Expenses needs to be made by the management of AICFL.
- Assumes a continuation of the existing legal environment in relation to claims settlements.
- Makes no additional allowance for the inherent uncertainty of the liability assessment. That is, no additional provision has been included in excess of a central estimate.
- Makes allowance for an estimate of the potential savings arising from the NSW Dust Diseases Tribunal reforms which became effective on 1 July 2005.

Readers of this report may refer to our previous reports (as set out in Section 1.1.2) which are available at [www.ir.jameshardie.com.au](http://www.ir.jameshardie.com.au).

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### 1.3.1 *Workers Compensation*

Workers Compensation claims are claims made by current and former employees of the Liable Entities. Such past, current and future reported claims were insured with, amongst others, Allianz Australia Limited (“Allianz”) and the various State-based Workers Compensation Schemes.

Under the Amended Final Funding Agreement, the part of future Workers Compensation claims that are met by a Workers Compensation Scheme or Policy of the Liable Entities are outside of the AICF Trust. The AICF Trust is, however, to provide for any part of a claim not covered by a Workers Compensation Scheme or Policy (e.g. as a result of the existence of limits of indemnity and policy deductibles on those contracts of insurance).

On this basis our liability assessment in relation to Workers Compensation claims and which relates to the AICF Trust, includes only the amount borne by the Liable Entities in excess of the anticipated recoveries due from a Workers Compensation Scheme or Policy.

In making our assessment we have assumed that the Workers Compensation insurance programme will continue to respond to claims by current and former employees of the Liable Entities as and when they fall due. To the extent that they were not to respond owing to (say) insurer insolvency, Insurer Guarantee Funds should be available to meet such obligations.

### 1.3.2 *Dust Diseases Board and Other Reimbursements*

There exists a right under Section 8E (Reimbursement Provisions) of the Dust Diseases Act 1942 for the NSW Dust Diseases Board (“DDB”) to recover certain costs from common law defendants, excluding the employer of the claimant.

This component of cost is implicitly included within our liability assessment as the claims awards made in recent periods and in recent settlements contain allowance for DDB reimbursement where applicable. Furthermore, currently reported open claims have allowance within their case estimates for the costs of DDB reimbursement where relevant and applicable.

The Amended Final Funding Agreement indicates that the AICF Trust is intended to meet Personal Asbestos Claims and that claims by the DDB or a Workers Compensation Scheme for reimbursement will only be met up to a certain specified limit, being:

- In the first financial year (2006/07) a limit of \$750,000 will apply;

- In respect of each future financial year, that limit will be indexed annually in line with the Consumer Price Index;
- There will be an overall unindexed aggregate cap of \$30m.

Owing to the inclusion of past DDB payments in historic claims data, and given the absence of sufficiently detailed “head of damage” claim data to separate the components of past DDB reimbursements from historic claims awards, it is impractical for us to separately model this component of claims cost within our liability assessment by direct assessment.

We have estimated the component of product and public liability claims awards which relate implicitly to DDB reimbursements to be approximately 1.5% of gross product and public liability claims costs.

We have calculated the implicit reimbursement component otherwise included within our liability assessment (on the basis of this 1.5% estimate) and applied the capping rules outlined above to determine the projected payments in relation to reimbursements that will be met by the AICF Trust.

The cashflow and liability figures contained within this report have already removed that component of reimbursements that will not be met by the AICF Trust.

### 1.3.3 *Baryulgil (“Marlew Claims”)*

In light of the agreement by the Board of JHINV to incorporate claims arising from mining activities at Baryulgil (called “Marlew Claims” in the Amended Final Funding Agreement) into the AICF Trust, where they are not otherwise recoverable from other sources, we have made separate allowance for the potential liabilities arising from exposure at Baryulgil, specifically:

- Claims made against Amaca Pty Ltd or ABN60 resulting from their past ownership of the mine, or in the case of Amaca also in relation to their joint venture with Wunderlich, are to be covered by the AICF Trust.
- Claims made against the subsequent owner of the mine (following its sale by James Hardie Industries to Woodsreef in 1976), being Marlew Mining Pty Ltd (“Marlew”) which is in liquidation, are to be met by the AICF Trust except where such claims are Excluded Marlew Claims, which are recoverable by the Claimant from other sources.

These claims are discussed further in Section 7.10.

---

#### 1.3.4 Risk Margins

It has been common practice for insurance companies, and in some cases non-insurance companies, to hold claims provisions at a level above the central estimate basis to reflect the uncertainty attaching to the liability assessment and to include an allowance in respect of that uncertainty.

A risk margin is an additional amount held, above the central estimate, which is held so as to increase the likelihood of adequacy of the provisions to meet the ultimate cost of settlement of those liabilities.

We note that the Amended Final Funding Agreement envisages the ongoing financing of the AICF Trust is to be based on a “central estimate” approach and that the Annual Actuarial Report should provide a Discounted Central Estimate valuation.

Accordingly, we have made no allowance for any risk margins within this Report.

#### 1.3.5 Cost savings

Our 31 March 2007 liability assessment includes an allowance for an estimate of the future cost savings anticipated from the procedural reforms in NSW.

The NSW Dust Diseases Tribunal reforms were introduced following the NSW Government Review which was conducted by Mr Laurie Glanfield AM, Director-General of the Attorney General’s Department and Ms Leigh Sanderson, Deputy Director-General of the Cabinet Office. They became an Act on 26 May 2005 and became effective on 1 July 2005.

Our report makes allowance for the estimated future impact of the NSW reforms and for the cost savings that have already emerged to date, whether as a result of cost savings initiatives implemented by ACS or the impact to date of the NSW reforms.

A further review of the Dust Diseases Claims Resolution Process was announced in October 2006 (“the 2006 Review”).

The 2006 Review did not seek to substantially modify the existing procedures for administering and settling claims, although it did propose a regular review of the system and ongoing reporting of performance of the system.

At this stage, we have made no allowance for any potential impact of the 2006 Review to reduce legal costs further than the extent to which reductions were envisaged at the time of the introduction of the NSW Dust Diseases Tribunal reforms.

---

### 1.3.6 Discounting

We have determined a Discounted Central Estimate in this report by discounting the projected future cashflows to 31 March 2007 using yields on Commonwealth Government Bonds.

Conceptually, the Discounted Central Estimate therefore represents an amount of money which, if fully provided in advance and invested in risk-free assets (such as Commonwealth Government Bonds) of term and currency appropriate to the liabilities, would generate the necessary investment income such that (together with the capital value of those assets) would be expected to be sufficient to pay for the liabilities as they fall due.

To the extent that the actual investments are:

- of different terms; and/or
- in different currencies; and/or
- provide different expected rates of return

investment profits or losses would emerge.

In this regard, we also note that the actual funding mechanism under the Amended Final Funding Agreement only provides for three years' worth of projected Claims and Claims Legal Costs expenditure and one year's worth of Operating Expenses at any one time.

### 1.4 Areas of potential exposure not included

As identified in Section 1.3, there are other potential sources of claims exposure beyond those directly considered within this report. However, while many of them are possible they are by no means certain and in a number of cases they are unquantifiable even if they have the potential to generate claims. This is especially the case for those sources of future claim where there has been no evidence of claims to date.

Areas of potential changes in claims exposure we have not explicitly allowed for in our valuation include:

- Future significant individual landmark and precedent-setting judicial decisions;
  - Significant medical advancements;
  - Unimpaired claims, i.e. claims for fear, stress, pure nervous shock or psychological illness;
-

- A change in the basis of compensation for asymptomatic pleural plaques for which no associated physical impairment is exhibited;
- A proliferation of “third-wave” claims, i.e. claims arising as a result of indirect exposure such as home renovation, washing clothes of family members that worked with asbestos, or from workers involved in removal of asbestos or demolition of buildings containing asbestos;
- Changes in legislation, especially those relating to tort reform for asbestos sufferers;
- Introduction of new, or elimination of existing, heads of damage;
- Exemplary and aggravated or punitive damages (being damages awarded for personal injuries caused as a result of negligence or reckless conduct);
- Changes in the basis of apportionment of awards for asbestos-related diseases for claimants who have smoked;
- Any changes to GST or other taxes; and
- Future bankruptcies of other asbestos claim defendants (i.e. other liable manufacturers or distributors).

Nonetheless, some implicit allowance is made in respect of some of these items in the allowance for superimposed inflation included in our liability assessment and to the extent that some of these have emerged in past claims experience.

We have made no allowance for the risk of further development in relation to New Zealand exposures and the rights of claims from New Zealand claimants in Australian courts (as per *Frost vs. Amaca Pty Ltd* (2005), NSWDDT 36 although this decision was successfully appealed in August 2006 but an application for Special Leave to Appeal has been granted) nor for the risk of additional exposures from overseas. This is because, as noted in Section 1.3, the AICF Trust will not meet the cost of these claims as they are Excluded Claims.

We discuss these matters further in Section 3.2.1.

## **1.5 Data reliances and limitations**

KPMG Actuaries has relied upon the accuracy and completeness of the data with which it has been provided. KPMG Actuaries has not verified the accuracy or completeness of the data, although we have undertaken steps to ensure its consistency with data previously received. However, KPMG Actuaries has placed reliance on the data previously received, and currently provided, as being accurate and complete in all material respects.

## **1.6 Uncertainty**

It must be understood that estimates of asbestos-related disease liabilities are subject to considerable uncertainty.

This is due to the fact that the ultimate disposition of future claims will be subject to the outcome of events that have not yet occurred. Examples of these events, as noted in Section 1.4, include jury decisions, court interpretations, legislative changes, epidemiological developments, medical advancements, public attitudes, potential third-wave exposures and social and economic conditions such as inflation.

It should therefore be expected that the actual emergence of the liabilities will vary, perhaps materially, from any estimate. Thus, no assurance can be given that the actual liabilities of the Liable Entities to be met by the AICF Trust will not ultimately exceed the estimates contained herein and any such variation may be significant.

Nonetheless, we provide our liability estimate based on our current expectations of future such events.

## **1.7 Distribution and use**

The purpose of this report is as stated in Sections 1.2 and 1.3. This report should not be used for any purpose other than those specified.

This report is to be provided to the Board and management of AICFL. We understand this report will be provided to the Board and management of JHINV, the NSW Government, and to PricewaterhouseCoopers in their capacity as auditors to both JHINV and AICFL.

We understand that this report will be filed with the ASX and placed on JHINV's website in its entirety.

KPMG Actuaries provide our consent for this report to be made available to the above-mentioned parties and for the report to be distributed in the manner described above.

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To the extent permitted by law, KPMG Actuaries will not be responsible to third parties for the consequences of any actions they take based upon the opinions expressed within this report, including any use of or purported reliance upon this report not contemplated in Sections 1.2 and 1.3.

Where distribution of this report is permitted by KPMG Actuaries, the report may only be distributed in its entirety and judgements about the conclusions and comments drawn from this report should only be made after considering the report in its entirety and with necessary consultation with KPMG Actuaries.

### **1.8 Author of the report**

This report is signed by Richard Wilkinson, a Director of KPMG Actuaries, a Fellow of the Institute of Actuaries (London) and a Fellow of the Institute of Actuaries of Australia.

This report is co-signed by Neil Donlevy, a Director of KPMG Actuaries, a Fellow of the Institute of Actuaries (London) and a Fellow of the Institute of Actuaries of Australia.

### **1.9 Professional standards and compliance**

This report details a valuation of the outstanding claims liabilities of entities which hold liabilities with features similar to general insurance liabilities as a self-insured entity, and which has purchased related insurance protection.

This report complies with the current version of Professional Standard 300 of the Institute of Actuaries of Australia ("PS300"), "Actuarial Reports and Advice on General Insurance Technical Liabilities". The effective date of the current version of PS300 is April 2002.

However, as we note in Section 1.3, this report does not include an allowance for the future Operating Expenses of the AICF Trust and nor does it include any allowance for a risk margin to reflect the inherent uncertainty in the liability assessment.



## **2 EXPOSURE HISTORY OF JAMES HARDIE'S FORMER SUBSIDIARIES<sup>2</sup>**

### **2.1 Overview**

In 1916, James Hardie opened its first asbestos factory at Camellia in Sydney. Between 1916 and 1987, James Hardie and its subsidiaries produced and developed a variety of products containing asbestos including:

- Cement pipes;
- Cement sheeting and building products;
- Lagging and other insulation products; and
- Brake linings and other friction products.

### **2.2 Baryulgil mining activities<sup>3</sup>**

Asbestos Mines Pty Limited owned and operated a small chrysotile (white asbestos) mine at Baryulgil NSW. We understand the history of the Baryulgil mine to be briefly as follows:

**Table 2.1: History of Baryulgil mine**

1940	Wunderlich Ltd begins developing the asbestos deposits.
1944	Wunderlich Ltd and James Hardie & Coy (now Amaca Pty Ltd) commence a joint venture to operate the mine at Baryulgil in the name of Asbestos Mines Pty Ltd.
1953	James Hardie & Coy purchases the remaining 50% interest in Asbestos Mines Pty Ltd from Wunderlich Ltd.
1954	Ownership of Asbestos Mines Pty Ltd is transferred to James Hardie Asbestos Ltd (subsequently renamed James Hardie Industries Ltd, now known as ABN60)
1976	Asbestos Mines Pty Ltd, later Marlew Mining Pty Ltd (now in liquidation), is sold by James Hardie Asbestos Ltd to Woodsreef Mines Ltd, which continued to operate the mine.
1979	Woodsreef ceased mining operations at Baryulgil.

<sup>2</sup> This section is substantially based on a paper submitted to the Special Commission of Inquiry and was included as the Special Commission of Inquiry Appendix J, Paper entitled "James Hardie and Asbestos" (15 January 2001) prepared by Mr Wayne Attrill, a former employee of James Hardie Industries Ltd.

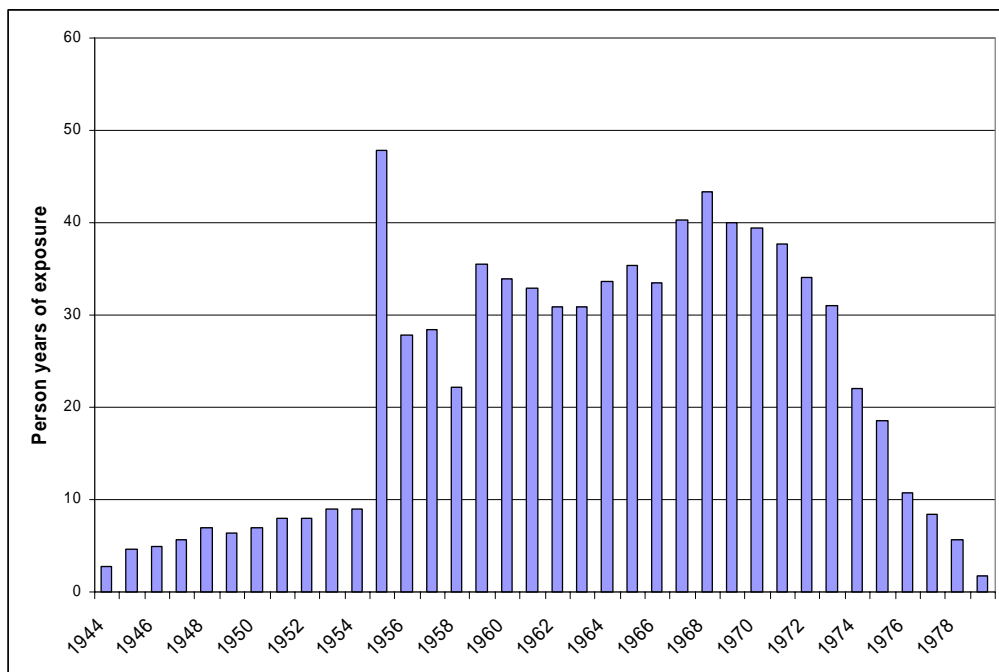
It is supplemented with disclosures in the JHINV Explanatory Memorandum dated 12 December 2006.

<sup>3</sup> This section is substantially based on the press release from James Hardie dated 24 March 2005 and on workforce statistics and information we were provided with.

It has been stated that the Baryulgil mine workforce was never more than approximately 40 people at any one time and that through the early 1940s to the closure of the mine in 1979 the employees included approximately 350 people in aggregate.

The chart below shows the number of person years of exposure for workers in each year based on the data provided and agreed upon during the Parliamentary Inquiry in 1984.

**Figure 2.1: Person years of exposure by year of exposure for Baryulgil mine workers: 1944 to 1979**



It can be seen that there appears to be a spike in 1955. We believe this is due to some prior data in relation to the workers' period of employment not being available and a dummy value (1955) being adopted in the database of workers submitted to the Parliamentary Inquiry.

What this means is that the number of workers in 1955 is over-stated and those in prior years is likely to be under-stated slightly.

The chart shows that there were up to 40 people working in the mine each year, and an overall average of 20-25 people, which is consistent with the commentary provided by James Hardie.

The database also shows that there were about 350 workers who ever worked at the mine. This implies that over the 35 year period, the average length of service was about 2 years per individual. However, we note that there are some workers who worked at the mine for only a matter of weeks.

### **2.3 Asbestos cement**

Production of asbestos cement based products was James Hardie & Coy's primary business. The products it produced came in the form of building products and asbestos cement pipes.

Production of asbestos cement pipes began in 1926 but the use of asbestos cement pressure pipes for water and sewerage use did not become widespread until autoclaving of pipes was introduced in the early 1950s.

Prior to the mid-1980s, James Hardie & Coy manufactured flat and corrugated asbestos cement sheets for internal and external wall cladding in buildings and for roofs, and asbestos cement water and sewer pipes.

The major fibre used in the manufacture of asbestos cement products was chrysotile.

Amosite (brown asbestos) was not used in James Hardie & Coy products until the 1950s, and small quantities of amosite continued to be used in asbestos cement products until about 1980.

James Hardie & Coy also used crocidolite (blue asbestos) in pressure pipes and building products, such as roofing products, from the mid-1950s until about 1968. The crocidolite was sourced from the CSR mine at Wittenoom.

Asbestos content of pipes was approximately 15% of which about 12% was chrysotile and the remainder amosite. During the period 1956–1968, crocidolite was also used (about 2%).

The asbestos content of James Hardie & Coy's asbestos cement sheet ranged from 8% to 15%, and was predominantly chrysotile with small amounts of amosite and crocidolite, with crocidolite only used up to 1968.

The building products business ceased using asbestos in 1985 and the pipes business ceased using asbestos in 1987.

### **2.4 Insulation products**

Asbestos containing insulation products were first manufactured by James Hardie & Coy in the 1930s, and by the 1950s James Hardie & Coy had established itself in the market with a product called 85% Magnesia.

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In 1964 James Hardie & Coy formed a joint venture with CSR and Bradford Insulation known as Hardie-BI Company to make and market insulation products.

Major products produced were 85% Magnesia and K-Lite. Both products contained about 15% amosite. The partnership was dissolved in 1974 and James Hardie & Coy ceased production of asbestos thermal insulation products at that time.

## **2.5 Brake linings**

James Hardie & Coy had initially entered the brakes and friction products market in the early 1930s and had a well-established business by 1950 under the brand name "Five Star".

In 1963 James Hardie & Coy entered into the Hardie-Ferodo joint venture with Ferodo of the UK. Hardie-Ferodo carried out considerable product development work, particularly with regard to railway rolling stock brakes. The partnership dissolved in 1978 and the business was renamed Better Brakes (and later became known as Jsekarb).

Jsekarb manufactured brake linings for motor vehicles, railway wagons and locomotives, and ceased using asbestos in their manufacturing process in 1984 and was sold in 1987.

The only asbestos used in friction products was chrysotile.

### **3 AREAS OF POTENTIAL EXPOSURE**

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#### **3.1 Overview**

In Section 1.4, we identified some sources of potential exposure that may not explicitly, or implicitly, be factored into our valuation. The impact of the emergence of these might be to increase, or decrease, the future number of claims or the overall costs in relation to the liabilities of the Liable Entities.

#### **3.2 Potential changes to the number of future claims**

##### *3.2.1 Overseas exposures*

Whilst overseas exposures remain a source of potential exposure for the Liable Entities, they will not impact the liabilities of the Liable Entities to be met by the AICF Trust as the AICF Trust will not meet claims relating to:

- Exposure to asbestos to the extent it took place overseas; and/or
- Claims made overseas relating to asbestos exposure (regardless of the place of exposure).

We note, in any event, that there have been few claims reported to date and that it is currently envisaged that the number of claims from overseas exposures should remain low given the significantly lower levels of asbestos products produced by the Liable Entities which were exported overseas.

We understand 1 claim was reported from the United States during the 2006/07 financial year.

##### *3.2.2 Third-wave claims*

We have made some implicit allowance for so-called “third-wave” claims. These are claims for personal injury and / or death arising from asbestos exposure during home renovations by individuals or to builders involved in such renovations. Such claims are allowed for within the projections to the extent to which they have arisen to date and to the extent our exposure model factors in such tertiary exposures in its extrapolation.

Over the last five years, pure home renovator claims have made up approximately 12% of mesothelioma claims by number, with around 20-30 claims being reported annually. The reporting activity of home renovator claims has not shown any significant upward trend over the period.

We have not allowed for a surge in such claims in the future arising from renovations, but conversely we have not allowed for a tempering of those third-wave claims already included within our projection as a result of improved education of individuals of the risks of such home renovations, or of any local Councils or State Governments passing laws in this regard.

It should be noted that claims for the cost of asbestos or asbestos product removal from homes and properties or any claims for economic loss arising from asbestos or asbestos products being within such homes and properties will not be met by the AICF Trust.

### 3.2.3 *Unimpaired claims*

Unimpaired claims are claims made by plaintiffs where the plaintiff does not exhibit any physical symptoms of injury or damage. This would include claims for fear and stress.

In the case of *Thompson vs. CSR* (NSWDDT 7/2003), the estate of Mr Thompson made a retrospective claim for fear of contracting mesothelioma 14 years before onset. In this case, Judge O'Meally ruled that the fear was not compensable. The NSW Court of Appeal ((2003) 59 NSWLR 77) upheld that fear was not compensable.

This case was appealed by the estate of Mr Thompson to the High Court of Australia (where it became *CSR vs. Eddy*) but the issue of whether fear was compensable was not the subject of that appeal.

We have not allowed for the admissibility of "unimpaired claims" within the Australian Court system.

### 3.2.4 *Pure nervous shock claims*

"Pure" nervous shock claims are claims which are unrelated to an underlying disease. Where there is a psychiatric illness, general damages may be payable and economic loss may also be payable where the inability to work is a result of the psychiatric illness.

In Western Australia in October 2004, an appeal case concerning Arturo Della Maddalena, a past employee of CSR at Wittenoom mine was heard. Mr Della Maddalena worked at Wittenoom, owned by CSR, from 1961 until it closed in 1966. During this period he was exposed to blue asbestos dust.

An investigation of 42 of Mr Della Maddalena's former workmates found 39 of them had died from asbestos-related diseases.

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In the first Court hearing, the primary judge's determination was that he did not accept there to be evidence of psychiatric illness, or evidence that it arose from asbestos exposure.

However, on appeal the second judge rejected the primary judge's decision as to the acceptability of the evidence placed before him. The Court of Appeal accepted Mr Maddalena's claim for psychiatric illness.

The defendants to the claim appealed the case to the High Court of Australia on two narrow points of law:

- Whether an appellate court is entitled to substitute its own findings as to the credibility of a witness for that of the trial judge; and
- Whether the appellate court had breached procedural fairness in expressing a preference for evidence of a particular expert witness described as being "well known to the Court".

On 2 February 2006, the High Court of Australia ordered that a new trial be held.

However, we understand the case was settled out of court in October 2006, although the terms of the settlement were confidential.

To the extent that other such cases arise in the future, in many cases they would likely represent a bringing forward of some future eventual claims, rather than outright additional claims.

We have assumed that stress or fear from potential exposure, which is not accompanied by a disease, will not result in a material additional net cost of claims for compensation.

### 3.2.5 *Pleural plaques*

Pleural plaques are formations of scarred tissue which form on the inside of the chest wall. They are usually benign and take about 20 years to emerge following exposure to asbestos but symptoms are rarely associated with pleural plaques. Current medical opinion is that pleural plaques do not shorten life and that their existence does not increase the possibility of developing an asbestos-related disease but rather acts as an indicator that exposure to asbestos has taken place.

If an individual presents benign pleural plaques without any demonstrable physical impairment, the individual would not currently be compensated within Australia for the existence of pleural plaques (see for example *Torrens vs. James Hardie* [1990] NSWDDT 6).

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Pleural plaques which are associated with a certain level of physical impairment, such as reduced “total lung capacity” or “forced vital capacity”, diffuse pleural thickening or where the plaques cause pain could be compensated within Australia (see for example *Abraham vs. Wallaby Grip & Ors* [2006] NSWDDT 22).

Our liability assessment makes no allowance for benign pleural plaque claims without any associated physical impairment.

In relation to pleural plaques with associated physical injury, such claims have arisen in the past and are included within our disease category “ARPD & Other”. Accordingly, we have allowed for these within our liability assessment based on past experience of such claims activity.

### **3.3 Potential changes to claims costs**

#### **3.3.1 Legal environment**

We have not explicitly allowed for the emergence of new heads of damage or the significant extension of current heads of damage, or for any overturn or restriction of current heads of damage.

However, allowance for these is, in part, implicit within the rate of superimposed inflation we have assumed.

#### **3.3.2 Exemplary and aggravated or punitive damages**

To date, there have been no awards for exemplary or punitive damages against the Liable Entities as a result of asbestos-related disease claims.

To the extent that such awards are possible and could arise in the future such awards would increase the liability assessment.

Of particular note is the South Australian legislation, The Dust Diseases Act 2005 (SA) Bill, which directs the Courts to consider exemplary damage awards.

We have made some allowance for the potential for exemplary damages awards in South Australia through our assumed average award size. This has been based on anecdotal evidence and views as to the potential size of exemplary awards were such awards to be made.

However, we note that in relation to the potential for exemplary damage awards in other States, the liability that could arise, or would arise were such claims to eventuate, is unquantifiable and has not been included in our liability assessment.

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### 3.3.3 *Smoking-related diseases*

There have been some notable cases involving the emergence of lung cancers from people with asbestos exposure but who have also smoked cigarettes.

There are two prevailing views of the interaction of smoking and asbestos exposure:

- That the emergence of asbestosis is a necessary precursor to lung cancer caused by asbestos exposure (“the necessary precursor hypothesis” as put forward by Hans Weill amongst others).
- That providing there has been exposure to asbestos sufficient to cause asbestosis it is reasonable to attribute a causal contribution to the asbestos exposure (“the fibre burden hypothesis”).

It is generally accepted that the risk of developing cancer after asbestos exposure is increased in the case of a smoker (see papers by Sir Richard Doll in 1985 amongst others).

We have continued to assume that the precedents set in *Judd vs. Amaca* (2002) (NSWDDT 25) and *McDonald vs. State Rail Authority* (1998) (16 NSWCCR 695) will continue and also that the thresholds required to attribute lung cancer to asbestos exposure will be maintained. In these circumstances we have assumed continuation of the current level of awards for asbestos-related lung cancer claims.

### 3.3.4 *Future bankruptcies*

As bankruptcies and insolvencies amongst defendants occur, there is a concentration of the costs of claims amongst a decreasing pool of defendants. This would be expected to lead to an increase in the proportion of claims borne by each of the remaining solvent defendants.

Allowance might be made for such bankruptcies by way of using general credit risk methods, or by reduction in the discount rate, but such allowance would require a full model of the liabilities of Australia by entity, including the interactions between entities. This is not adequately determinable at present.

Consequently, within our central estimate assessment, we have not allowed for the future failure of any of the substantial asbestos defendants, insurers or governments who bear a share of the asbestos-related liabilities of Australia.

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### **3.4 Medical developments**

Medical developments have the potential to affect claim costs, although it is uncertain as to whether such developments would likely increase or decrease claims costs. In these circumstances, we have taken what we believe to be a central estimate view.

For example, there may be drugs developed which increase costs and extend life without curing mesothelioma: this might increase overall claim amounts. On the other hand, a total cure for mesothelioma would be more likely to reduce overall claim amounts.

Examples of drugs or treatments that are currently (or may be) used for people diagnosed with mesothelioma include:

- Alimta;
- Coramsine;
- Surgery; and
- Radiotherapy or Chemotherapy.

Additionally, there continue to be new blood tests developed which may give rise to earlier diagnosis of mesothelioma (e.g. SMRP serum). Such tests have the potential to result in a change in the pattern of reporting of future claims by accelerating diagnosis of these claims. Furthermore depending on how the courts would treat claims settlement in relation to these earlier diagnoses, it could also be associated with a change in the profile of claims payments.

At this stage there is no evidence of the success of any treatments to cure mesothelioma, or of SMRP to provide earlier diagnosis.

Accordingly, we have made no allowance for the potential impact of such diagnostic or medical developments within the current valuation.

## **4 DATA**

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### **4.1 Data provided to KPMG Actuaries**

We have been provided with the following information:

- Claims database at 31 March 2007 with individual claims listings;
- Accounting database at 31 March 2007 (which includes individual claims payment details);
- Monthly Management Information Reports to 31 March 2007;
- Home Renovator Reports at various dates; and
- Detailed insurance bordereaux information (being a listing of claims filed with the insurers of the Liable Entities) produced by Capita Insurance Services (London) as at 31 March 2007.

We have allowed for the benefits of the product and public liability insurance policies of the Liable Entities based on information provided to us by AICFL relating to the insurance programme's structure, coverage and layers.

We have also considered the claims data listings which formed the basis of our previous valuation assessments.

### **4.2 Data limitations**

We have tested the consistency of the various data sets provided to us at different valuation dates, as noted in Section 4.3 which outlines the nature of the testing and verification process undertaken. However, we have not otherwise verified the data and have instead relied on the data provided as being complete and accurate in all material respects. We have relied upon the robustness of AICFL's operational processes and systems as to the completeness of the data provided.

Consequently, should there be material errors or incompleteness in the data, our assessment could also be affected materially.

### **4.3 Data verification**

We have undertaken a number of tests and reconciliations to verify the accuracy of the data to the extent possible, noting the limitations outlined above.

#### 4.3.1 *Reconciliation with previous valuation's data*

We have performed a reconciliation of the claims database as at 31 March 2007 with that provided at 30 September 2006.

We have reviewed the consistency of a number of key fields, on a claim-by-claim basis, including:

- Claim notification date;
- Claim settlement date;
- Disease type; and
- Settlement amounts (award and legal costs separately).

We note that there are some movements in the historic data between valuations. The following summarise the results of that reconciliation process:

- 7 claims have changed their date of reporting with 6 of them changing their report date by an inconsequential amount. Additionally, 4 other claims have now been assigned a report date;
- 12 claims have changed their disease type: 4 to mesothelioma, 7 to asbestosis and 1 to lung cancer; and
- 3 claims have changed their settlement date.

We understand that a change in disease type is often due to the data being updated over time, often as more information comes to light as to the nature of the disease, or through the correcting of any previous data errors which have emerged.

Changes in the date of settlement can often arise because the previous settlement date recorded relates to the settlement with some, but not all, parties to the claim and that this information is updated when all parties have settled.

As such, changing data is not unexpected or to be considered as adverse. Indeed, changing data is common to all claims administration systems.

At this valuation, we have continued to note that new claim records have been created in respect of some historic claims and some claim numbers have changed. We understand these changes have been made to aid operational procedures in regard to pursuing cross-claims recoveries for individual claims.

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The effect of this operational change is to increase the numbers of claims reported relative to those quoted in our previous valuation report (although it should be noted that the effect is small and varies by individual claim year).

A consequential effect of this is that the average cost of claims shows some compensatory reductions and nil settlement rates have also reduced.

We have identified these changes, discussed and reviewed them in conjunction with AICFL and considered the extent of their impact on the data.

Overall, the effect of this change is minimal in the context of the overall liability assessment.

#### 4.3.2 *Reconciliation between claims and accounting databases*

We have compared the claims awards, the legal costs and the recoveries amounts between the claims database and the accounting database from the earliest date to the current file position. Table 4.1 shows the results of this reconciliation for all claims to date.

**Table 4.1: Comparison of amounts from claims and accounting databases at 31 March 2007**

	Claims database	Accounting database	Difference	Difference
	\$m	\$m	\$m	%
Gross settlement amounts	443.4	442.3	1.1	0.2%
Cross claim recoveries	(14.6)	(14.1)	(0.5)	3.5%
<b>Net settlement amounts</b>	<b>428.8</b>	<b>428.2</b>	<b>0.6</b>	<b>0.1%</b>

Overall, the data appears to reconcile reasonably well in aggregate, with the gross claim settlement amounts from the two data sources differing by only 0.2%.

Our approach for each claim record has been to take the maximum value of the two databases for each claim record.

This approach is likely to result in some minor prudence in our overall analysis although the amount of prudence is not material in the context of the size of the potential liabilities and the underlying uncertainty in any valuation estimating future claims costs over the next 40 years or more.

#### **4.4 Data conclusion**

We have noted above that we have not verified the data but have instead tested the data for internal consistency with the data provided at previous valuations.

Based on that testing and reconciliation, and subject to the limitations described in Section 1.5, we have formed the view that notwithstanding those limitations:

- The data is generally consistent between valuations, with any differences in the data being readily explained;
- The data appears to reconcile reasonably between the two data sources (the claims database and the accounting database);
- Any data issues that have emerged are not material in relation to the size of the liabilities; and
- The data is therefore appropriate for use.

## **5 VALUATION METHODOLOGY AND APPROACH**

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### **5.1 Previous valuation work and methodology changes**

We have maintained the core valuation methodology that we adopted at our previous valuations since 30 June 2004, although the exact scope of the valuation has changed over time. The data and tables in this report are generally comparable with those previous reports.

The only significant change in methodology that has taken place in recent valuations was implemented at 30 September 2006, when we made allowance for the potential for savings to result from case estimates based on past observed experience (see Section 5.8).

### **5.2 Overview of current methodology**

The methodology involves assessing the liabilities in two separate components, being:

- Allowance for the cost of settling claims which have already been reported but have not yet been settled (“pending claims”); and
- Allowance for the cost of settling claims which have not yet been reported but are expected to arise out of past exposure (“Incurred But Not Reported” or “IBNR” claims).

For pending claims, we have used the case estimates (where available) with some adjustments to reflect the extent to which they tend to overstate the ultimate cost, whilst for IBNR claims we have used what can best be described as an “average cost per claim method”.

In brief, the overall methodology may be summarised as follows:

- Project the future number of claims expected to be reported in each future year by disease type (for product and public liability) and for Workers Compensation and Wharf claims taking into account the past rate of co-joining of the Liable Entities and the expected future incidence of mesothelioma and other diseases;

- Analyse past average attritional claim costs of non-nil claims in current money terms. We have defined attritional claims to be claims which are less than \$1m in **2005/06** money terms. We estimate a baseline attritional non-nil average claim cost in 2006/07 (current) money terms. This represents the Liable Entities' share of a claim rather than the total claim settlement. For Workers Compensation claims, the average cost represents only that part of a claim which is borne by the Liable Entities (i.e. it excludes any insurance proceeds from a Workers Compensation Scheme or Policy);
  - Adjust historic average claim costs to recognise the impact of DDB reimbursements upon the average cost awards;
  - Analyse past historic average plaintiff and defendant legal costs for non-nil claim settlements;
  - Analyse past historic average defendant legal costs for nil claim settlements (which includes costs incurred in defending and repudiating liability);
  - Estimate a "large claims loading" for mesothelioma claims by estimating the frequency, or incidence rate, and average claim and legal cost sizes of such claims (being claims which are in excess of \$1m in **2005/06** money terms);
  - Project the pattern and incidence of future claims settlements from the claims reporting profile projected. This is done by using a settlement pattern derived from consideration of past experience of the pattern of delay between claim reporting and claim settlement for each disease type;
  - Estimate the proportion of claims which will be settled with no liability against the Liable Entities by reference to past proportions of claims settled for nil claim cost (we refer to this as the "nil settlement rate");
  - Inflate average claim, plaintiff and defence legal costs and large claim costs to the date of settlement of claims allowing for base inflation and superimposed inflation;
  - Multiply the claims numbers which are expected to be settled for non-nil amounts in a period by the inflated average non-nil claim costs (including the "large claims loading") and plaintiff and defence legal costs for that period;
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- Make allowance in defence legal costs for that proportion of settled claims which are expected to be settled for no liability but for which defence costs will be incurred in disputing liability or contribution;
- Inflate average defence legal costs of nil claims to the date of settlement of claims allowing for base inflation and superimposed inflation;
- Multiply the claims numbers which are expected to be settled for nil amounts in a period by the inflated average defence legal costs for nil claims for that period;
- Add the expected claims and legal payments on pending claims (after allowance for the potential savings on case estimates);
- This gives the projected future gross cashflow for each future financial year;
- Estimate the recoveries resulting from cross-claims made by the Liable Entities against other parties (“cross-claim recoveries”);
- Project Insurance Recoveries to establish the net cashflows;
- Discount the cashflows using a yield curve derived from yields on Commonwealth fixed interest bonds to arrive at our present value liability assessment.

It should be noted that this description is an outline and is not intended to be exhaustive in consideration of all the stages we consider. Those other stages are outlined in more detail elsewhere in this report and readers are advised to refer to those sections for a more detailed understanding of the process undertaken.

As discussed elsewhere, the liabilities are established on a central estimate basis.

In our analyses, the “year” we refer to aligns with the financial year of JHINV and runs from 1 April to 31 March, so that a 2005 reported claim would be a claim notified in the period 1 April 2005 to 31 March 2006. Similarly a 2006 settlement would be a claim settled in the period 1 April 2006 to 31 March 2007.

### **5.3 Disease type and class subdivision**

It is critical when modelling the future liabilities to sub-divide the data into groups which exhibit similar characteristics, i.e. into homogeneous groups.

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We have split the claims into the following groups:

- Product and Public Liability;
- Workers Compensation, being claims by current and former employees of the Liable Entities;
- Wharf claims; and
- Cross-claims brought by one or more Liable Entities.

We have separated the Workers Compensation claims from product and public liability claims because claim payments from Workers Compensation claims do not generate recoveries under the product and public liability insurance cover, so that in order to value those contracts we need to separately identify the cashflows from product and public liability claims and the cashflows from Workers Compensation claims.

We have separated out wharfside workers claims because of their significantly different claim sizes relative to other classes.

### 5.3.1 *Categories of disease*

For product and public liability claims, we have separately considered the individual disease types.

We have split the data by disease because it displays substantially different average claim sizes and because the incidence pattern of future notifications is also expected to vary considerably between the different disease types. As product and public liability claims are financially significant to the overall total of the liabilities and there is significant available data, the sub-division by disease type is appropriate.

We have not divided the Workers Compensation claims data by disease type given its relatively low financial significance and the low credibility of the data if sub-divided by disease type.

For the purposes of our analysis, we have allocated each claim once and therefore to one disease. We have selected the following order of priority, based on the relative severity of the disease:

- Mesothelioma;
  - Lung cancer / Other cancer;
  - Asbestosis; and then
  - Asbestos-Related Pleural Disease and Other (“ARPD & Other”).
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This means that if a claim has mesothelioma as one of its listed diseases, it is automatically included as a mesothelioma claim. If a claim has lung or other cancer as one of its listed diseases (but not mesothelioma), it is included as a lung cancer claim. If a claim has asbestosis as one of its listed diseases, it is only coded as asbestosis if it has no reference to mesothelioma, lung cancer or other cancer as one of its diseases.

### 5.3.2 *Claims excluded*

The following claims are excluded from our analysis:

- Cross-claims brought by the Liable Entities against other defendants. Where the cross-claim is brought as part of the main proceedings the claim is automatically counted in our analysis of the number of claims. However, where the cross-claim by the Liable Entities is severed from the main proceedings, the existence of a separate record on the claims file does not indicate an additional claim (or liability against the Liable Entities). In these circumstances such claims records are not counted in our analysis.
- Claims with a blank report year. These are in the nature of “provisional loss advices” and are only included once a date of notification has been allocated to the claims. However, at 31 March 2007, all claims had an assigned report date.

We have, however, included claims which arise as contribution claims against the Liable Entities, and we have also included (as separate claims counts) multiple claims filed against the Liable Entities arising from the same event or individual’s exposure. As such, there can be multiple claims in relation to an individual claimant. We note that as a consequence the “number of claims” projected will exceed the number of individual people affected.

## 5.4 **Numbers of future claims notifications**

We begin by first estimating the incidence of future notifications of claims.

We have based this on the use of what we have termed an “exposure model”, which we have constructed in relation to Australian usage of asbestos.

We do not have detailed individual exposure information for the Liable Entities, its products or where the products were used and how many people were exposed to those products. However, given the market share of James Hardie over the years (through to 1987) and its relative stability, we have used a national pattern of usage as a reasonable proxy for the Liable Entities.

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We start by constructing an index from the annual consumption of asbestos within Australia from 1900-2002.<sup>4</sup> We split this between the various asbestos types and by year of consumption.

We have not allowed for multiple exposures with respect to the Liable Entities from each unit of asbestos consumed, e.g. where the Liable Entities were both mining and milling the same asbestos. While there was some (moderate) mining at Baryulgil, in relative terms it is not significant. Nonetheless, we have made separate allowance for mining activities at Baryulgil within our liability assessment.

With the exposure index that we have derived, we then allow for the latency period from the average date of exposure to claims notification.

Our model is that claims will:

- emerge proportional to past asbestos exposure measured by asbestos consumption (in metric tonnage); and
- have a latency pattern that is statistically normally distributed.

Our current assumptions are that:

- The historic asbestos consumption shown in Figure 7.9 gives our assumed past asbestos exposure.
- The latency pattern (from average date of exposure) for mesothelioma has a mean of 35 years and a standard deviation of 10 years. This appears to be generally supported by analyses and comments by Professor Berry et al<sup>5</sup>, by Jim Leigh et al<sup>6</sup> and by Yeung et al<sup>7</sup>. Latency pattern assumptions for mesothelioma and other diseases have also been set with consideration of the Liable Entities' own experience to date.

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<sup>4</sup> World Mineral Statistics Dataset, British Geological Survey, [www.mineralsuk.com](http://www.mineralsuk.com)

US Geological Survey – Worldwide Asbestos Supply and Consumption Trends 1900 to 2000; Robert L. Virta (2003)

<sup>5</sup> Malignant pleural and peritoneal mesotheliomas in former miners and millers of crocidolite at Wittenoom, Western Australia; G Berry, N H de Klerk, et al (2004)

<sup>6</sup> Malignant Mesothelioma in Australia: 1945-2000; J. Leigh et al (2002)

<sup>7</sup> Distribution of Mesothelioma Cases in Different Occupational Groups and Industries, 1979-1995; P. Yeung, A. Rogers, A. Johnson (1999)

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Our methodology is to take each year of exposure, weighted by “average consumption” of asbestos in tonnage for that year, and project an index of the number of claims emerging in each future reporting year resulting from that exposure year using the latency distribution. We then aggregate the index of claims projected across all exposure years to derive an overall index of the number of future claims by report year.

This methodology provides not only the shape of claims reporting as an index but it also derives the peak year of incidence of mesothelioma claims reported to the Liable Entities to be 2010/2011.

For the other claim types, we allow for those diseases having different average latency periods to that of mesothelioma. This results in different projected peak years for the different diseases.

From this claims index we then project the future number of claims by calibrating the index derived to the current level of claims emerging.

## 5.5 Numbers of claim settlements from future claim notifications

We derive a settlement pattern by considering triangulations of the numbers of settlements by delay from the year of notification.

The following triangles provide an illustrative example of how we perform this:

**Figure 5.1: Settlement pattern derivation for mesothelioma claims**

*Number of claims settled by the end of each year*

Reporting Year	Delay to settlement (years)										Number of claims reported	
	0	1	2	3	4	5	6	7	8	9		10
1996	46	78	83	84	84	84	84	84	84	84	84	84
1997	64	93	93	95	96	99	99	100	101	101	101	111
1998	57	78	82	84	86	86	88	88	88	88		93
1999	51	85	88	89	90	92	94	95				95
2000	75	112	118	121	121	121	123					126
2001	85	138	145	150	151	156						161
2002	99	161	173	173	173							179
2003	104	161	173	178								186
2004	143	221	232									263
2005	107	175										212
2006	101											202

*Proportion of claims settled by the end of each year*

Reporting Year	Delay to settlement (years)										
	0	1	2	3	4	5	6	7	8	9	10
1996	55%	93%	99%	100%	100%	100%	100%	100%	100%	100%	100%
1997	58%	84%	84%	86%	86%	89%	89%	90%	91%	91%	
1998	61%	84%	88%	90%	92%	92%	95%	95%	95%		
1999	54%	89%	93%	94%	95%	97%	99%	100%			
2000	60%	89%	94%	96%	96%	96%	98%				
2001	53%	86%	90%	93%	94%	97%					
2002	55%	90%	97%	97%	97%						
2003	56%	87%	93%	96%							
2004	54%	84%	88%								
2005	50%	83%									
2006	50%										
<b>Pattern assumed</b>	<b>54.9%</b>	<b>87.9%</b>	<b>93.3%</b>	<b>95.0%</b>	<b>96.3%</b>	<b>97.2%</b>	<b>98.5%</b>	<b>99.2%</b>	<b>99.7%</b>	<b>100.0%</b>	<b>100.0%</b>

Owing to limited data volumes, we have modelled “non-mesothelioma” claims as one cohort for determining claims settlement patterns.

**Figure 5.2: Settlement pattern derivation for non-mesothelioma claims**

*Number of claims settled by the end of each year*

Reporting Year	Delay to settlement (years)										Number of claims reported	
	0	1	2	3	4	5	6	7	8	9		10
1996	31	60	81	92	96	98	100	103	106	108	109	112
1997	32	68	91	103	109	110	115	117	117	117		121
1998	28	47	59	67	70	73	74	76	77			83
1999	38	82	99	104	114	116	117	118				122
2000	38	91	112	143	144	147	154					161
2001	64	122	188	195	204	209						222
2002	51	148	185	202	219							235
2003	45	125	162	176								199
2004	57	142	198									245
2005	36	131										187
2006	54											262

*Proportion of claims settled by the end of each year*

Reporting Year	Delay to settlement (years)										
	0	1	2	3	4	5	6	7	8	9	10
1996	28%	54%	72%	82%	86%	88%	89%	92%	95%	96%	97%
1997	26%	56%	75%	85%	90%	91%	95%	97%	97%	97%	
1998	34%	57%	71%	81%	84%	88%	89%	92%	93%		
1999	31%	67%	81%	85%	93%	95%	96%	97%			
2000	24%	57%	70%	89%	89%	91%	96%				
2001	29%	55%	85%	88%	92%	94%					
2002	22%	63%	79%	86%	93%						
2003	23%	63%	81%	88%							
2004	23%	58%	81%								
2005	19%	70%									
2006	21%										
<b>Pattern assumed</b>	<b>21.7%</b>	<b>58.5%</b>	<b>77.2%</b>	<b>85.4%</b>	<b>88.4%</b>	<b>90.2%</b>	<b>91.6%</b>	<b>93.0%</b>	<b>93.9%</b>	<b>95.0%</b>	<b>96.0%</b>

From these settlement pattern analyses, we have estimated the pace at which claims notified in the future will settle, and used this to project the future number of settlements in each financial year for each disease type.

We have estimated the settlement pattern from claim reporting to be as follows:

**Table 5.1: Settlement pattern of claims awards by delay from claim reporting**

Delay (years)	Mesothelioma	Asbestosis	Lung Cancer	ARPD & Other
0	54.9%	21.7%	21.7%	21.7%
1	33.0%	36.8%	36.8%	36.8%
2	5.4%	18.7%	18.7%	18.7%
3	1.7%	8.2%	8.2%	8.2%
4	1.3%	3.0%	3.0%	3.0%
5	0.9%	1.8%	1.8%	1.8%
6	1.3%	1.4%	1.4%	1.4%
7	0.7%	1.4%	1.4%	1.4%
8	0.6%	0.9%	0.9%	0.9%
9	0.3%	1.1%	1.1%	1.1%
Future	0.0%	5.0%	5.0%	5.0%

These assumed settlements patterns are unchanged since our previous valuation.

### 5.6 Proportion of claims settled for nil amounts

We apply a “nil settlement rate” to the overall number of settlements to estimate the number of claims which will be settled for nil claim cost (i.e. other than in relation to legal costs) and those which will be settled for a non-nil claim cost.

Nil settlement claims can arise for a number of reasons and these include:

- Claims made against the Liable Entities by plaintiffs where the claim is ultimately determined by a Court to not be compensable. This can arise:
  - because the “injury” for which the claimant seeks compensation is not compensable (e.g. asymptomatic pleural plaques without any physical impairment); or

- because the "injury" is not proven to be a result of asbestos-related exposure (e.g. smoking-related lung cancer with no evidence of asbestos exposure).
- Claims made against the Liable Entities by plaintiffs which are ultimately not pursued by the plaintiff. This would include claims where the plaintiff discontinues a claim:
  - Either in relation to the entire claim being discontinued by the plaintiff; or
  - In relation to the claim against the Liable Entity being discontinued by the plaintiff (but that the claim continues against other defendants).
- Claims made against the Liable Entities by plaintiffs but where liability against the Liable Entities is ultimately declined by the Court. This would, for example, include circumstances where the plaintiff joins the Liable Entity in a claim but it is later shown that the Liable Entity is not a relevant defendant and that another defendant is liable. This would, for example, cover:
  - Circumstances where it is demonstrated that that the product used which is alleged to have contributed to asbestos exposure and the subsequent claim was proven not to be a product manufactured or used by a Liable Entity.
  - Circumstances where through indemnity or contractual obligations another party is ultimately held liable for that element of the claim in which the Liable Entities were previously held liable.

The prospective nil settlement rate is estimated by reference to past trends in the rate of nil settlements.

## **5.7 Average claim costs of IBNR claims**

### **5.7.1 Attritional claims**

We need to separately consider average settlement costs in respect of future claims and average legal costs of the defendants.

We have estimated the following five components to the average cost assessment:

- Average award (sometimes including plaintiff legal costs) of a non-nil "attritional" claim.
-



- Average plaintiff legal costs of a non-nil “attritional” claim.
- Average defendant legal costs of a non-nil “attritional” claim.
- Average defendant legal costs of a nil claim.
- Large claim awards and legal cost allowances.

All of our analyses have been constructed using past average awards, which have been inflated to current money terms using a base inflation index. This compensates for basic inflation effects when identifying trends in historic average settlements. We then determine a prospective average cost in current money terms.

We perform the same exercise for the defence and plaintiff’s legal costs in respect of non-nil claims, and for defence costs for nil claims (together “Claims Legal Costs”).

#### *5.7.2 Large claims loading*

We define a large claim as those for which the award is greater than or equal to \$1m in **2005/06** money terms (this equates to approximately \$1.043m in 2006/07 money terms). We define an attritional claim as a non-nil, non-large claim. We define a nil claim as one for which the award payable by the relevant Liable Entity is zero.

We analyse the historic incidence rate of large claims (being measured as the ratio of the number of large claims to the total number of non-nil claims), and the average claim and legal costs of these claims. We have determined a prospective incidence rate and average cost in current money terms to arrive at a “per claim” loading (being the average cost multiplied by the incidence rate per claim) being the additional amount we need to add to our attritional average claim size to allow for large claims.

#### *5.7.3 Future inflation of claim sizes*

Allowance for future claim cost inflation is made. This is modelled as a combination of base inflation plus superimposed inflation. This enables us to project future average settlement costs in each future year, which can then be applied to the IBNR claims as they settle in each future year.

## **5.8 Pending claims**

### *5.8.1 Definition of pending claims*

At 31 March 2007, there are 504 claims for which claim awards have not yet been settled by the Liable Entities. Additionally, there are a number of other claims for which defence legal costs have not yet been settled, even though the awards have been settled.

We have adopted 3 definitions of settlement status:

- Where there is a closure date, there are not expected to be any further award or legal costs incurred.
- When there is no closure date but the claim has a settlement date, there is a possibility of further emerging defendant legal costs, even though the claim award has been settled.
- When there is no settlement date, there is a possibility of award, plaintiff legal costs and defendant legal costs still being incurred.

### *5.8.2 Evaluating the liability for pending claims*

The excess amount of the liability for pending claims, over the case estimates held, is what the insurance industry term Incurred But Not Enough Reported ("IBNER").

Depending on the case estimation procedure of the company and the nature of the liabilities, IBNER can be either positive or negative, with a negative IBNER implying that the ultimate cost of settling claims will be less than case estimates, i.e. that there is some degree of redundancy in case estimates.

In assessing the degree of redundancy in case estimates, we have undertaken a projection of the future settlement cost of pending claims and compared this to the case estimates for such claims. Our projection is based on a blending of the following actuarial techniques:

- Projection of future claim payments by year of notification using triangulation techniques as described in section 5.5 and compare with the case estimates for those claims; and
  - Projection of future average cost per claim for reported, but not finalised claims. The average cost is assessed by reference to the delay from when the claim was reported to when the claim settles (this method is known as the PPCF method).
-

Mesothelioma claims were projected separately from other disease types due to differing reporting and settlement patterns as well as differing average claim awards.

Workers Compensation claims were excluded from the analysis owing to limited data volumes and due to the impact of Workers Compensation insurance upon the data.

### 5.8.3 Findings

Our analysis has indicated that there is a degree of redundancy in case estimates.

Amaca's own analysis suggests that actual savings have been of the order of at least 20% in most months and that the average level of savings is around 25% of case estimates.

The comparison of current case estimates with actuarially-projected future settlement costs for claims reported to date suggests that potential savings from case estimates in relation to the award component could be of the order of 15%.

Taking these two different results into account, we have increased our assumption for the level of redundancy in case estimates on currently reported claims to 20% at this valuation (September 2006: 15%).

The increase since the last valuation reflect increasing evidence of the existence of such savings, given at the last valuation the allowance for potential savings was the first time such allowance had been made.

With case estimates for claim awards of the order of \$60m, the impact of a change in the assumption of the level of savings from 15% to 20% equates to around \$3m in undiscounted money terms.

It should also be noted that making allowance for savings from case estimates is expected to have the most impact on the near term cash flows and a lesser impact on the longer-term cashflows, with 90% of the cost of pending claims expected to be settled within the next six years.

## 5.9 Insurance Recoveries

Insurance Recoveries are defined as proceeds which are estimated to be recoverable under the product and public liability insurance policies of the Liable Entities, and therefore exclude any such proceeds from a Workers Compensation Scheme or Policy in which the Liable Entities participate or which the Liable Entities hold.

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In applying the insurance programme we consider only the projected gross cashflows relating to product and public liability.

We split out product liability cashflows from public liability cashflows as they are covered by different sections of the insurance policy under different bases:

- Product liability claims are covered by an aggregate policy which provides cover for all claims up to an overall aggregate limit; and
- Public liability claims are covered by an “each and every loss” policy which provides cover for each claim up to an individual limit for each claim.

Historical analysis of the claims data suggests that 95% of all liability claims, by number, have been product liability claims.

We make no allowance for the Workers Compensation cashflows in estimating the Insurance Recoveries, as the insurance programme only provides insurance cover to product and public liability exposures.

The insurance cover, for any policy year, consists of a number of consecutive layers of cover. By way of illustration, an insurance programme might be structured as follows:

- Primary \$2m – covering the first \$2m of claims costs; and
- \$3m xs \$2m – covering the next \$3m of claims costs, once the \$2m cover is fully utilised. If the \$2m layer below this cover is not fully utilised then this cover would also not be utilised.

#### *5.9.1 Allocation of cashflows*

We allocate the gross projected cashflow for Claims and Claims Legal Costs separately to product liability and public liability, assuming that 95% of future cashflows in each year will relate to product liability and 5% of future cashflows in each year will relate to public liability.

We then allocate these costs to each individual exposure year. This is based on a projection of how the pattern of exposure has changed in past years and is estimated to change in future years. In this regard, your attention is drawn to Section 7.8 which shows a recent history of how the allocation to each exposure year has changed with time.

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We separate the cashflow into claims costs, plaintiff legal costs and defence legal costs. This is because we understand that defence legal costs do not contribute to the erosion of the insurance cover but that such legal costs are recoverable in addition to recoveries from claims settlements.

For the purposes of the valuation, we have assumed that plaintiff legal costs contribute to the erosion of the insurance cover. Our decision is an actuarial one and is not based on legal opinion, although we note that it appears that plaintiff legal costs may (in common with defence legal costs) not contribute to the erosion of the insurance cover. If this latter view is the case, the value of the insurance assets may increase relative to that which we have assumed within this valuation report.

From this, we then model the future Insurance Recoveries by exposure (policy) year.

We map the Insurance Recoveries to each layer of the historic insurance programme and thereby to each insurer and reinsurer to determine an estimate of the recoveries (both in timing and amount) due from each insurer and reinsurer.

As noted in Section 10, no allowance has been made for any potential Insurance Recoveries in relation to the period from 1986/87 to 1996/97, when insurance was placed on a claims made basis.

#### *5.9.2 Product liability recoveries*

In relation to product liability, given the nature of the cover being on an “in the aggregate” basis, it is likely that the majority of the cover (both the primary and umbrella) covers will be utilised given that we are projecting more than \$3.3bn of future gross claim costs in actual money terms.

We anticipate that all insurance covers, other than the highest layer of insurance cover for some of the policy years, will be fully utilised.

#### *5.9.3 Public liability recoveries*

In relation to public liability, given that the cover is “each and every loss”, it is not likely that layers above the primary layer (\$1m) will be substantially impacted. It is possible that the non-primary layers could be triggered, although we recognise that this would require:

- a large public liability claim in excess of A\$1m; and

- that the period of exposure be of sufficient brevity or sufficiently concentrated that the allocated cost of the claim to any one year would be in excess of A\$1m.

Whilst it is possible that such claims may arise in the future, to date there has been no such evidence of a claim above \$1m in any one exposure year. Indeed, the largest allocation to any one exposure year has been approximately \$920,000 in relation to a claim with a total cost of \$1,068,000 which was spread over two exposure years.

This is not unsurprising as the average exposure period for mesothelioma claims has historically been approximately 16 years.

Accordingly, at this time we have made no allowance for any layer above the primary layer to generate public liability recoveries.

#### **5.10 Bad debt allowance**

We have made an allowance for general credit risk based on the credit rating of insurers of the Liable Entities using Standard & Poor's default rates.

We assume that insurance recoveries from syndicates of Lloyd's of London, which are reinsured by Equitas<sup>8</sup> (amounting to 45% of the coverage in the claims occurring period), will have 100% recoverability and that no credit risk charge is made against those recoveries. For the remaining companies, we have allowed for credit risk costs on the Insurance Recoveries.

We have estimated this credit risk cost by using the Standard & Poor's credit ratings of the insurers of the Liable Entities as at 31 March 2007 and the Standard & Poor's default rates by credit rating and duration (at December 2006), as shown in Appendix A, to estimate the cost of credit risk for each of the insurers and reinsurers.

Where additional information regarding the expected payout rates of solvent and insolvent Schemes of Arrangement is available we have instead taken the expected payout rates to assess the credit risk allowance to be made in our liability assessment.

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<sup>8</sup> The announcement by Berkshire Hathaway on 20 October 2006 that it would take over management of Equitas and provide additional capital (by way of a \$7bn reinsurance contract from Berkshire Hathaway to Equitas) appears to reduce the risk of insolvency to Equitas considerably at this time. Berkshire Hathaway is AAA rated by Standard & Poor's. Indications are that Berkshire Hathaway will ultimately assume the liabilities of Equitas, subject to regulatory approval.

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### **5.11 Cross-claim recoveries**

A cross-claim can be brought by, or against, one or more Liable Entities. Cross-claims brought against a Liable Entity (“Contribution Claims”) are included in our analysis of claims and such claims are treated as if the Liable Entities were joined by the plaintiff in the main proceedings as a joint defendant to the claim, as opposed to being joined as a cross-defendant by another defendant.

Cross-claims brought by a Liable Entity relate to circumstances where the Liable Entity seeks to join (as a cross-defendant) another party to the claim in which the Liable Entity is already joined.

To the extent that the Liable Entities are successful in joining such other parties to a claim, the contribution to the settlement by the Liable Entities will reduce accordingly.

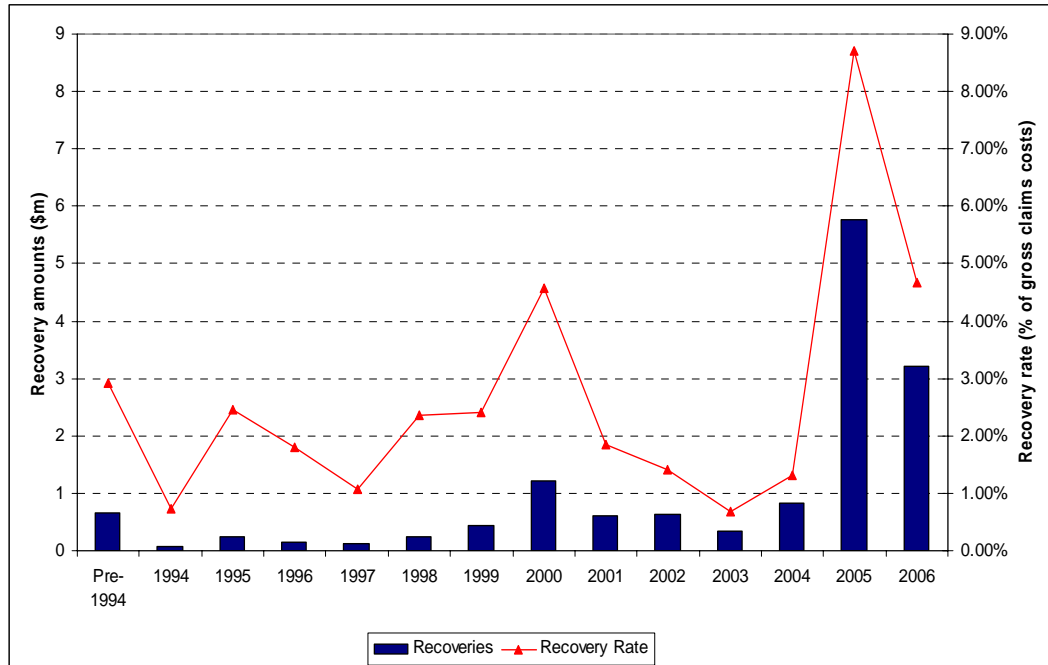
Within our valuation, we have treated such recoveries as being analogous to the cross-defendant being joined in the main proceedings and the liability of the Liable Entities being reduced.

Our approach in the valuation has been to separately value the rate of recovery (“cross-claims recovery rate”) as a percentage of the award based on historic experience of such recoveries.

We have valued these recoveries assuming that they become payable at the time of the claim.

The majority of cross-claim recoveries have been in relation to the Hardie-BI Joint Venture with CSR, including more than \$3m paid in 2005/06 in relation to a one-off clearance of cross-claims against CSR and Bradford Insulation in relation to the Hardie-BI Joint Venture.

**Figure 5.3: Cross-claim recovery experience**



Given the observations that 2005/06 (\$5.8m) and 2006/07 (\$3.2m) have been impacted by significant recoveries from CSR and also due to the impact of the Hardie-BI Joint Venture, and given that such recoveries in part relate to recoveries that ought to have been made earlier, the rate of recovery exhibited over the last two years is currently not believed to be a good guide to the future level of recovery.

The recent trend in recoveries has been aberrationally high, insofar that it reflects a catch-up of recoveries that should have been made earlier. We have therefore given greater regard to the overall experience to date rather than the trends in recent periods. We note in particular that the average rate of recovery from all years has been 3.3%, being \$14.6m from gross claim costs of \$443m (see Table 4.1).

Taking all of the above factors into account, we have assumed that future levels of cross-claim recoveries will be 3.0% of the average award. This is increased from our previous assumption of 2% and reflects increased understanding of the drivers of the recovery activity to date.

**5.12 Allowance for legal cost savings**

Within our valuation at 31 March 2007, we have made allowance for an estimate of the total cost savings anticipated to be achieved from the NSW Dust Diseases Tribunal reforms.



Our report makes allowance within our base valuation assumptions for the cost savings that have arisen to date, whether as a result of the cost savings initiatives implemented by ACS or the impact to date of the NSW Dust Diseases Tribunal reforms together with an estimate of the further savings that are yet to eventuate from those reforms.

### **5.13 Discounting cashflows**

Cashflows are discounted on the basis of yields available on Commonwealth government bonds of varying coupon rates and durations to maturity (matched to the liability cashflows).

It should be recognised that the yield curves and therefore the discount rates applied can vary considerably between valuations and can, and do, contribute significant volatility to the present value of the liability at different assessment dates.

## 6 ECONOMIC ASSUMPTIONS

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### 6.1 Overview

The two main economic assumptions required for our valuation are:

- The underlying claims inflation assumptions adopted to project the future claims settlement amounts and related costs.
- The discount rate adopted for the present value determinations.

These are considered in turn below.

### 6.2 Claims inflation

We are required to make assumptions about the future rate of inflation of claims costs. We have adopted a standard Australian actuarial claims inflation model for liabilities of the type considered in this report that is based on:

- An underlying, or base, rate of general economic inflation relevant to the liabilities, in this case based on wage/salary (earnings) inflation; and
- A rate of superimposed inflation, i.e. the rate at which claims costs inflation exceeds base inflation.

#### 6.2.1 Base inflation basis

Ideally, we would aim to derive our long term base inflation assumptions based on observable market indicators or other economic benchmarks. Unfortunately, such indicators and benchmarks typically focus on inflation measures such as CPI (e.g. CPI index bond yields and RBA inflation targets).

We have therefore derived our base inflation assumption from CPI based indicators and long term CPI / AWOTE<sup>9</sup> relativities.

#### 6.2.2 CPI assumption

We have considered two indicators for our CPI assumption:

- Market implied CPI measures.
- RBA CPI inflation targets.

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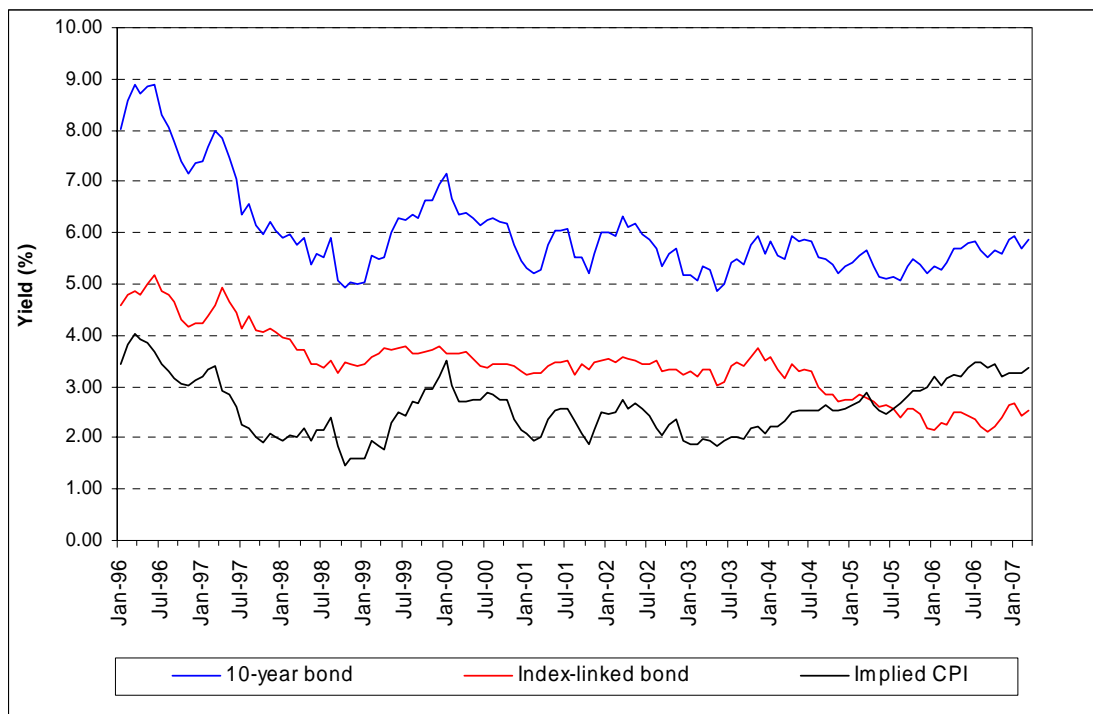
<sup>9</sup> AWOTE = Average Weekly Ordinary Time Earnings

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We have measured the financial market implied expectations of the longer-term rate of CPI by reference to the gap between the yield on government bonds and the real yield on government CPI index-linked bonds.

The chart below shows the yields available for 10-year Commonwealth Bonds and Index-linked bonds. The gap between the two represents the implied market expectation for CPI at the time.

**Figure 6.1: Trends in Bond Yields: 1996 - 2007**



Source: <http://www.rba.gov.au/Statistics/Bulletin/index.html>

It can be seen that the implied rate of CPI has varied between 1.5% per annum and 4% per annum during the last 10 years, although it broadly remained between 2% and 3% per annum from March 2000 to January 2006.

Currently, the effective annual yield on long-term government bonds is approximately 5.9% p.a. and the equivalent effective real yields on long-term index-linked bonds is approximately 2.5% per annum. This would imply current market expectations for the long-term rate of CPI were of the order of 3.4% per annum.

In considering this result we note that:

- The implied CPI rate varied significantly over the eighteen months to September 2006 (e.g. from around 2.5% as at 30 June 2005 to 3.4% at September 2006).

- The implied CPI rate has remained broadly stable, at between 3.2% and 3.4% per annum, over the last six months since September 2006.
- The yields on both nominal and CPI-linked government bonds are driven by supply and demand, and both are in increasingly short supply in the market. The yields on both, and their relativities, are subject to some volatility and likely some short term distortion.
- The RBA's long term target is for CPI to be maintained between 2% and 3% per annum.
- While the RBA has been relatively successful with this target over the recent past, over the longer term future the risk of events leading to inflation emerging occasionally outside this range needs to be allowed. Given a likely upside bias to such events, longer term inflation at the higher end of the RBA's range would not be unexpected.

Weighing this evidence together, this suggests a long term CPI inflation benchmark of 2.75% to 3.00% per annum.

### 6.2.3 Wages (AWOTE) / CPI relativity

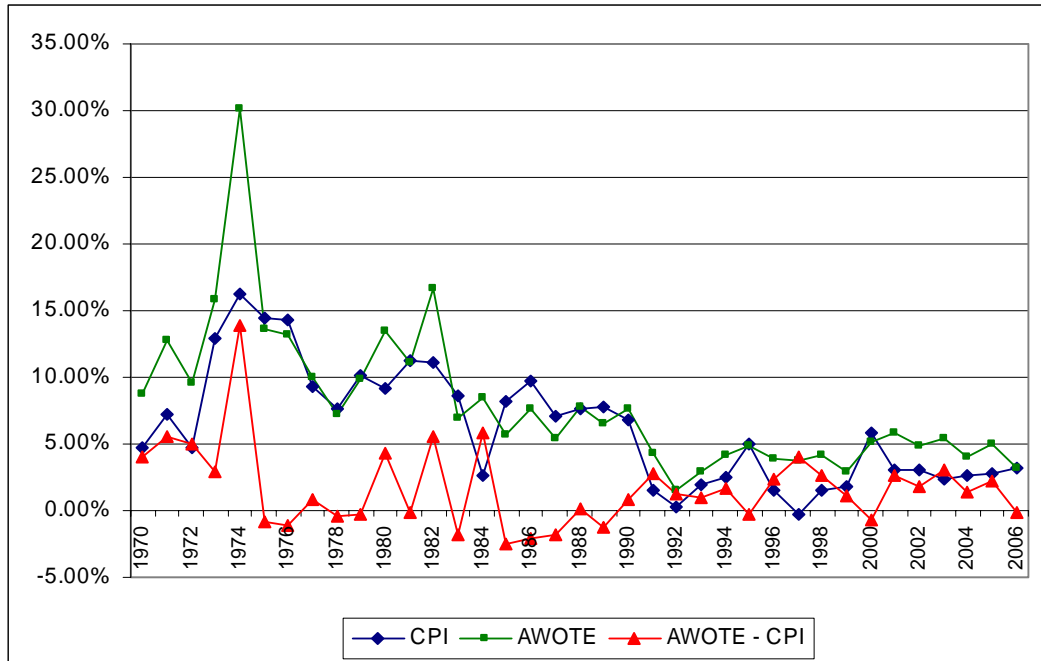
The following table summarises the average annualised rates of AWOTE and CPI inflation, and their relativities, for various historic periods:

**Table 6.1: Annualised rates of CPI and AWOTE**

	AWOTE	CPI	AWOTE – CPI
1970 – 2006	7.81%	6.19%	1.62%
1980 – 2006	5.72%	4.56%	1.16%
1990 – 2006	4.11%	2.42%	1.69%
1995 – 2006	4.38%	2.50%	1.88%
2000 – 2006	4.71%	2.86%	1.85%

Figure 6.2 shows these yearly results, graphically, for the 1970 to 2006 period.

**Figure 6.2: Trends in CPI and AWOTE: 1970 - 2006**



In considering the above, we note:

- The last period from 1995 reflects largely a continuous period of economic growth which may not be reflective of longer term trends.
- The longer periods cover a range of business cycles, albeit that the period from 1970 includes the unique events of the early 1970's (i.e. general inflationary pressures, both locally and worldwide, and the impact of high oil prices owing to the Oil Crisis in 1973).

Allowing for these factors, the historic data suggests a CPI / AWOTE relativity, or gap, of 1.5% to 1.75%.

On this basis, given a longer term CPI benchmark of 2.75% to 3.00%, it would suggest a longer-term wage inflation (AWOTE) assumption of 4.25% to 4.75% p.a.

We note that such an assumption is not inconsistent with actual wage inflation over recent years (see Table 6.1 above) which has arisen during economic conditions not dissimilar to those reflected in the current market interest rates looking forward.

#### *6.2.4 Impact of claimant ageing and non-AWOTE inflation effects*

The overall age profile of claimants is expected to rise over future years with the consequent impact that, other factors held constant, claims amounts should tend to increase more slowly than average wage inflation (excluding any societal changes, e.g. changes in retirement age). This is due to both reduced compensation for years of income or life lost and a tendency for post retirement age benefits to possibly increase closer to CPI than AWOTE.

Furthermore, we note that some heads of damage would be expected to rise at CPI or lower, such as general damages and compensation for loss of expectation of life, owing to the age profile of claimants showing a continuing upward trend in average ages. Other heads of damage, including loss of earnings, would be expected to rise at AWOTE (ignoring the ageing effect); whilst medical expenses and care costs would be expected to rise in line with medical cost inflation which in recent times has been in excess of AWOTE.

Taking these factors into account, we have reduced our base inflation assumption by 0.25% to 0.50% p.a. from the AWOTE rate indicated above for the combined effect of ageing and other non-AWOTE inflation drivers of the benefits.

Weighing all of this together, we have adopted a base inflation assumption of 4.25% p.a.

#### *6.2.5 Superimposed inflation*

As discussed later in Section 8, actual claims inflation has been approximately 6.3% per annum historically. This rate of claim inflation has prevailed against a backdrop of general wage inflation (making some minor allowance for ageing effects as above) over the same period of approximately 4% per annum. This implies average superimposed inflation has been approximately 2.2% per annum.

Prospectively, we have assumed that superimposed inflation will be 2.25% per annum over the long-term, although it should be noted that the actual rate of claim inflation exhibited in any one year will be inherently volatile.

In addition, the 2.25% per annum superimposed inflation allowance is not inconsistent with superimposed inflation experience we have seen under other relevant liability portfolios.

We discuss the claims inflation assumptions further in Section 8.

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### 6.2.6 Summary of claims inflation assumptions

The table below summarises the claims inflation assumptions we have used within our current and previous liability assessments.

**Table 6.2: Claims inflation assumptions**

	Current valuation	Previous valuation
Base inflation	4.25%	4.25%
Superimposed inflation	2.25%	2.25%
Claim cost inflation*	6.60%	6.60%

*\* Base and superimposed Inflation are applied multiplicatively in our models so that claim cost inflation is calculated as  $1.0425 * 1.0225 - 1$*

### 6.3 Discount rates: Commonwealth bond zero coupon yields

We have adopted the zero coupon yield curve at 31 March 2007, underlying the prices, coupons and durations of certain Australian government bonds for the purpose of discounting the liabilities for this report.

The use of such discount rates is consistent with standard Australian actuarial practice for such liabilities, is in accordance with Professional Standard PS300 and is also consistent with our understanding of the Australian accounting standards in this regard.

Table 6.3 shows the zero coupon yields adopted for each duration of cashflows.

**Table 6.3: Zero coupon yield curve by duration**

Year	Current valuation	Previous valuation
1	6.36%	6.02%
2	6.27%	5.84%
3	6.14%	5.69%
4	6.02%	5.57%
5	5.91%	5.48%
6	5.82%	5.42%
7	5.76%	5.38%
8	5.71%	5.37%
9+	5.67%	5.37%

The equivalent single uniform discount rate, based on cashflows weighted by term, is 5.88% per annum at 31 March 2007 (30 September 2006: 5.51% per annum).

#### **6.4 Consistency of economic assumptions**

An important consideration to bear in mind when setting economic assumptions is the consistency of the various assumptions. For a valuation involving the long-term inflating of cashflows and then discounting these cashflows to current money terms, a key consideration is the relativity between the inflation rate and discount rate assumptions.

Whilst future investment yields on government bonds will change, so too will the rate of future wage inflation and consequently also the overall rate of claims inflation. The key factor is whether the gap between the two factors remains reasonable.

Within our current valuation, we have allowed for base inflation at 4.25% per annum, superimposed inflation at 2.25% per annum, and average yields at 31 March 2007 of 5.88% per annum. As such, the gap between claims inflation and the yield is 0.72% per annum (being 6.60% – 5.88%).



This compares with our valuation at 30 September 2006 where the gap was 1.09% per annum (being 6.60% – 5.51%).

Taking the current and prospective economic environment into consideration, a reduction (of 37 basis points) in the gap between claims inflation and the yield on long-term government bonds appears reasonable.

## 7 ANALYSIS OF CLAIMS EXPERIENCE – CLAIM NUMBERS

### 7.1 Overview

We have begun by analysing the pattern of notifications of claims as shown in Table 7.1. This table shows the claim notifications by year.

**Table 7.1: Number of claims reported annually**

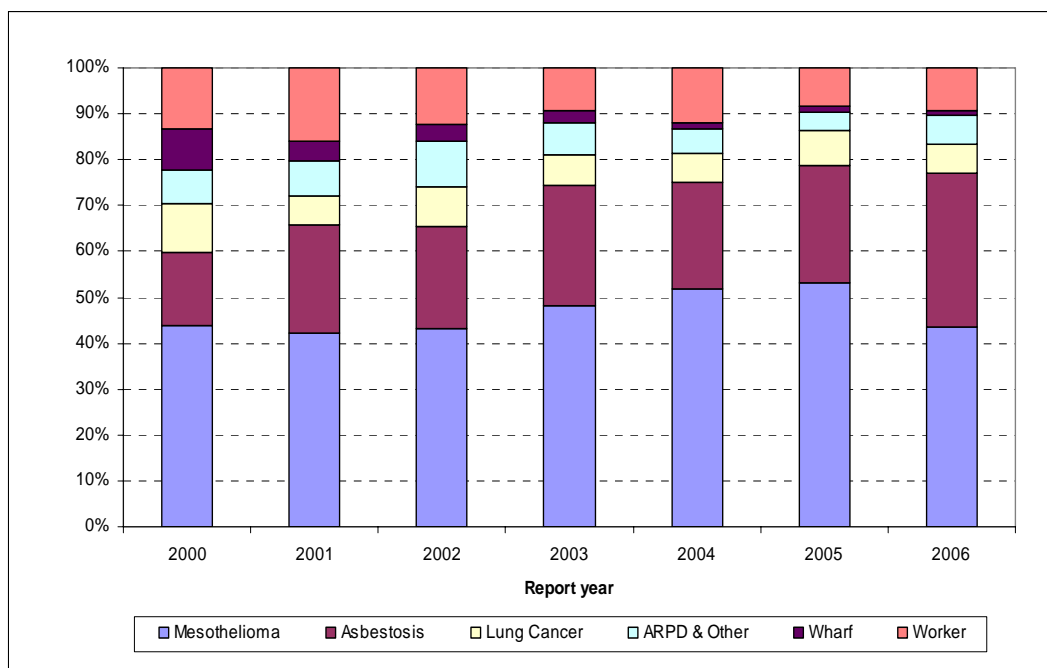
Report Year	Mesothelioma	Asbestos	Lung Cancer	ARPD & Other	Wharf	Workers Compensation	All claims
1994/95	81	14	8	14	4	30	151
1995/96	72	24	16	23	3	32	170
1996/97	84	36	15	19	2	40	196
1997/98	111	32	20	17	2	50	232
1998/99	93	25	12	13	3	30	176
1999/00	95	41	16	12	14	39	217
2000/01	126	46	30	21	26	38	287
2001/02	161	91	24	29	17	61	383
2002/03	179	92	36	41	15	51	414
2003/04	186	100	26	27	10	36	385
2004/05	263	119	32	27	6	61	508
2005/06	212	102	30	16	6	33	399
2006/07	202	155	30	29	5	43	464
<b>All Years (incl. pre-1994)</b>	<b>2,057</b>	<b>996</b>	<b>335</b>	<b>367</b>	<b>128</b>	<b>1,024</b>	<b>4,907</b>

*Note: Throughout this section the date convention used in tables and charts is that (for example) 2006/07 indicates the financial year running from 1 April 2006 to 31 March 2007. Furthermore, unless clearly identifying a calendar year the label "2006" in charts would indicate the financial year running from 1 April 2006 to 31 March 2007*

It can be seen that in recent years, mesothelioma has accounted for more than 40% of claims, and that this percentage increased from 42% in 2001/02 through to 2005/06 when mesothelioma claims represented 53% of claims by number.

In 2006/07, mesothelioma claims have accounted for 44% of claims, with asbestosis showing a significant increase (from 26% in 2005/06 to 33% of claims in 2006/07).

**Figure 7.1: Proportion of claims by disease type**



## 7.2 Mesothelioma claims

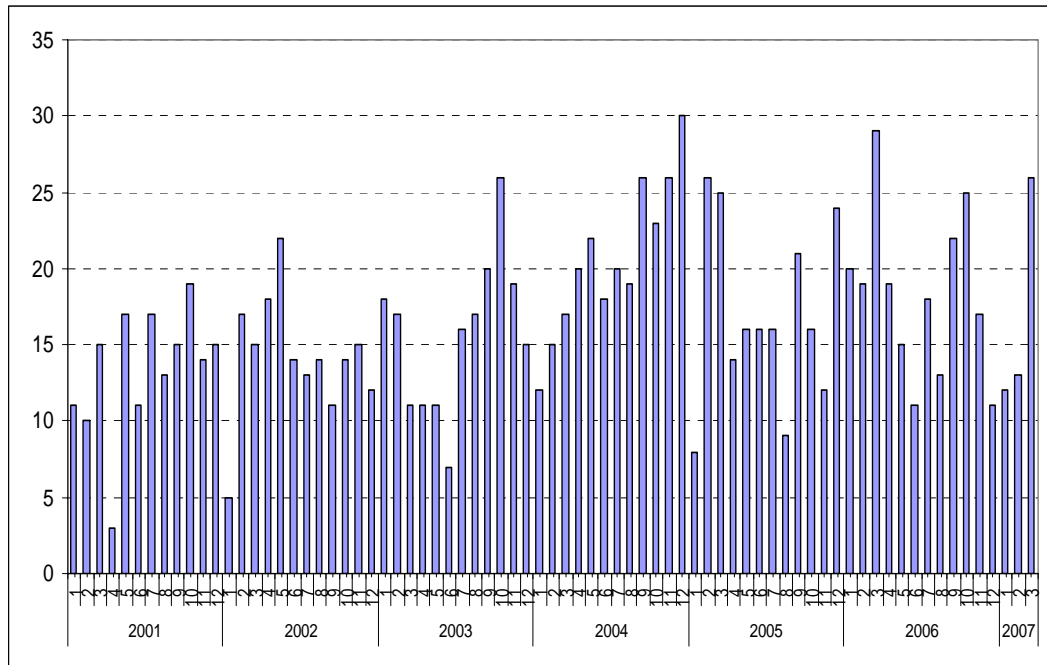
It can be seen that for mesothelioma, the incidence of notifications showed a step change upwards from 1999/00 through to 2001/02 and a steady rate of increase to the 2003/04 financial year, to 186 claims, with a further upward step in claim numbers during 2004/05 with 263 claims reported in the year.

There were 212 claims reported during 2005/06 and there have been 202 claims reported in 2006/07.

### 7.2.1 Monthly analysis of notifications

We have examined the mesothelioma claims reported on a monthly basis to better understand the nature of the trends.

**Figure 7.2: Monthly notifications of mesothelioma claims**



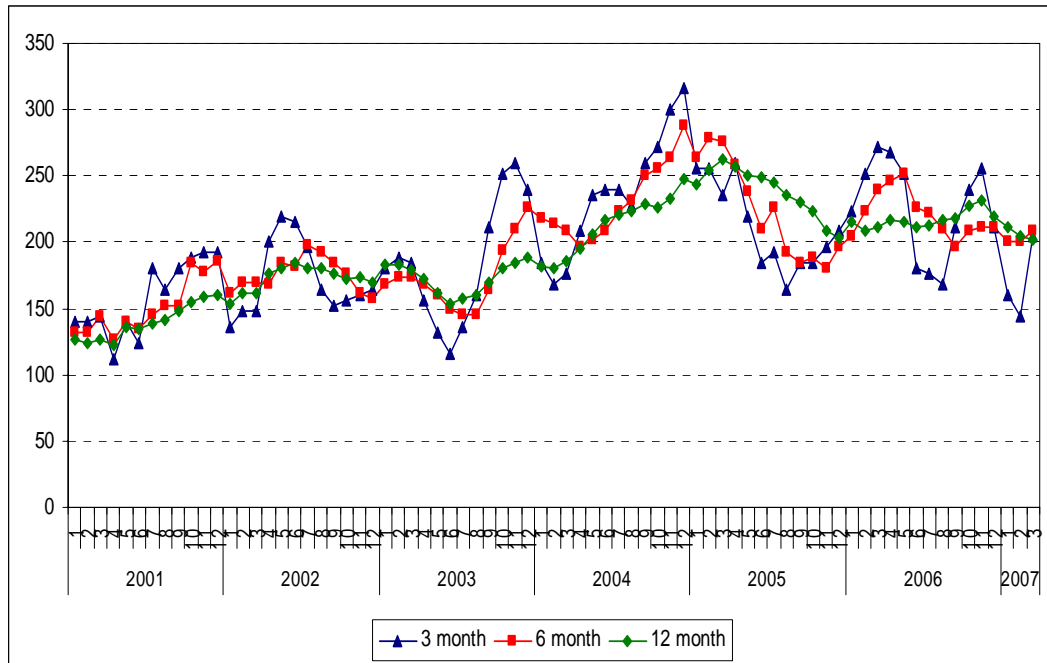
We have previously noted that high trend of 2004/05 had appeared to have abated somewhat during 2005/06. This lower trend of claims reporting appears to have continued during 2006/07.

There has been a degree of volatility in monthly reporting, with March 2007 showing a particularly high level of claims reporting (26 claims). That said, there is a degree of seasonality in claims reporting. For example, March has been high for each of the last three financial years (with 29 and 25 claims reported in the previous 2 years).

### 7.2.2 Rolling averages

We have also reviewed the number of mesothelioma claims reported on a monthly basis and reviewed the rolling 3-month, 6-month and 12-month averages in recent periods.

**Figure 7.3: Rolling annualised averages of mesothelioma claim notifications**



It can be seen that the current annualised rolling averages are between 202 (12 month average) and 208 (6 month average).

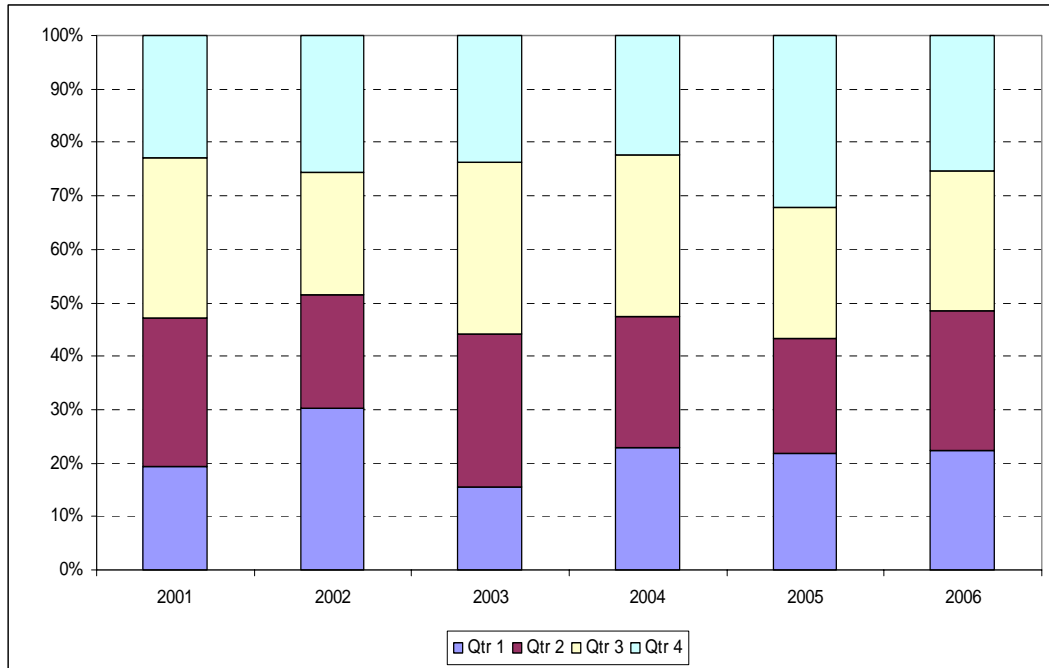
Generally, over the last two years, the 6-month and 12-month averages have remained within the range of 200 to 250 claims per annum.

The 3-month averages have, not surprisingly, shown more volatility, varying between 150 and 250 over the last twelve months.

### 7.2.3 Seasonality of claims reporting

Claim reporting has a degree of seasonality to it, with more of the claims activity in the second half of the financial year, as shown in the chart below.

**Figure 7.4: Quarterly reporting pattern of mesothelioma claims**



It can be inferred from the chart that (other than for 2002) around 46% of mesothelioma claims are typically reported in the first half of the financial year.

It appears that the 2006/07 financial year has followed a similar trend and, as such, the lower claim reporting in 2006/07 has been systemic across the whole year rather than any particular quarter being aberrationally low.

#### 7.2.4 Claims notifications by State

We have monitored the claims notifications patterns by State in which the claim is filed. Table 7.2 shows the number of claims notified by year by State.

**Table 7.2: Number of mesothelioma claims by location of claim filing**

Report Year	NSW	VIC	WA	QLD	SA	USA	Other	Total
1994/95	57	18		2			4	<b>81</b>
1995/96	48	17	2	3			2	<b>72</b>
1996/97	55	11	9	2			7	<b>84</b>
1997/98	83	16	4	3			5	<b>111</b>
1998/99	61	24	4	2			2	<b>93</b>
1999/00	58	21	8	2		1	5	<b>95</b>
2000/01	70	28	14			7	7	<b>126</b>
2001/02	104	28	21			2	6	<b>161</b>
2002/03	111	41	23	2			2	<b>179</b>
2003/04	113	47	26				0	<b>186</b>
2004/05	113	92	33	19	1		5	<b>263</b>
2005/06	98	58	35	6	11		4	<b>212</b>
2006/07	84	67	27	12	9	1	2	<b>202</b>
<b>All Years (incl. pre-1994)</b>	<b>1,163</b>	<b>521</b>	<b>232</b>	<b>54</b>	<b>21</b>	<b>12</b>	<b>54</b>	<b>2,057</b>

It is of note that for 2006/07:

- Experience in NSW is lower than previous years;
- Experience in Victoria and WA have overall been broadly similar to 2005/06;
- Experience in Queensland has reverted closer to levels previously observed in 2004/05, with a number of claims from WorkCover Queensland reported on the same day.

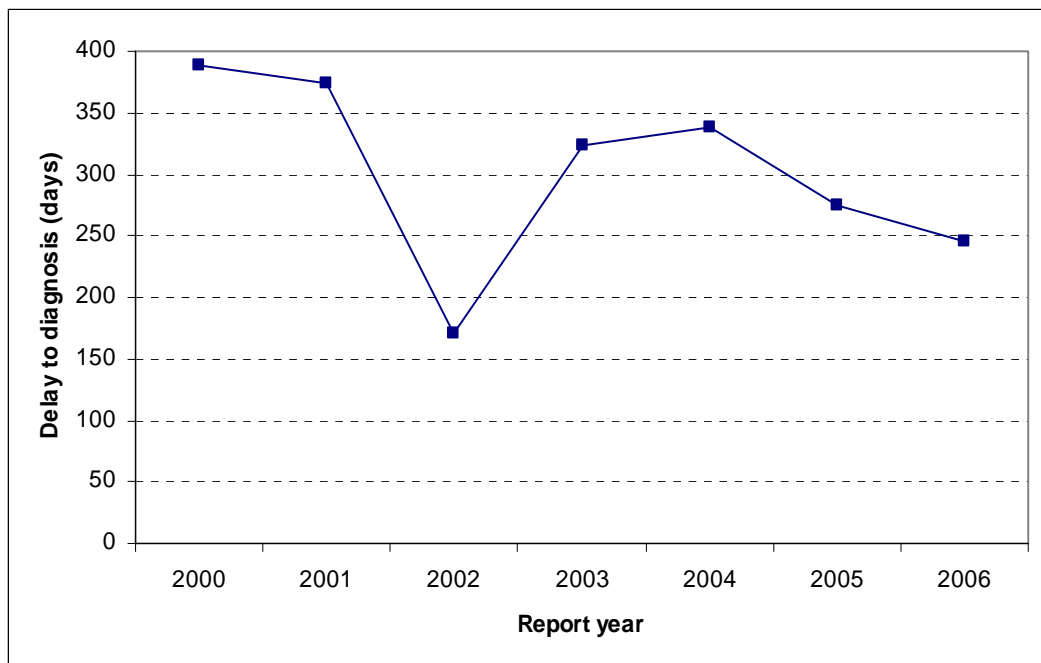
In part these trends in claims activity in the various States will also have been contributed to by the decisions of *BHP vs. Schultz*, which will lead to claims being more regularly heard in the State of exposure rather than NSW.

It is not clear what is causing the reduction in mesothelioma claims activity in NSW (notwithstanding the likely impact of *BHP vs. Schultz*) although we understand this experience is being observed for other defendants and also in the insurance industry.

### 7.2.5 Delay from diagnosis to notification

We have reviewed the delay from diagnosis to notification to understand whether the reduction in claims reporting could be due to backlogs emerging in claim reporting.

**Figure 7.5: Delay from diagnosis to notification: mesothelioma claims**



The chart suggests that there has been an acceleration in reporting over the last three years as the delay from diagnosis to notification has reduced by around 100 days over the last three years. This does not seem to indicate that there is a backlog developing in claims reporting.

The current delay is approximately 8 months.

### 7.2.6 Base valuation assumption

In setting a base valuation assumption for 2007/08, we need to consider whether the observations in the last two years were one-off fluctuations or were part of a new trend.



We are of the opinion that the sharp increase in claim reporting activity in the latter part of 2004 and early part of 2005 were a function of accelerated reporting by plaintiff lawyers in order to preserve the rights of their clients to claim against the Liable Entities, owing to concerns at that time over the financial position of the MRCF and the ability of the MRCF to continue to meet its liabilities.

As a consequence, the surge in claims activity in the latter part of 2004/05 represented a “bringing forward” of claims that would otherwise have been reported in the early part of 2005/06.

***Base mesothelioma valuation assumption adopted***

In setting an assumption for mesothelioma activity in 2007/08, we have taken into account the experience in 2005/06 and 2006/07.

We have also allowed for the late processing that we have observed in the last two financial years, which have shown an increase of around 10 claims after the financial year-end.

At the previous two valuations, our projected level of claims activity for 2007/08 onwards was set by giving equal credibility to 2004/05 and 2005/06, being the two most recent complete years. In our September 2006 valuation, we gave little additional credibility to the trends in the first six months of 2006/07 because it was a period of only 6 months.

However, at this valuation, we are now faced with having had two consecutive and complete years of claims reporting much lower than that observed in 2004/05.

In setting our valuation assumption for 2007/08 we have given increased credibility to the emerging experience in the last two years and this has resulted in a 10% reduction in future claim numbers.

Our revised projection for 2007/08 equates to a future reporting activity of 18.5 claims per month for the next 12 months, or 222 claims. This compares with our previous estimate, at 30 September 2006, of the number of claims reported in 2007/08 of 245 claims.

**7.3 Asbestosis claims**

It can be seen in Table 7.1 that for asbestosis, the incidence of notifications has shown a step change upwards since 2000/01 and a gradual increase to 2003/04.

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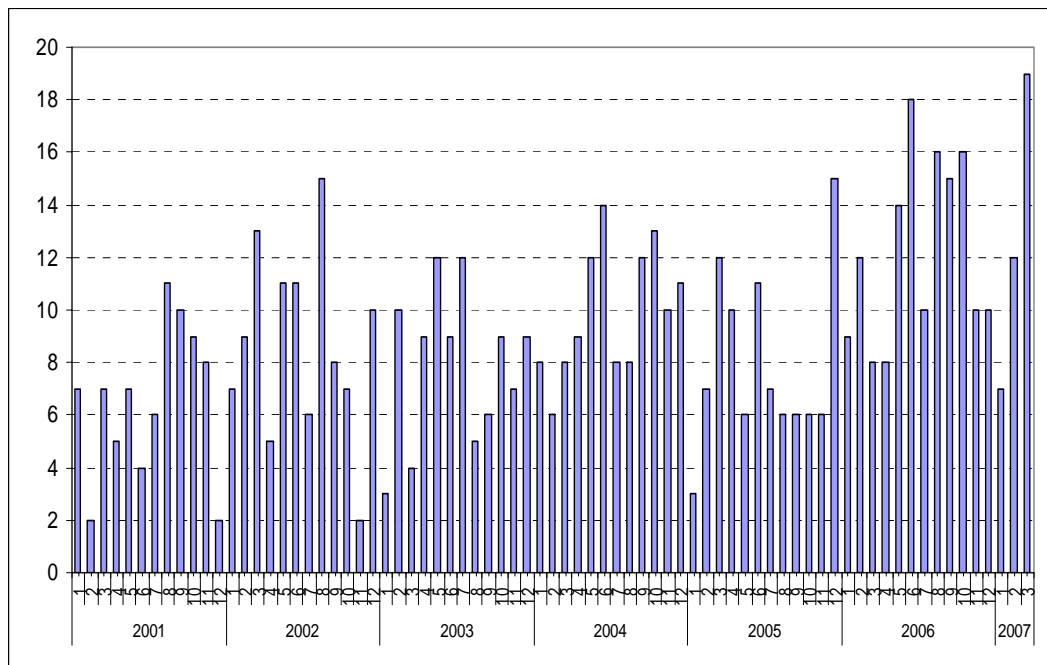
The number of asbestosis claims increased substantially from 100 in 2003/04 to 119 in 2004/05 and then fell back to 102 claims in 2005/06.

There have been 155 claims reported in 2006/07, which is considerably above previous experience and prior expectations.

### 7.3.1 *Monthly analysis of notifications*

We have examined claims on a monthly basis to better understand the nature of the trends.

**Figure 7.6: Monthly notifications of asbestosis claims**



It is observed that:

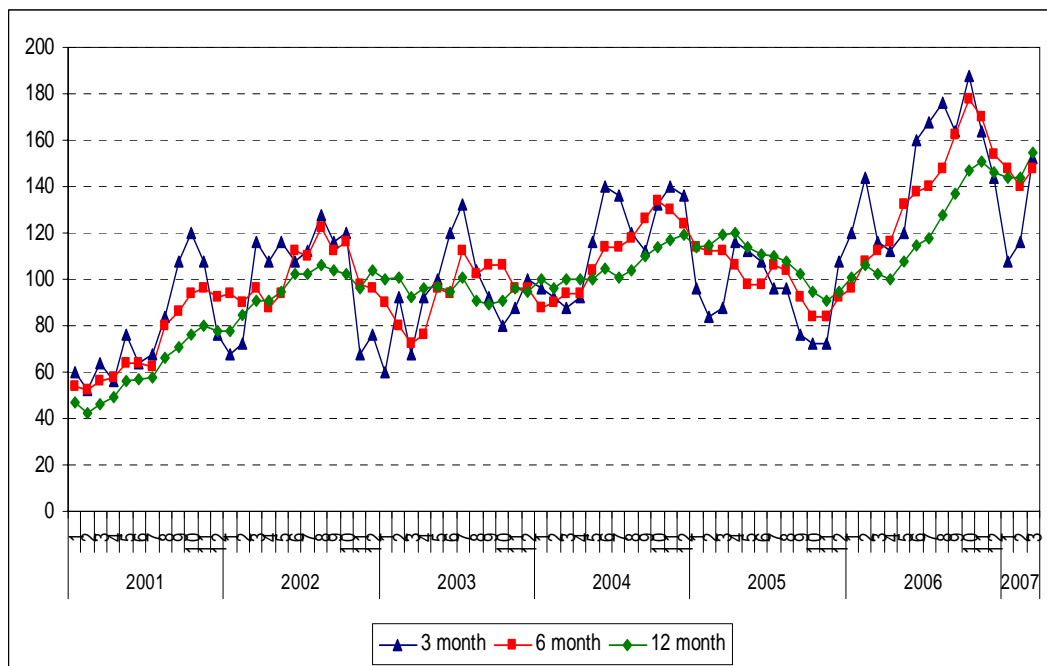
- The first and second quarters of 2006/07 showed a significant increase in claims reporting compared to 2005/06;
- The third quarter of 2006/07 showed a degree of slow-down, although the level of reporting activity was still above prior expectations; and
- This level of reporting activity was last observed during the first and third quarters of 2004/05 which were associated with significant publicity surrounding the Special Commission of Inquiry and the subsequent concerns over the ability of the MRCF to meet liabilities when they fall due.

It appears that the increase in asbestosis activity has arisen at the same time that mesothelioma activity has fallen, and by broadly similar numbers.

### 7.3.2 Rolling averages

As with mesothelioma, we have considered rolling 3-month, 6-month and 12-month averages in considering the projected level of claims activity in 2006/07.

**Figure 7.7: Rolling annualised averages of asbestosis claim notifications**



It is not surprising that asbestosis shows greater volatility than mesothelioma, given the smaller number of claims involved. It can be seen that recent 3 month averages have varied between 108 and 188 claims per annum, with it currently running at 152 claims per annum.

The 6-month and 12-month averages are currently running at around 148 and 155 claims per annum respectively.

### 7.3.3 Claims notifications by State

It has been observed that the number of claims being filed in Victoria (see below) showed a considerable increase in 2004/05 and 2005/06, whilst activity in NSW fell considerably in 2005/06 only to return to a more usual level of activity during 2006/07.

Claims activity in Queensland in 2006/07 has been considerably greater than in previous years, whilst South Australia has also shown an increase in reporting activity (although it currently contributes less than 10% of claims by number).

**Table 7.3: Number of asbestosis claims by location of claim filing**

<b>Report Year</b>	<b>NSW</b>	<b>VIC</b>	<b>WA</b>	<b>QLD</b>	<b>SA</b>	<b>USA</b>	<b>Other</b>	<b>Grand Total</b>
1994/95	11	3						<b>14</b>
1995/96	19	3			1		1	<b>24</b>
1996/97	27	8	1					<b>36</b>
1997/98	28	4						<b>32</b>
1998/99	21	3					1	<b>25</b>
1999/00	28	12				1		<b>41</b>
2000/01	36	7				2	1	<b>46</b>
2001/02	75	15			1			<b>91</b>
2002/03	79	9			3		1	<b>92</b>
2003/04	75	21	3	1				<b>100</b>
2004/05	80	26	4	7	1		1	<b>119</b>
2005/06	35	39	2	20	5		1	<b>102</b>
2006/07	62	37	3	37	14		2	<b>155</b>
<b>All Years (incl. pre-1994)</b>	<b>641</b>	<b>229</b>	<b>20</b>	<b>65</b>	<b>25</b>	<b>4</b>	<b>12</b>	<b>996</b>

There was a step-change in the level of asbestosis claims activity from 2000/01 to 2001/02 in NSW with claims activity more than doubling in that year.

Activity in NSW fell considerably in 2005/06 although it appears that part of that reduction could be explained as being the impact of *BHP vs. Schultz*, such that claims were increasingly filed in Queensland or South Australia as opposed to the previous practice of such claims being heard in the Dust Diseases Tribunal.

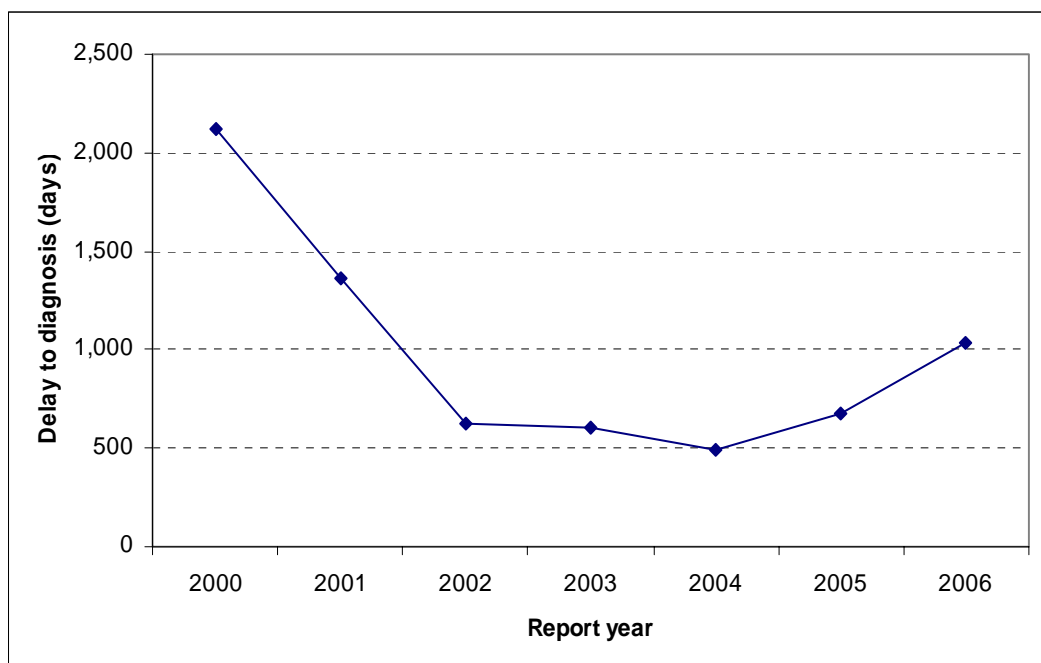
However, in 2006/07 the level of claims activity in NSW has shown a significant increase, reverting closer to levels experienced prior to 2005/06. At the same time, Queensland and South Australia have shown further increases in claim numbers.

We have reviewed the sources of asbestosis claims in 2006/07 to assess whether the significant escalation in claims activity has arisen from one source or involving a number of cross-claims from one particular entity. However, our analysis indicates that there were no discernable trends.

#### 7.3.4 Delay from diagnosis to notification

We have reviewed the delay from diagnosis to notification to understand whether the increased reporting was a function of changes in procedures by plaintiff law firms.

**Figure 7.8: Delay from diagnosis to notification: asbestosis claims**



The chart indicates that for claims reported in 2006/07, the average delay has increased by more than 300 days this year.

This suggests that a number of the claims reported to the Liable Entities in 2006/07 were “in the system” for a long while before the claim was filed against the relevant Liable Entity.

We therefore believe that some of the increase in activity in 2006/07 has been due to a “backlog clearance” by plaintiff law firms of claims that were already advised to them.

We believe the chart helps to explain one possible cause of the increase in reporting activity in 2006/07.

#### **7.3.5 Base valuation assumption**

For 2006/07, claims reporting was 155 claims. However, as we have noted previously, we believe some of this was a clearance of backlog in the system based on our analysis of the delays from diagnosis to notification.

It is not clear whether such a trend in late processing and emergence of claims will continue in the future but at this time we feel it appropriate to assume there will be some continuation of this in the near term, particularly if mesothelioma claims reporting remains low.

We have therefore estimated 156 claims to be reported in 2007/08. This is an increase of 18% compared with our previous estimate for 2007/08 of 132 claims.

#### **7.4 Lung cancer claims**

For lung cancer claims, claim notifications have been steady and do not appear to have shown the same pattern of notification as mesothelioma and asbestosis. There were 30 claims reported during 2005/06 and 30 reported in 2006/07.

We have estimated 30 claims to be reported in 2007/08.

#### **7.5 ARPD & Other claims**

For ARPD & Other claims, the number of claims have been volatile, with 41 reported in 2002/03, 16 claims reported in 2005/06 and 29 claims reported in 2006/07.

We have estimated 30 claims to be reported in 2007/08.

#### **7.6 Workers Compensation and wharf claims**

The number of Workers Compensation claims, including those met in full by the Liable Entities’ Workers Compensation insurers, has exhibited some degree of volatility ranging from 33 claims to 61 claims in the last six years.

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In 2005/06, there were 33 claims reported and in 2006/07 there were 43 claims reported.

We note that if the underlying level of claims activity was expected to be 48 claims per annum, the range of observations would be 34 to 62 claims (broadly representing a 95% confidence interval). It is therefore quite likely that the experience in the last five years simply reflects statistical variation.

We have estimated 48 claims to be reported in 2007/08.

It should be noted that the financial impact of this source of claim is not substantial given the proportion of claims which are settled for nil liability against the Liable Entities (in excess of 90%), which results from the insurance arrangements in place.

For wharf claims, we have projected 6 claims to be notified in 2007/08. Again, the financial impact of this source of claim is not material.

#### **7.7 Summary of base claims numbers assumptions**

In forming a view on the numbers of claims in 2007/08, we have taken into account the emerging experience in the latest financial year (2006/07) and a revised view of the expected numbers of claims reported monthly based on recent trends.

In forming a view as to the base number of claims in 2007/08 from which we calibrate the curve of claims notifications, we have also considered the extent to which the 2004/05 and 2005/06 experience, or previous trends in claims numbers, will continue.

As outlined in Sections 7.2 to 7.6, our assumptions as to the levels of claims numbers to assume are as follows:

**Table 7.4: Base claim numbers assumptions**

	Average 2004/05 and 2005/06	First half- year of 2006/07 (annualised)	Second half- year of 2006/07 (annualised)	2007/08 (projected)
Mesothelioma	237	196	208	222
Asbestosis	111	162	148	156
Lung Cancer	31	20	40	30
ARPD & Other	21	34	24	30
Wharf claims	6	4	6	6
Workers Compensation	47	46	40	48
<b>Total</b>	<b>453</b>	<b>462</b>	<b>466</b>	<b>492</b>

*Note: Annualised figures do not make allowance for any seasonality of reporting or for late processing adjustments. They are calculated by multiplying the half-year experience by a factor of 2.*

It can be seen that the first half and second half of 2006/07 have been very similar in terms of overall activity, although the mix of claims by disease type has shown a degree of variation.

Our projection for 2007/08 compares with a previous projection (as at 30 September 2006) for 507 claims in 2007/08.

The reduction in the assumption predominantly reflects the low mesothelioma claims reporting now being given credibility after two successive years of lower reporting than was otherwise expected.

## **7.8 Exposure and latency information**

To project the pattern of incidence of claims against the Liable Entities, we have constructed a model which utilises the following inputs:

- The exposure to asbestos in Australia, adjusted to allow for the Liable Entities particular incidence of usage, noting that for the period to 1987 they had approximately a uniform market share but thereafter were not involved in asbestos products;
- The average period over which claimants are typically exposed; and

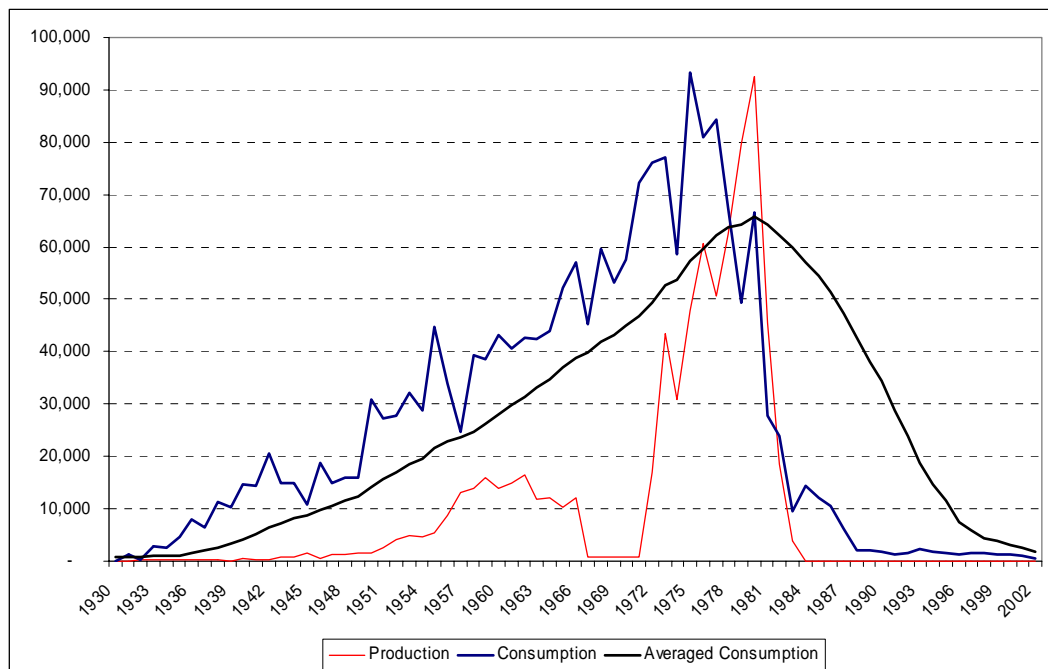


- The distribution of the latency period from average exposure for each disease type.

### 7.8.1 Australian use of asbestos

Figure 7.9 shows measures of the production and consumption of asbestos in Australia in the period 1920 to 2002. It can be seen that the exposure, being measured in net consumption, appeared to peak in the early to mid 1970s. It can also be seen that for Australia as a whole, asbestos consumption continued at significant levels until the mid 1980s and then began to fall, but nonetheless continued through to 2002.

**Figure 7.9: Consumption and production indices – Australia 1920-2002**



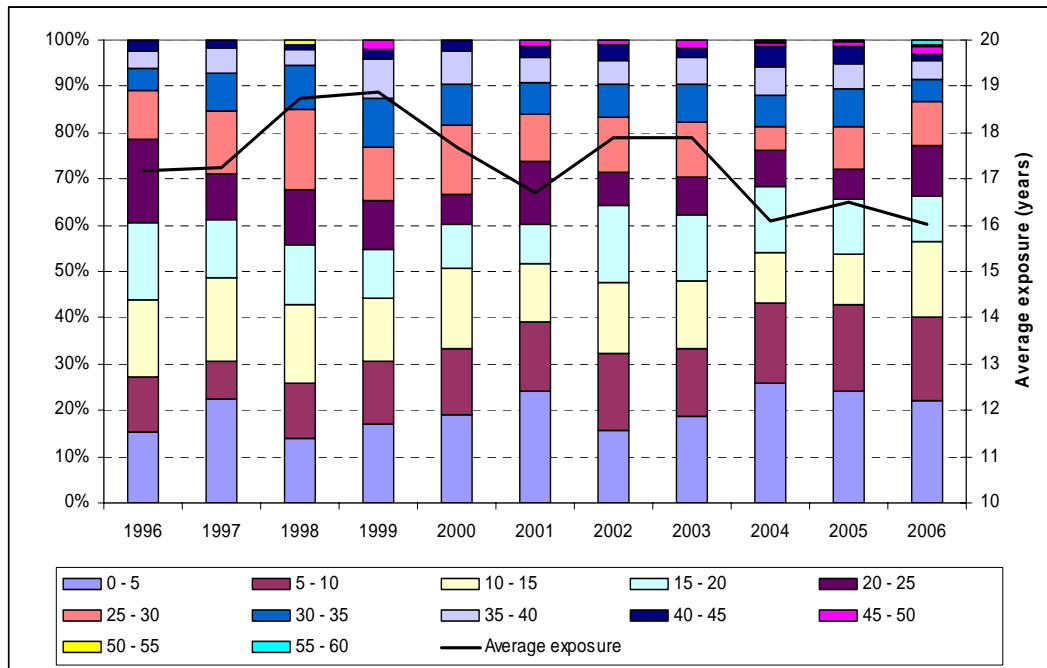
Source: World Mineral Statistics Dataset, British Geological Survey, [www.mineralsuk.com](http://www.mineralsuk.com)  
 R Virta, USGS Website Annual Yearbook  
 The data underlying this chart is shown in Appendix I.

The “averaged consumption” is derived as the consumption averaged over the prior 16-year period. The 16-year assumption for “averaging” the exposure is based on experience specific to the Liable Entities and reflects that, for the Liable Entities, claims have (on average) related to 16 years of exposure.

It is the averaged consumption which is used as a basis for projecting future mesothelioma claims numbers.

The following chart show the derivation and support for the assertion that claims have resulted from, on average, 16 years of exposure.

**Figure 7.10: Mix of claims by duration of exposure (years): 1996-2006**



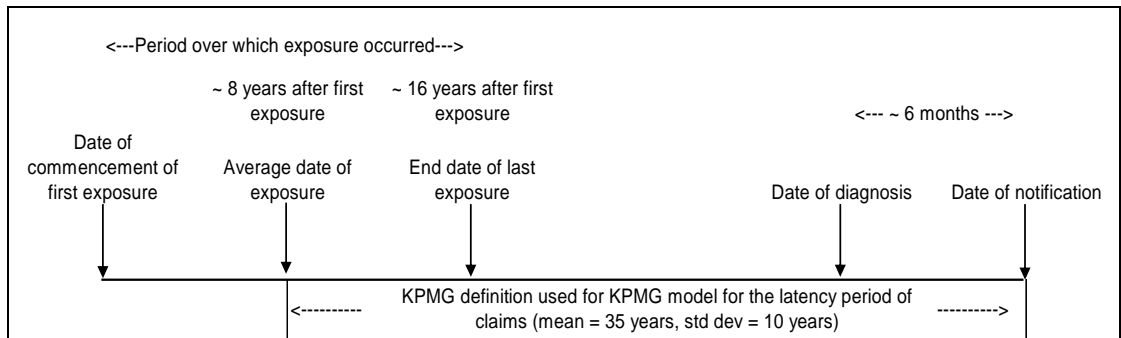
It can be seen that the average duration of exposure has generally varied between 16 years and 19 years, with an average of 16.8 years over the last five years and 17.1 years over the last ten years.

The general trend has been downwards in recent years, indicating that recently reported claims have arisen from shorter periods of exposure.

This analysis justifies our current model assumption that the averaging exposure period for the Liable Entities is approximately 16 years.

The following chart shows the timeline of exposure, diagnosis and claims reporting.

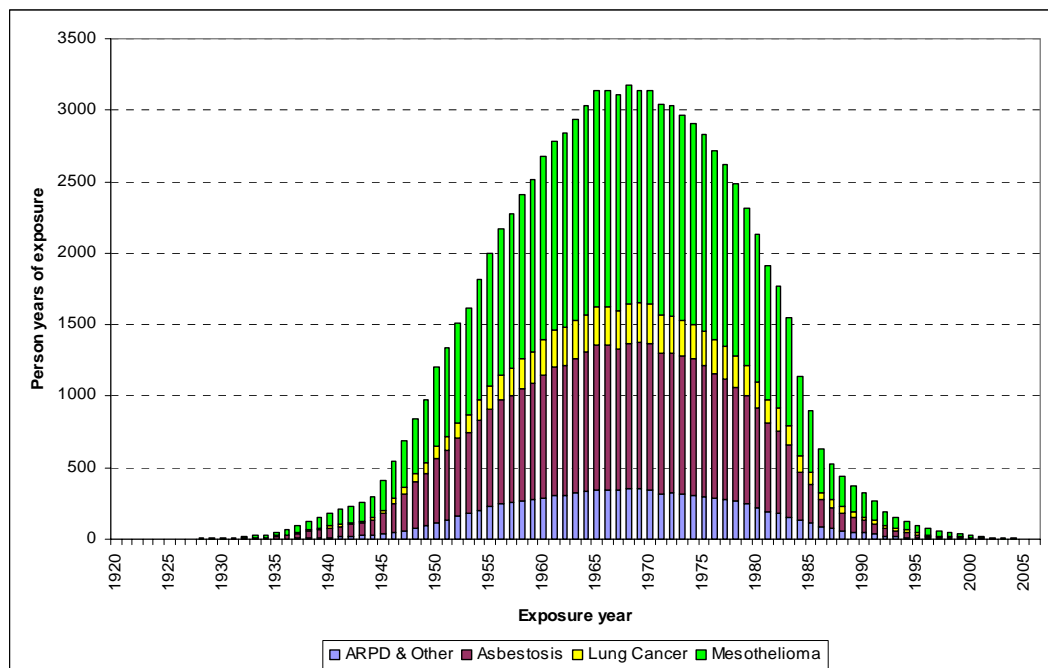
**Figure 7.11: Timeline of exposure and claim reporting**



**7.8.2 Exposure information from current claims**

We have also reviewed the actual exposure information available in relation to claims notified to date. This has been conducted by using the exposure dates stored in the claims database at an individual claim level and identifying the number of person-years of exposure in each exposure year. We have reviewed the pattern of exposure for each of the disease types separately, although we note that they tend to follow similar patterns for each disease type.

**Figure 7.12: Exposure (person-years) of all Liable Entities' claimants to date**



The chart shows that the peak of exposure from claims reported to date has so far arisen in 1968. It should be recognised that there is a significant degree of bias in this analysis in that the claims notified to date will tend to have arisen from the earlier periods of exposure.

Over time, one would expect this curve to develop to the right hand side and the peak year of exposure to trend towards the early to mid 1970s, whilst also increasing in absolute levels at all periods of exposure as more claims are notified and the associated exposures from these are included in the analysis.

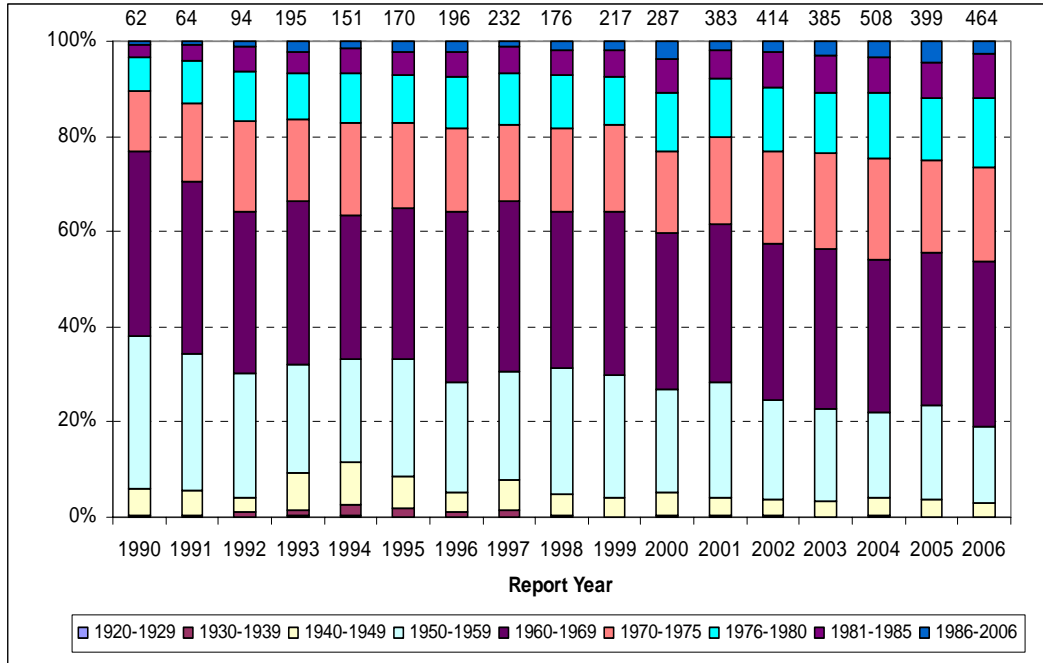
The relatively low level of exposure from 1987 onwards (about 3% of the total) is not unexpected given that products ceased to be manufactured in 1987 but the exposure after that date likely results from usage of products already produced and sold before that date.

This chart is a cumulative chart of the position to date and does not show temporal trends in the allocation of claims to exposure years.

For example, one would expect that more recently reported claims should be associated with, on average, later exposures; and that claims reported in future years would continue that trend to later exposure periods. If this did not occur, it would suggest mean latency periods would increase substantially over time and that the claimant's age at diagnosis would also rise considerably. This does not appear to be commensurate with trends to date or for that matter with epidemiological research of mesothelioma.

To understand better these temporal trends, we have modelled claimants' exposures for each past claim report year since 1990/91 to 2006/07 separately.

**Figure 7.13: Exposure (person years) of all claimants to date  
 by report year and exposure year**



As can be seen in the above chart, there has been a general increasing shift towards the 1970-1985 period, evident by the downwards trends in the chart from left to right indicating that an increasing proportion of the claimants' exposure relates to more recent exposure periods.

We would expect that such a trend should continue for some time to come and that an increasing proportion of the exposure will relate to the period 1981 to 1985.

### 7.8.3 Latency model

Our method for projecting claim numbers is described in Section 5.4.

In brief terms, we use the exposure curve (averaged consumption) together with a model of the latency period of claims to derive an index of future claim notifications. We then calibrate this index to a base number of claims notifications to estimate the future incidence of claims reporting.

Our latency model for mesothelioma is for latency from the average date of exposure to be normally distributed with a mean latency of 35 years and a standard deviation of 10 years.

We have monitored the latency period of the claims of the Liable Entities in order to test the validity of those assumptions.

We have measured the mean latency period from the average date of exposure to the date of notification of a claim.

In strict epidemiological terms, the latency period should be measured from the date of first exposure to the date of diagnosis.

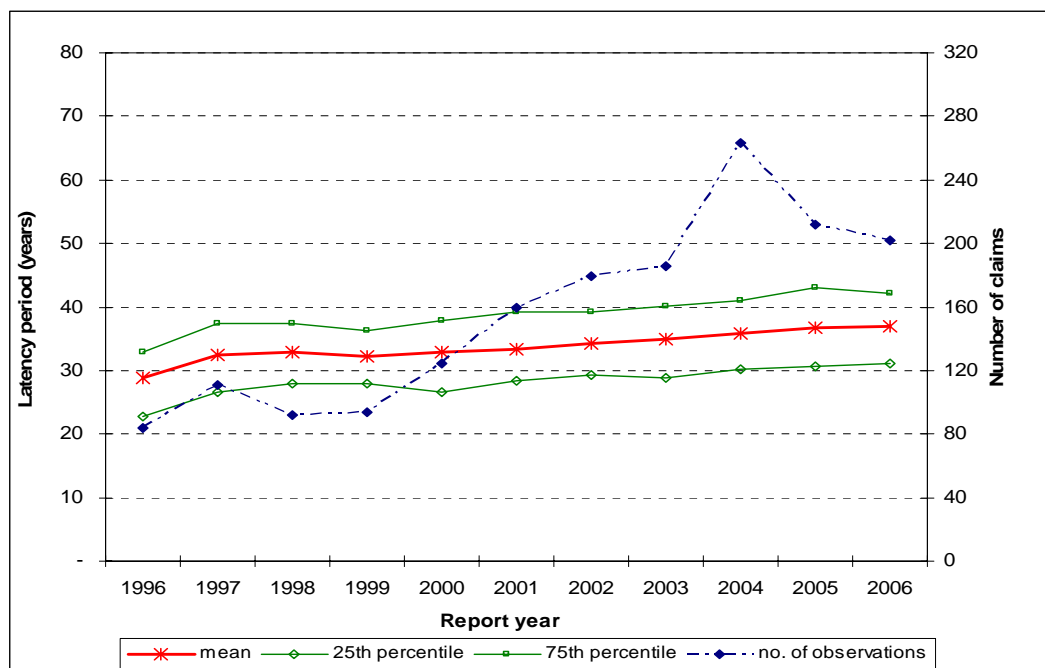
Because our model utilises latency assumptions from the average date of exposure, the latency period reported in the following charts is not directly comparable with that referred to in epidemiological literature.

As indicated in Figure 7.11, the average period of exposure for claimants against the Liable Entities is around 16 years. This means the actual latency period from the date of first exposure is around 8 years more than indicated in the following charts.

Given that the date of notification lags the date of diagnosis by around 8 months for mesothelioma and by about 2 to 3 years for non-mesothelioma disease types, the latency trends shown in the following charts might slightly overstate the latency to diagnosis (by around 4 months for mesothelioma and by around 1 to 1.5 years for non-mesothelioma).

The charts below show the average (mean) latency and the 25<sup>th</sup> percentile and 75<sup>th</sup> percentile observations.

**Figure 7.14: Latency of mesothelioma claims**



The above charts indicate that the average latency period from the average exposure is around 35 years for mesothelioma.

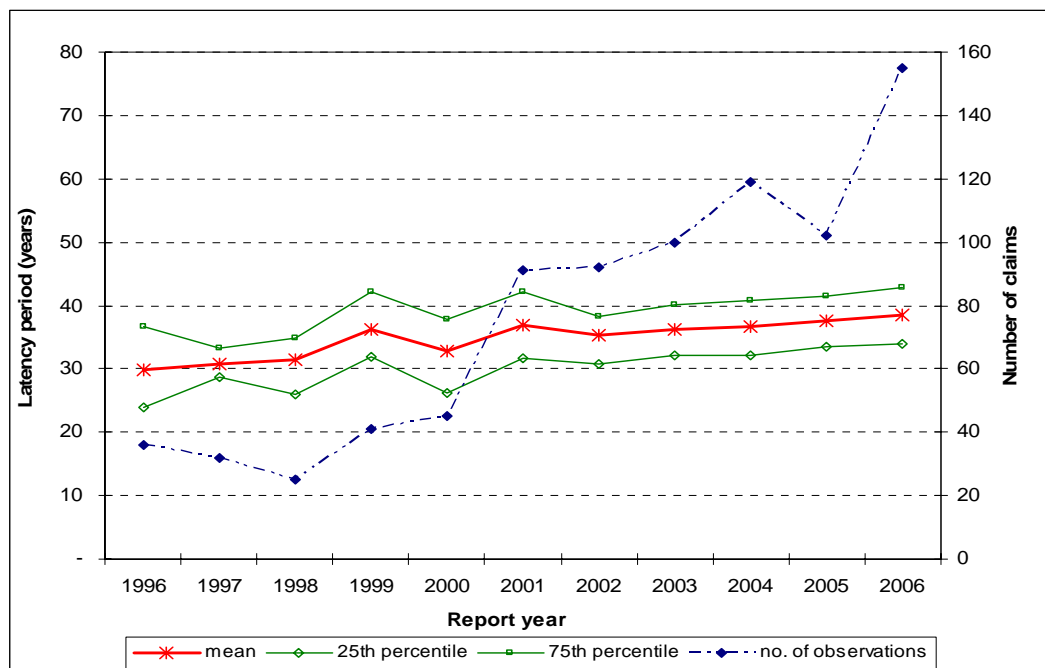
Epidemiological studies tend to suggest that the observed latency period (from first exposure) for mesothelioma is between 4 and 75 years, with an average latency of around 35 to 40 years.

Given that the average period of exposure is 16 years, this implies our latency assumption from the date of first exposure is approximately 43 years (being  $35 + \frac{1}{2} \times 16$ ). Our model therefore accords with epidemiological literature and, if anything, implies slightly longer latencies than epidemiological studies suggest.

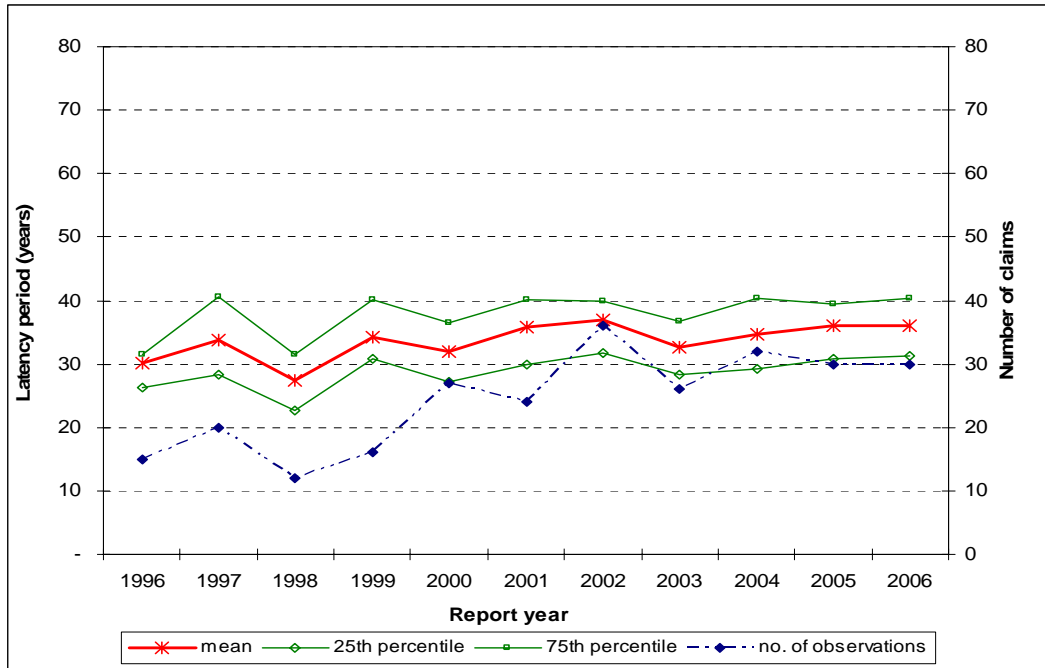
It is not surprising that the average latency period observed is showing an upward trend. This is because an analysis of the latency period would be biased in early years as the claims that are reported in the earlier years must necessarily result from earlier exposures (e.g. 1940s) and be associated with shorter latency. By contrast, claims reported in the later years (e.g. 2040 onwards) will likely result from later exposure (e.g. in the 1980s) and be associated with longer latency.

The currently observed standard deviation of the latency period is about 9 years.

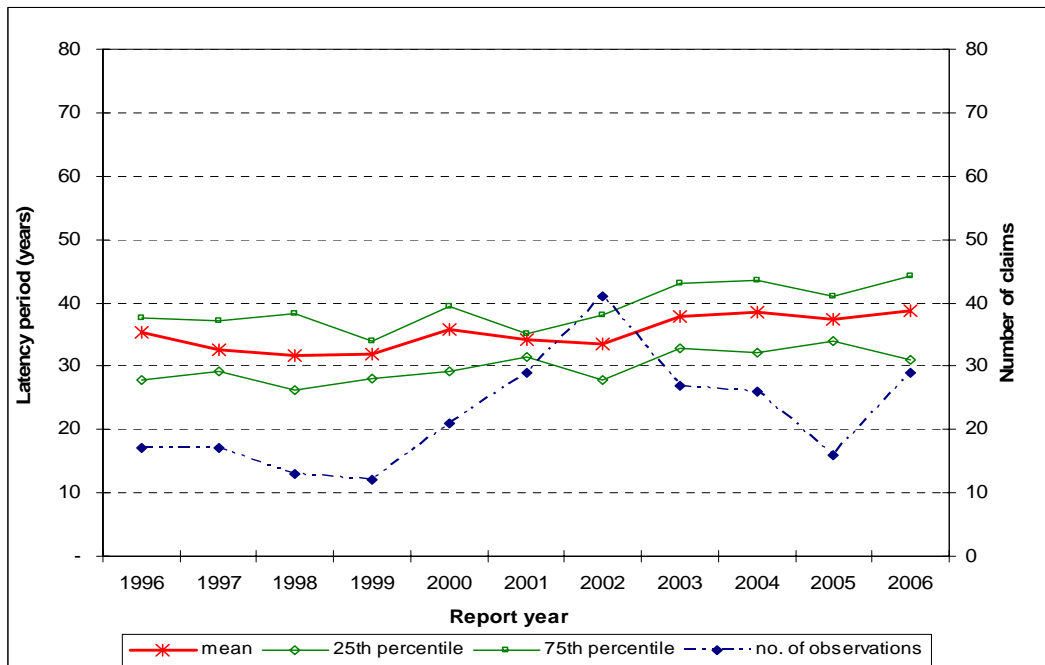
**Figure 7.15: Latency of asbestosis claims**



**Figure 7.16: Latency of lung cancer claims**



**Figure 7.17: Latency of ARPD & Other claims**



The latency periods for the other disease types shows a more surprising trend.



The actual latency periods experienced for these disease types appears longer than epidemiological literature has tended to suggest (particularly when adjusting our information to the latency from first exposure).

This longer latency is factored into our considerations when determining the projected peak and pattern of incidence for the other disease types.

At present, given that we are some 30 to 40 years after the main period of exposure, claims currently being reported reflect a broad mix of claims of varying latencies. Accordingly, any analysis of the latency period during the most recent 5 to 10 years:

- Should provide a good indicator of the underlying average latency period of each disease type; and
- Should show some slight upwards trends given the fall-off in exposure in the late 1970s and 1980s.

Accordingly, at this time the claims experience provides support to our assumption as to the mean latency period of mesothelioma claims and seems to accord with epidemiological research in relation to mesothelioma, once the relevant adjustments to standardise onto a consistent terminology are made.

A summary of our overall latency assumptions by disease type are shown below.

**Table 7.5: Assumed latency periods by disease type from average date of exposure to notification**

	Mean (years)	Std Dev (years)
Mesothelioma	35	10
Asbestosis	30	10
Lung Cancer	35	10
ARPD & Other	30	11
Wharf	n/a	n/a
Workers Compensation	n/a	n/a

#### 7.8.4 The Clements paper

We have read the paper “Actuarial projections for mesothelioma: an epidemiological perspective” by Clements, Berry and Shi (“Clements et al” or “the Clements paper”) presented at the XI<sup>th</sup> Accident Compensation Seminar in Melbourne on 2 April 2007.

The Clements paper presents a model for projecting the incidence of mesothelioma in NSW and Australia (specifically for males) based on actual levels of incidence to 2001. The Clements paper projects the peak incidence of mesothelioma in Australia will arise in 2017 and peak incidence in NSW will arise in 2014.

In considering the relevant of the findings of the Clements paper we note the following:

- The model used by Clements et al is an Australia-wide model of incidence of people who may develop mesothelioma based on the exposures that took place in Australia. Australia continued importing and using Chrysotile asbestos until 31 December 2003, when a ban came into effect.
- The KPMG Actuaries model is a model for the Liable Entities’, and not the whole of Australia’s, exposures. Our model recognises the timing of the involvement of the former James Hardie entities with asbestos. The insulation business was closed in 1974; the building products business ceased using asbestos in 1985; the pipes business ceased using asbestos in 1987; and the brakes business ceased using asbestos in 1984 and was sold in 1987.
- The national model of incidence derived by Clements et al is not relevant to individual populations of claimants, as recognised by the authors of the paper who state in their paper:

*“Importantly, these predictions may not be useful for specific industries that do not follow the population-wide risk profile; as an example, the predictions are inappropriate for the mining industry, where mining of asbestos ceased 10-20 years earlier than the consumption of asbestos products.”*

- Given the models are produced for different purposes and are projecting different claimant populations, they are not directly comparable.
-

- It should be of no surprise that Clements et al are projecting a later peak for the nation (and NSW) as a whole than KPMG Actuaries have projected within this report given that the Clements et al projection involves a population with a later and more prolonged exposure than that of the Liable Entities which was curtailed some 15 years earlier.
- There remains a wide range of views (ranging from 2010 to later than 2020), rather than consensus, amongst epidemiologists as to when peak incidence of mesothelioma will arise in Australia as a whole.

A later peak in claims reporting against the Liable Entities is a possibility, and one which we have always commented upon in the uncertainty and sensitivity testing section of our report. However, such scenarios do not reflect our central estimate projection.

We continue to monitor those parameters (mean latency, standard deviation of latency and the average period of exposure of claimants) which form the basis of our incidence model to verify whether the actual experience continues to support the current assumptions and the derivation of the timing of the peak of incidence.

#### **7.9 Peak year of claims and estimated future notifications**

Based on the application of our exposure model and our latency model, and also taking into account various epidemiological views from both Australia and the UK, recognising that there are conflicting and widely diverging views as to when the peak might arise, the peak year of notification of claims reporting against the Liable Entities for each disease type is assumed to be as follows:

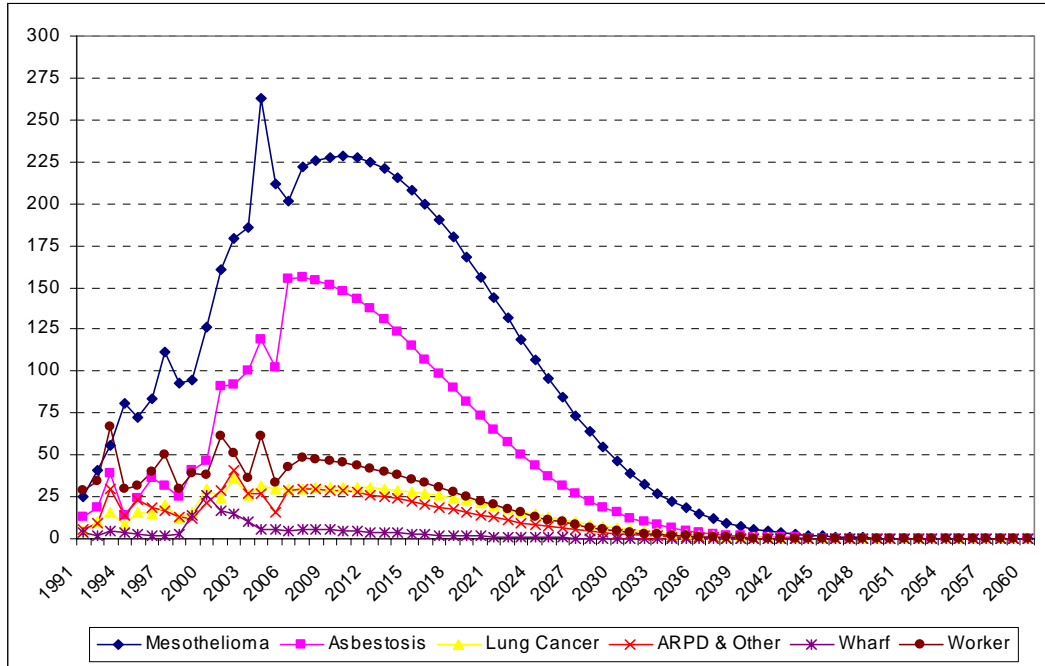
**Table 7.6: Peak year of claim notifications**

	<b>Current valuation assumption</b>	<b>Previous valuation assumption</b>
Mesothelioma	2010/11	2010/11
Asbestosis	2006/07	2006/07
Lung Cancer	2010/11	2010/11
ARPD & Other	2006/07	2006/07
Wharf claims	2000/01	2000/01
Workers Compensation	2006/07	2006/07

We have projected the future number of claim notifications from the curve we have derived using our exposure model and our latency model. We have applied this curve to the base number of claims we have estimated for 2007/08 as summarised in Section 7.7.

Figure 7.18 shows the pattern of future notifications which have resulted from the application of our exposure and latency model and the recalibration of the curve to our expectations for 2007/08.

**Figure 7.18: Expected future claim notifications by disease type**



The number of future claim notifications and the ultimate number of claims is shown below, both at our previous valuation and at this valuation.

**Table 7.7: Number of claim notifications by disease type**

	Current number projection		Previous number projection	
	2007 onwards	Ultimate	2007 onwards	Ultimate
Mesothelioma	4,023	6,080	4,446	6,510
Asbestosis	2,138	3,134	1,809	2,791
Lung Cancer	544	879	562	893
ARPD & Other	411	778	535	915
Wharf claims	57	185	57	186
Workers Compensation	658	1,682	740	1,772
<b>All claim types</b>	<b>7,832</b>	<b>12,739</b>	<b>8,149</b>	<b>13,068</b>

Note: "Ultimate" is the number of claims we project will be reported to the Liable Entities from 1967 to 2060.

It can be seen that the recognition of the emerging experience to 31 March 2007 has reduced our projected ultimate number of claims compared with our previous valuation by 329 claims, the majority of which results from mesothelioma (430) offset by asbestosis (an increase of 343) and other more minor changes in relation to the other disease types.

#### **7.10 Baryulgil**

To date, there have been 38 product and public liability claims (relating to 28 separate claimants) filed against the Liable Entities costing \$1.4m, inclusive of legal costs of \$0.7m.

Of these 38 claims, 15 claims were settled with no liability against the Liable Entities and 6 remain unsettled.

During the last financial year, there have been 5 claims reported, all of which were lodged on one day. These 5 claims remain unsettled.

Baryulgil claims have not generated substantial claims costs historically because most of the claims were settled in the 1980s when awards were considerably lower than current levels.

It is also of note that the Liable Entities tended to bear only around one-third to one-half of the liability, reflecting the contribution by other defendants to the overall settlement (including those which have since been placed in liquidation).

For the purposes of our valuation, we have estimated there to be a further 27 future claims, comprising 10 mesothelioma claims, 8 other product and public liability claims and 9 Workers Compensation claims.

We have assumed average claims and legal costs, net of Workers Compensation insurances, broadly in line with those described in Section 8.

Our liability assessment at 31 March 2007 of the additional provision (for claims not yet reported) that could potentially be required is an undiscounted liability of \$8.6m and a discounted liability of \$5.5m, all of which is deemed to be a liability of Amaca.

## **8 ANALYSIS OF EXPERIENCE – AVERAGE CLAIMS COSTS**

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### **8.1 Overview**

We have modelled the average claim awards and plaintiff and defendant legal costs (where separately disclosed) by disease type in arriving at our valuation assumptions.

Average attritional claim awards (which we have defined to be claims below \$1m in 2005/06 money terms) may vary considerably with the development of new heads of damage.

Past examples include the decision in relation to *Sullivan vs. Gordon* (1999) (47 NSWLR 31, [1999] NSWCA 338), the offsetting decision in *CSR vs. Eddy* [2005] HCA64 and the Civil Liability Amendment Bill 2006 which sought to restore the entitlement to *Sullivan vs. Gordon* benefits following the decision in *CSR vs Eddy*.

The Civil Liability Amendment Bill 2006 and the South Australia (Dust Diseases) Act 2005 have come into force that may affect future awards relative to that experienced in prior years (i.e. increase them).

Table 8.1 shows how the average settlement costs for non-nil attritional claims have varied by plaintiff settlement year. All data have been converted into 2006/07 money terms using base inflation at 4% per annum.

The reader's attention is drawn to the fact that the average amounts shown hereafter relate to the average amounts of the contribution made by the Liable Entities, and do not reflect the total award payable to the plaintiff unless this is clearly stated to be the case.

In particular, for Workers Compensation the average awards reflect the average contribution by the Liable Entities for claims in which they are joined but relate only to that amount of the award determined against the Liable Entities which is not met by a Workers Compensation Scheme or Policy.

**Table 8.1: Average attritional non-nil claim award  
 (inflated to 2006/07 money terms)**

Plaintiff settlement Year	Mesothelioma	Asbestos	Lung Cancer	ARPD & Other	Wharf	Workers Compensation
1994/95	228,021	128,476	48,581	260,973	39,425	122,010
1995/96	171,345	64,343	98,273	202,395	10,006	73,266
1996/97	173,566	72,400	48,646	29,188	0	64,838
1997/98	172,407	70,609	42,951	72,560	71,166	121,473
1998/99	185,811	46,261	34,452	117,016	0	48,355
1999/00	206,809	69,861	74,419	124,101	71,993	114,492
2000/01	233,512	73,103	91,738	80,021	87,518	64,333
2001/02	273,744	87,580	112,942	103,129	59,798	51,708
2002/03	248,406	93,342	82,941	81,113	144,078	108,407
2003/04	233,633	107,100	98,030	90,911	125,695	93,584
2004/05	245,799	82,693	147,085	80,260	77,283	137,538
2005/06	244,452	86,832	84,829	90,256	74,487	99,876
2006/07	246,902	92,327	124,021	67,775	116,142	92,667

*Note: Throughout this section the date convention used in tables and charts is that (for example) 2006/07 indicates the financial year running from 1 April 2006 to 31 March 2007. Furthermore, the label "2006" (for example) in charts would indicate the financial year running from 1 April 2006 to 31 March 2007*

Some of the average award information on the above table has changed from the previous report.

As noted at our previous valuation, there remains some additional processing of claims resulting in the creation of new claims records for some historic claims. This has resulted in more claims being counted without changing the overall quantum of awards and has therefore reduced the average claim size of a non-nil claim (see section 4.3.1).



## 8.2 Mesothelioma claims

For mesothelioma, the year 2001/02 resulted in the highest annual average cost. The step changes in 1999/00 through 2001/02 would appear to reflect in part legislative changes that occurred as well as in the percentage of the total award which the Liable Entities were required to contribute.

### 8.2.1 Contribution rate

We have estimated the percentage share which the Liable Entities have taken of the gross settlements. The following table shows that share, for those claims where such information is available, and how it has changed over time.

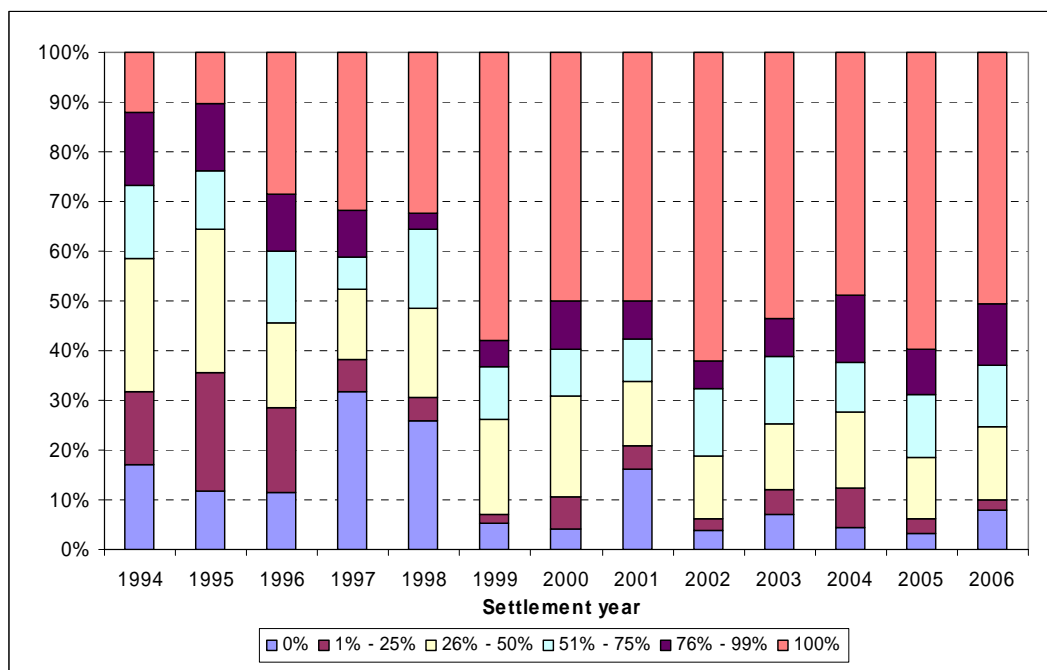
**Table 8.2: Contribution rate for direct mesothelioma claims: 1994-2006**

Plaintiff Settlement Year	Total award settlement	Liable Entities' contribution	Percentage Share
1994/95	9,422,500	5,285,097	56.1%
1995/96	13,479,092	6,619,729	49.1%
1996/97	7,797,708	5,287,684	67.8%
1997/98	11,085,298	8,789,560	79.3%
1998/99	10,949,146	7,774,456	71.0%
1999/00	12,840,235	10,628,167	82.8%
2000/01	26,069,726	21,107,679	81.0%
2001/02	31,425,551	26,254,603	83.5%
2002/03	39,815,605	35,002,391	87.9%
2003/04	41,759,715	32,463,911	77.7%
2004/05	57,399,174	44,537,980	77.6%
2005/06	52,970,860	45,108,401	85.2%
2006/07	55,532,017	45,914,347	82.7%
<b>Total (1994-2006)</b>	<b>370,546,628</b>	<b>294,774,005</b>	<b>79.6%</b>

The step change in the average costs from the levels exhibited between 1995/96 and 1998/99 and those exhibited after 1998/99 may, in part, be a result of the change in the percentage shares contributed by the Liable Entities as well as the introduction of new heads of damage.

We have investigated the reason for the increase in the contribution rate. It appears that the main driver of this has been an increasing frequency of claims where the Liable Entities bear 100% of the contribution, which has shown a step-change since 1999. Currently around 50% to 60% of all claims by number show a contribution rate of 100% of the award, up from around 30% of claims prior to 1999.

**Figure 8.1: Distribution of contribution rates for direct mesothelioma claims**



### 8.2.2 Distribution of claim sizes for mesothelioma claims

We have analysed the make-up of the average costs for mesothelioma claims by banding claims into cohorts of 10% groups. That is, identifying the contribution to the overall average cost from the smallest 10% of non-nil claims by size, then the contribution from the smallest 20% of claims by size etc.

By way of illustration, the amount for the 10%-20% band is measured as the average cost of the smallest 20% of claims less the average cost of the smallest 10% of claims.

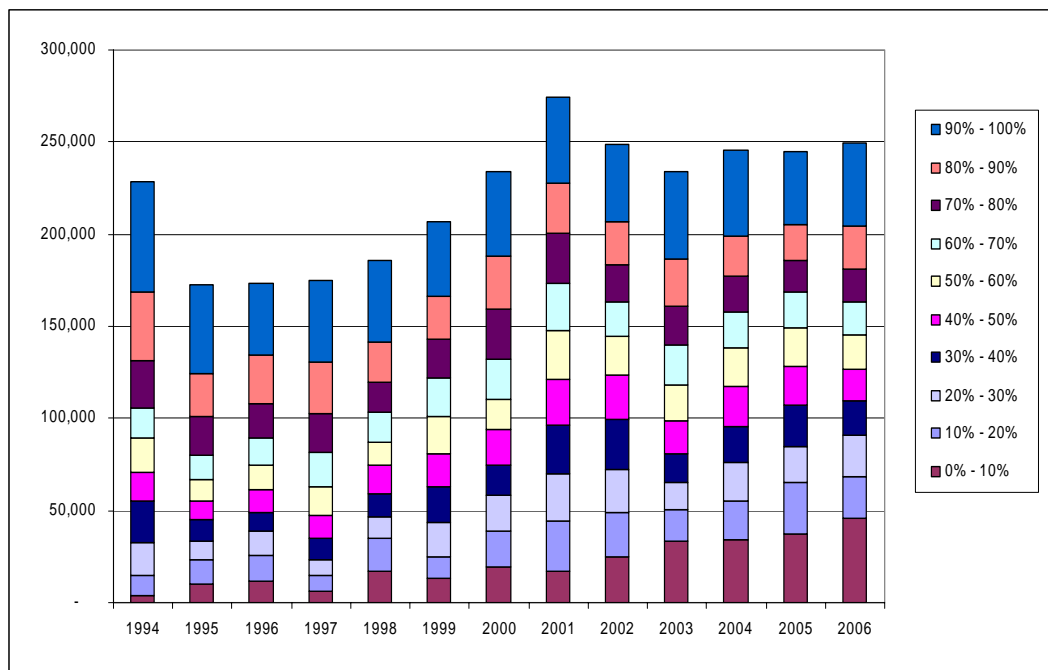
The aim of this is two-fold:

- To understand the trends in the average costs; and

- To identify if the change in mix of claims by size has contributed to the observed level of superimposed inflation.

Figure 8.2 shows the relative contribution of the various bands to the overall average costs identified in Table 8.1.

**Figure 8.2: Contribution of individual bands of claims to overall average attritional mesothelioma claim costs (inflated to 2006/07 money terms)**



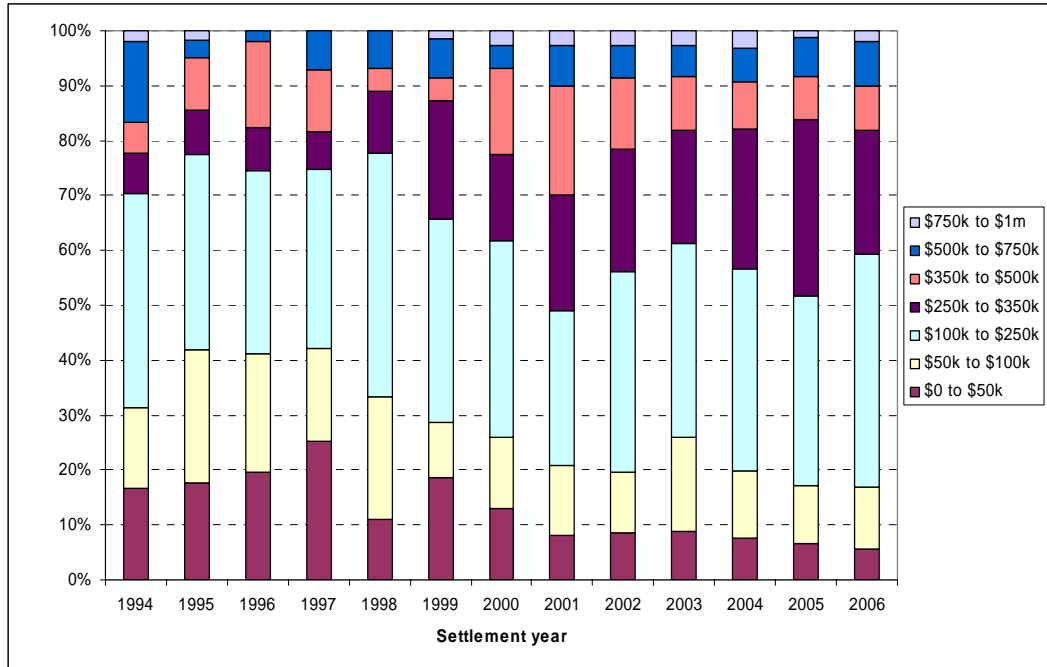
This chart shows that the key drivers to the pattern in inflated average claims costs, in recent years, are largely the “smaller sized” and “medium sized” claims, and not the “large sized” claims.

The chart shows that the 2001 settlement year appears to have a much heavier proportion of larger claims, with the largest 40% of claims by size contributing around \$125,000 to the overall average claim size.

The chart also shows that for the last three years the mix of claims has been broadly stable (other than in relation to the smallest 10% of claims by size).

An alternative way of looking at this is to consider the distribution of claims by size.

**Figure 8.3: Distribution of claims awards for attritional non-nil mesothelioma claims (inflated to 2006/07 money terms)**

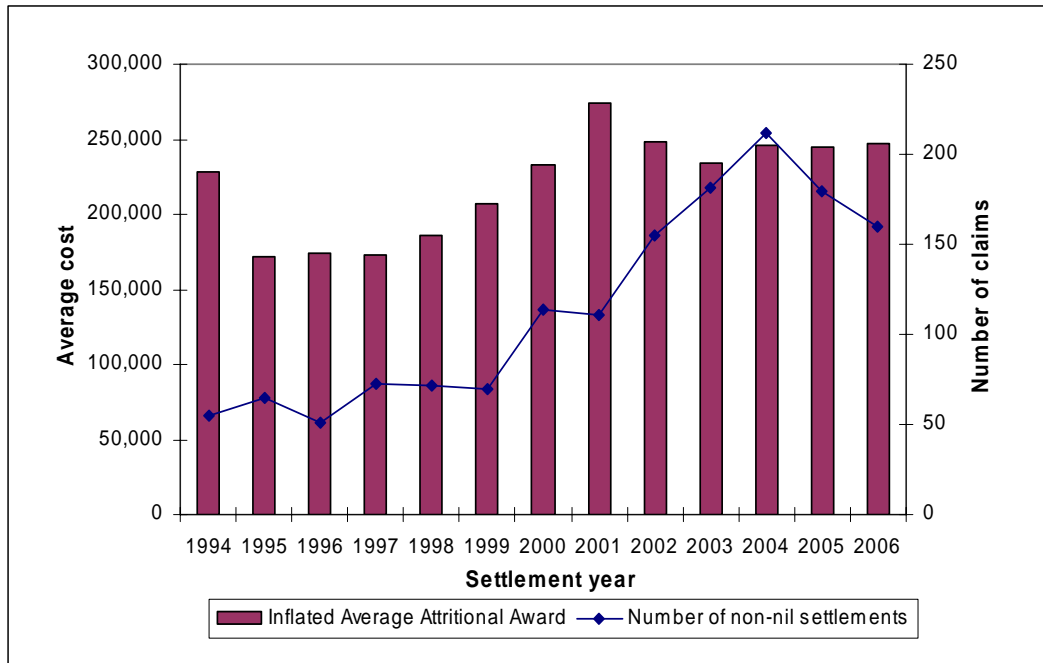


The chart confirms that the primary driver for the high average award in 2001 was the high proportion of larger claims (i.e. around 30% of non-nil claims were over \$350k).

### 8.2.3 Trends in average awards

In setting our assumption for mesothelioma, we have considered average awards over the last 3, 4 and 5 years in arriving at our valuation assumption.

**Figure 8.4: Inflated average awards and number of non-nil claims settlements for mesothelioma claims: 1994 to 2006**



The chart above shows the historic variability in average claim sizes for mesothelioma varying from \$170,000 to \$270,000 in 2006/07 money terms.

The average of the last three years (to 2006/07) is \$246,000; the average of the last four years is \$243,000 and the average of the last five years is \$244,000.

We have already noted that the experience in recent years will understate, to some extent, future experience owing to changes in legislation affecting the level of awards. In relation to the revised NSW legislation, 2005/06 will have been affected (reduced) by the decision in *CSR vs. Eddy* which was subsequently overturned by the Civil Liability Amendment Bill. In relation to the recent South Australia reforms, mesothelioma awards may increase owing to the inclusion of *Sullivan vs. Gordon* benefits and exemplary damages.

Taking these averages and the underlying trends into consideration, we have adopted a valuation assumption of \$250,000 for mesothelioma claims in 2006/07 money terms.

This compares with our previous valuation assumption of \$260,000 in 2006/07 money terms. This represents a 4% reduction in inflation adjusted terms.

**Table 8.3: Average mesothelioma claims assumptions**

Valuation Report	Claim settlement year	
	2005/06	2006/07
31 March 2006	260,000	276,500
30 September 2006	n/a	260,000
31 March 2007	n/a	250,000

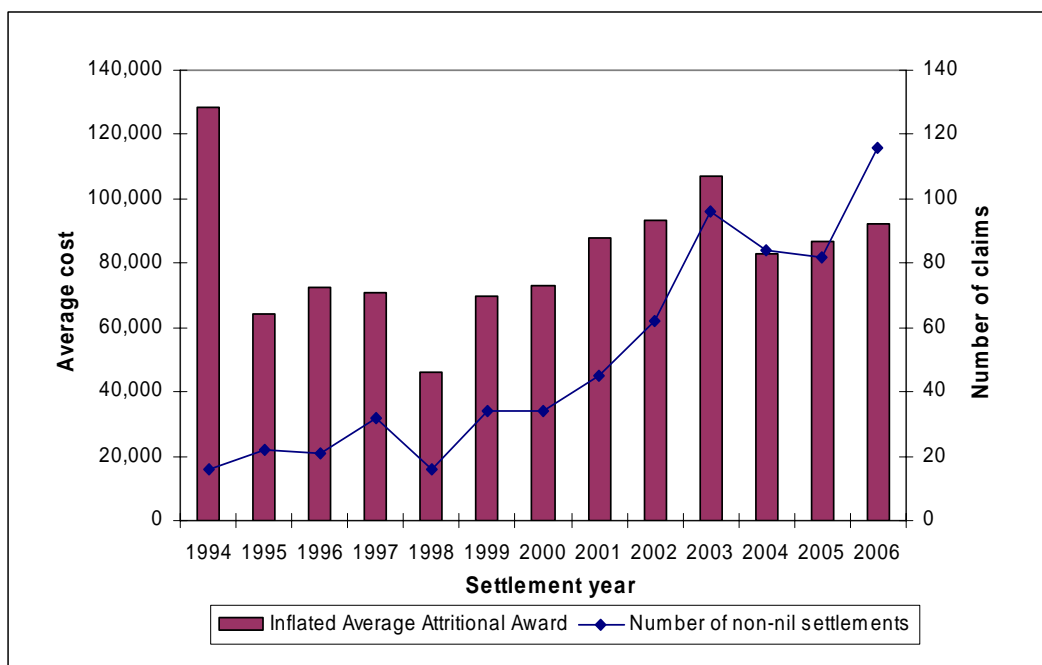
Note: 2005/06 settlements are in 2005/06 dollars whilst 2006/07 settlements are in 2006/07 dollars.

### 8.3 Asbestosis claims

For asbestosis, it can be seen from Table 8.1 that in 2003 the average settlement was high relative to recent experience.

In setting our assumption for asbestosis, we have considered average awards over the last 3, 4 and 5 years in arriving at our valuation assumption.

**Figure 8.5: Inflated average awards and number of non-nil claims settlements for asbestosis claims: 1994 to 2006**



The chart shows the substantial variation in average awards though in part this is affected by the low numbers of claims settled in the earlier years.

The average of the last three years (to 2006/07) is \$88,000; the average of the last four and five years is \$93,000. These are not surprising given the relatively high average cost in 2003 and the substantial increase in claim numbers thereby giving greater weight to the recent years' experience.

We have reduced our assumption to \$95,000 in light of this recent experience, whilst still giving some credibility to the experience in 2003. This represents a 3% reduction in inflation adjusted terms.

**Table 8.4: Average asbestosis claims assumptions**

Valuation Report	Claim settlement year	
	2005/06	2006/07
31 March 2006	100,000	106,300
30 September 2006	n/a	97,500
31 March 2007	n/a	95,000

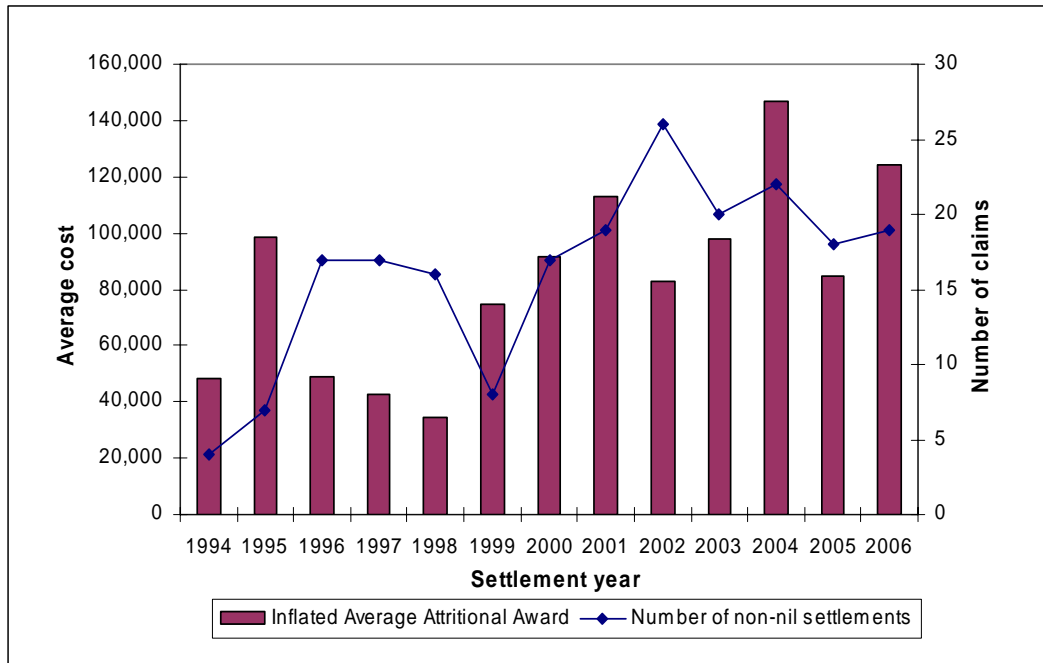
*Note: 2005/06 settlements are in 2005/06 dollars whilst 2006/07 settlements are in 2006/07 dollars.*

#### **8.4 Lung cancer claims**

Lung cancer average claims costs appear to have experienced some volatility in the last five years, although this is not unexpected given the small volume of claim settlements (usually approximately 20 per annum).

Average claim costs observed in 2001, 2004 and 2006 were high relative to previous and more recent experience, mainly due to a number of claims settlements being made which were in excess of \$200,000.

**Figure 8.6: Inflated average awards and number of non-nil claims settlements for lung cancer claims: 1994 to 2006**



The average of the last three years (to 2006/07) is \$121,000; the average of the last four years is \$115,000 and the average of the last five years is \$107,000.

At this valuation, we have adopted an average award size of \$125,000, taking into account the recent downward trend in experience but recognising the volatility in past experience and the high average awards in 2001, 2004 and 2006. This is unchanged from our previous assumption.

**Table 8.5: Average lung cancer claims assumptions**

Valuation Report	Claim settlement year	
	2005/06	2006/07
31 March 2006	135,000	143,600
30 September 2006	n/a	125,000
31 March 2007	n/a	125,000

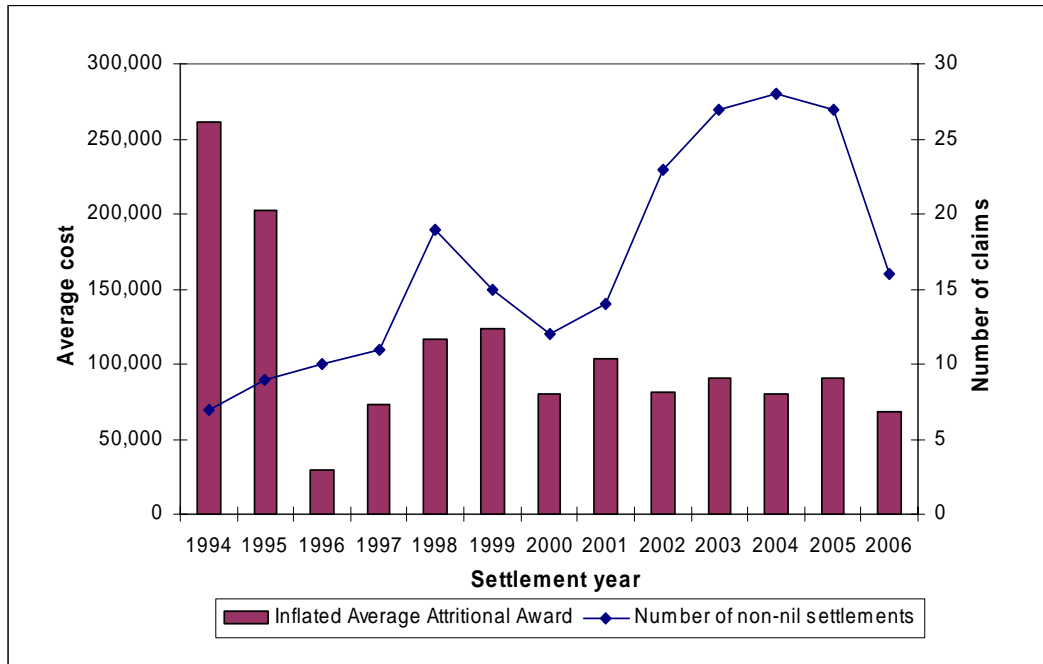
Note: 2005/06 settlements are in 2005/06 dollars whilst 2006/07 settlements are in 2006/07 dollars.



## 8.5 ARPD & Other claims

Historically, average awards have been volatile owing to the low number of claims. However, the past few years have shown a degree of stability.

**Figure 8.7: Inflated average awards and number of non-nil claims settlements for ARPD & Other claims: 1994 to 2006**



For ARPD & other claims, the average of the last three years (to 2006/07) is \$81,000; the average of the last four years is \$84,000 and the average of the last five years is \$83,000.

We have adopted an average award size of \$90,000 recognising the experience between 2003 and 2005 (and ignoring the experience in 2006 owing to the lower number of claim settlements). This is unchanged from our previous assumption.

**Table 8.6: Average ARPD & Other claims assumptions**

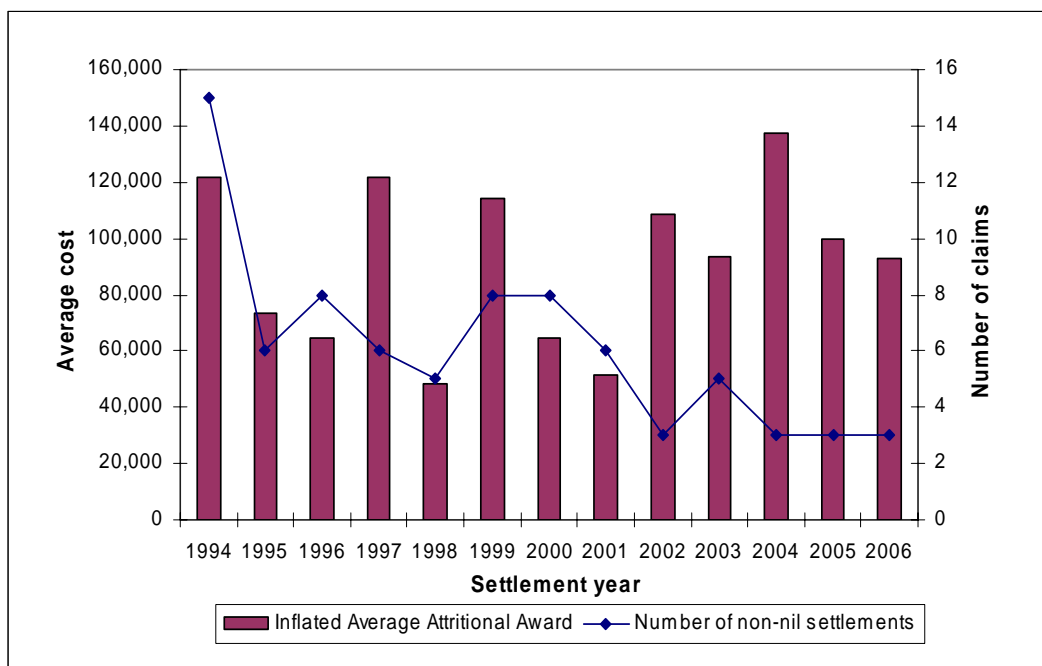
Valuation Report	Claim settlement year	
	2005/06	2006/07
31 March 2006	90,000	95,700
30 September 2006	n/a	90,000
31 March 2007	n/a	90,000

Note: 2005/06 settlements are in 2005/06 dollars whilst 2006/07 settlements are in 2006/07 dollars.

### 8.6 Workers Compensation claims

The average award for non-nil Workers Compensation claims has shown a degree of volatility and has reduced from the level observed in 2004/05 through to 2006/07, although it should be noted that with just 3 non-nil claims settlements per annum, there is limited credibility that can be attached to the experience.

**Figure 8.8: Inflated average awards and number of non-nil claims settlements for Workers Compensation claims: 1994 to 2006**



The average of the last three years (to 2006/07) is \$110,000; the average of the last four years is \$104,000 and the average of the last five years is \$105,000.

The average award for 2006/07 settlements has fallen relative to the previous valuation owing to the emergence of two further claims (totalling \$70,000) in addition to the one claim settled in the first six months at a cost of \$210,000.

We have adopted \$125,000 as our valuation assumption for Workers Compensation claims in 2006/07 money terms, noting the variability in these claims which is not surprising given the small volume of claims and the high nil settlement rate. This represents a 7% reduction in the assumption in inflation adjusted terms.

**Table 8.7: Average Workers Compensation claims assumptions**

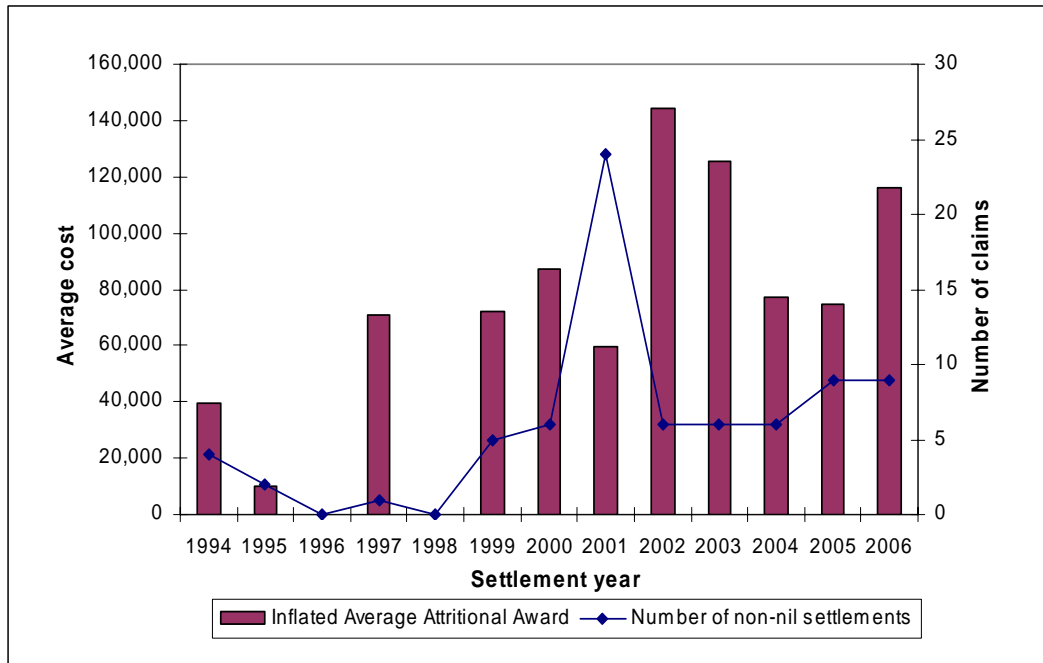
Valuation Report	Claim settlement year	
	2005/06	2006/07
31 March 2006	135,000	143,600
30 September 2006	n/a	135,000
31 March 2007	n/a	125,000

*Note: 2005/06 settlements are in 2005/06 dollars whilst 2006/07 settlements are in 2006/07 dollars.*

### 8.7 Wharf claims

For wharf claims, the average of the last three years (to 2006/07) has been \$91,000; the average of the last four years has been \$98,000 and the average of the last five years has been \$105,000.

**Figure 8.9: Inflated average awards and number of non-nil claims settlements for Wharf claims: 1994 to 2006**



We have adopted a valuation assumption of \$100,000 in 2006/07 money terms. This is unchanged from our previous assumption.

**Table 8.8: Average wharf claims assumptions**

Valuation Report	Claim settlement year	
	2005/06	2006/07
31 March 2006	90,000	95,700
30 September 2006	n/a	100,000
31 March 2007	n/a	100,000

*Note: 2005/06 settlements are in 2005/06 dollars whilst 2006/07 settlements are in 2006/07 dollars.*

**8.8 Large claim size and incidence rates**

There have been 25 settled claims with claims awards in excess of \$1m in 2005/06 money terms. All of these claims are product and public liability claims and the disease diagnosed in every case is mesothelioma.

In aggregate they have been settled for \$38m in current money terms, at an average cost of approximately \$1.52m. We have noted one claim of almost \$4m in current money terms.

The incidence rate of large claims to non-nil settlements has been variable, dependent on the random incidence of large claims by settlement year:

- Over the period 1990-2006 there have been 25 large claims compared with 1,609 non-nil non-large claims settlements. This gives an incidence rate of 1.53%.
- Over the period 1990-1999 there were 5 large claims compared with 497 non-nil non-large settlements, an incidence rate of about 1.00%.
- Over the period 2000-2006 there have been 20 large claims compared with 1,112 non-nil non-large settlements, an incidence rate of about 1.77%.
- There have been 5 large claims settled in 2006/07.

We have assumed that there will be a large claim incidence rate of 2.00% prospectively over all future years, increased from our previous assumption of 1.6%.

With approximately 200-250 mesothelioma claims settlements per annum, we are therefore projecting to observe approximately 4 or 5 large claims per annum.

In setting this assumption, we have had regard to the recent experience; most notably the number of large claims settled in 2006/07, the incidence rate over the last six years and also the number of large pending claims.

There remain six claims open with award sizes case-estimated at in excess of \$700,000. In particular, there remain 5 claims which are case-estimated at in excess of \$1m.

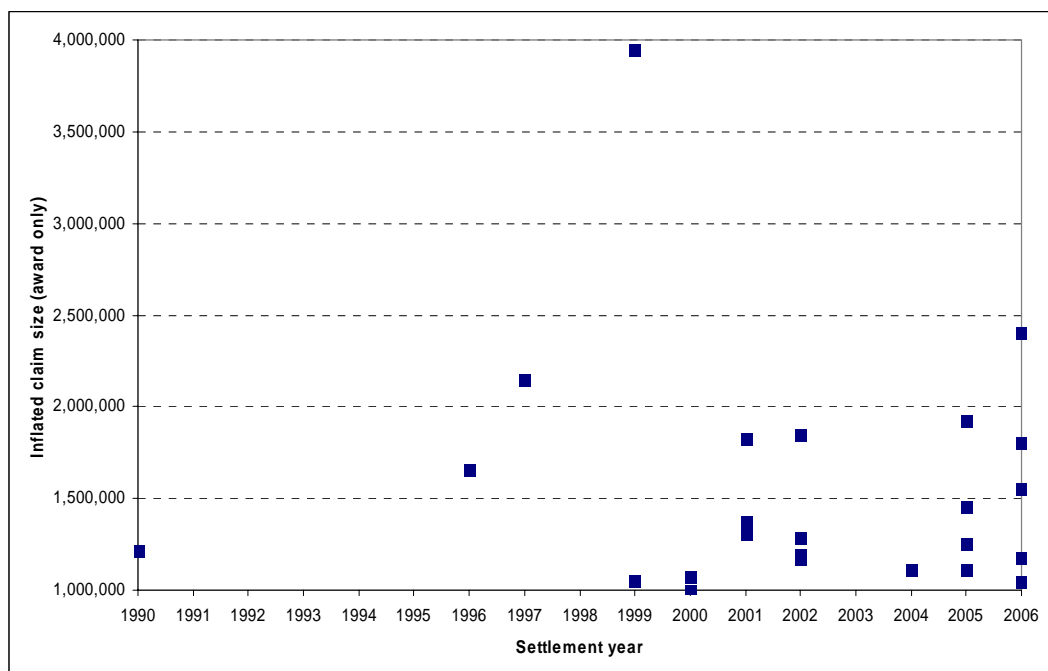
We have taken the average costs from all years as our base assumption, given the small volume of such claims. This has been assumed to be \$1.6m for the award and \$50,000 for plaintiff legal costs with separate allowance also made for defendant legal costs of \$100,000 per claim. Implicitly this allows for the occasional \$3.5m to \$4m claim at an incidence rate broadly equivalent to past experience

As a consequence, the overall loading per non-nil mesothelioma claim (including plaintiff legal costs) to make allowance for large claims is \$33,000 (being 2.0% x \$1,650,000) and this equates to an allowance of over \$7m in 2007/08 for claims in excess of \$1m (in 2005/06 money terms).

We note that the actual incidence of, and settlement of, large claims is not readily predictable and it should be expected that deviations will occur from year to year due to random fluctuations because of the small numbers of large claims (about 5 per annum).

For other disease types, there have been no claims settled which have exceeded \$600,000 in actual money terms. Therefore we have made no allowance for large claims for other disease types.

**Figure 8.10: Scatter plot of large claims by settlement year**



**8.9 Average defendant legal cost for non-nil and nil claim settlements (before allowance for cost savings)**

As with the average awards, we have modelled defendant legal costs separately. We have also modelled nil claims and non-nil claims separately as they should portray different characteristics in relation to their legal costs.

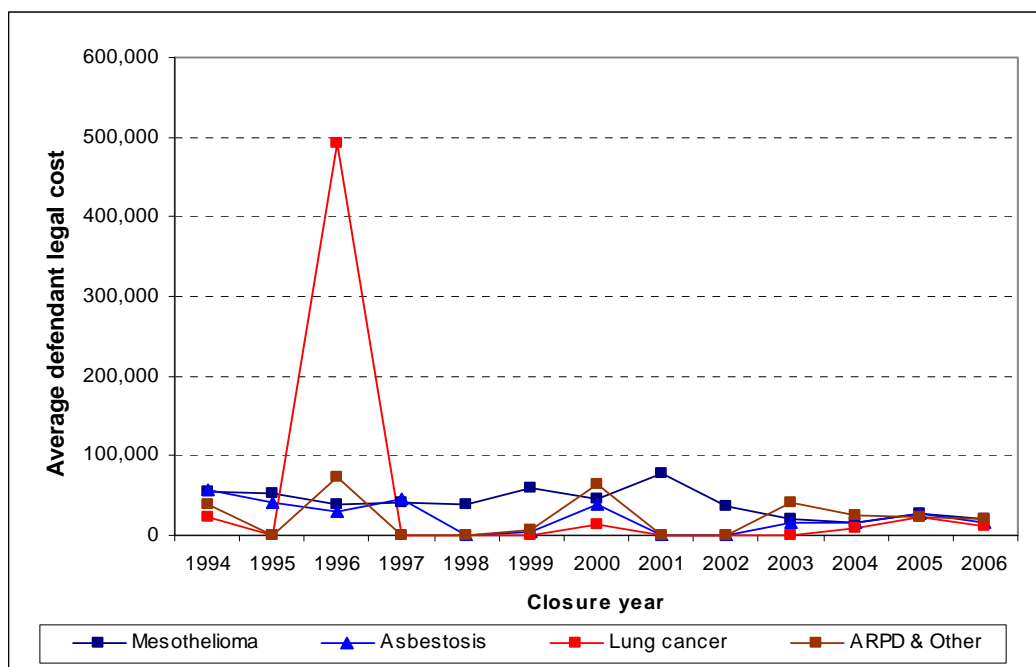
We have again removed large claims from the analysis and treated them separately, applying a large claim loading and an incidence rate consistent with the underlying large claims.

We have used closure year as the base definition to allocate costs into years and given the lag between the award settlement and the closure year, distortions can arise from year to year depending on closure activity of claims files.

### 8.9.1 Non-nil claims

The following chart shows the pattern of average defendant legal costs of the Liable Entities by disease type for non-nil claims, inflated to 2006/07 money terms over recent years. We have not included Wharf claims or Workers Compensation claims in the chart as the data is more sparse and exhibits considerable volatility.

**Figure 8.11: Inflated average defendant legal costs for non-nil claims by closure year**



The aberrational average legal cost observed for lung cancer in 1996 is mainly a result of a single claim for which a high level of legal costs were incurred in defence against that claim.

For mesothelioma, we have determined an average base defendant legal cost of \$22,500. This is a reduction relative to that previously assumed and reflects the ongoing downward trends in recent defence costs for mesothelioma. This is providing support to the assertion that legal costs have been reducing as a result of the NSW Dust Diseases Tribunal reforms and as a result of internal cost saving initiatives by ACS.

For asbestosis, we have determined an average of \$22,500 recognising the recent stability in defence costs at around \$22,500 per claim.

For lung cancer, we have selected \$20,000 although there is sparse data from which to estimate this amount. We recognise that there have been substantial average defence costs incurred in some years, especially in 1993 and 1996, but we are aware that these have been a result of precedent-setting cases, or matters involving key principles of law. It should also be recognised that the financial materiality of such an assumption is not expected to be significant given the low number of lung cancer claims and the relatively high nil settlement rate.

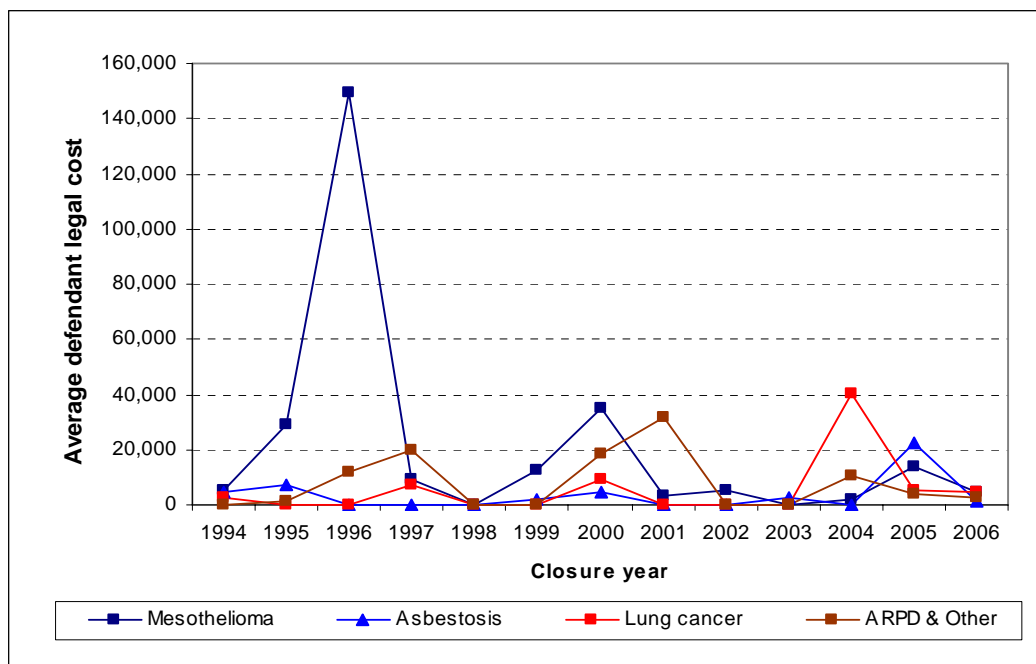
For ARPD & Other claims, we have selected \$20,000 based on an average of the last three years.

For Workers Compensation and Wharf claims we have selected \$15,000.

### 8.9.2 Nil claims

The following chart shows the pattern of average defendant legal costs of the Liable Entities by disease type for nil claims, inflated to 2006/07 money terms over recent years. We have not included Wharf claims or Workers Compensation claims in the chart as the data is more sparse and exhibits considerable volatility.

**Figure 8.12: Inflated average defendant legal costs for nil claims by closure year**





The aberrational legal cost observed for mesothelioma in 1996 is mainly a result of a single claim for which a high level of legal costs was incurred in defence against that claim. The claim related to a New Zealand exposure for which the claim had been brought in the NSW Dust Diseases Tribunal.

For mesothelioma, we have selected an average of \$15,000, a slight reduction from the previous valuation.

For asbestosis, we have selected an average of \$15,000 unchanged from the previous assumption. Given the low nil settlement rate for asbestosis, however, this assumption is not overly significant.

For lung cancer, again there is scarcity of data, but we have selected \$7,500 as our assumption, unchanged from our previous valuation. We note that there have been a small number of precedent-setting cases for which significant legal costs have been incurred but where the claim has not been closed.

For ARPD & Other claims, we have selected \$10,000 based on an examination of the average of the last three, four and five years.

For Workers Compensation and Wharf claims we have selected \$2,500.

## **8.10 Superimposed inflation**

### **8.10.1 Overview**

At our previous valuation, we indicated that an allowance of 2.25% per annum for superimposed inflation was appropriate. We identified a number of factors we considered in setting this assumption.

These included:

- The rate of pure (judicial) inflation reflecting the natural tendency for personal injury claim awards to rise at a rate higher than wage inflation;
- The impact of medical or other developments;
- The emergence of new heads of damage, or the expansion of existing heads of damage; and
- The mix of claims costs by different heads of damage.

Additionally, we have considered the potential for these factors to be offset to some extent by:

- The potential for existing heads of damage to be removed, or for the contraction of these heads of damage (e.g. *CSR vs. Eddy*); and
-

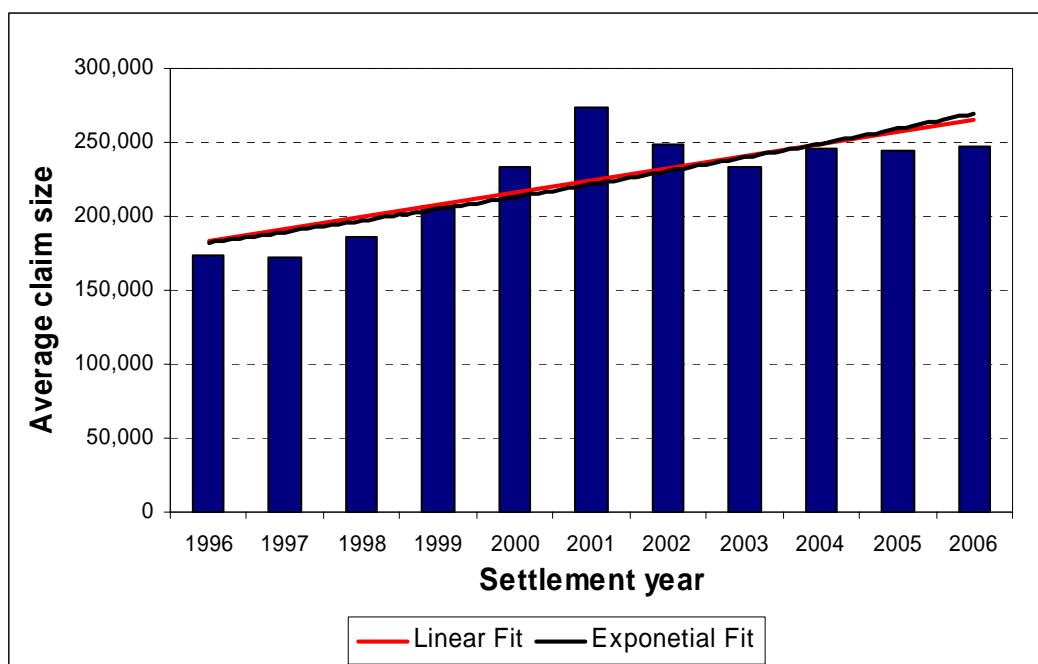
- The effect of an ageing population of claimants on the rate of inflation of overall damages, a component of which relates to economic loss.

Whilst the future rate of superimposed inflation is uncertain, and not predictable from one year to the next, it is of note that the average claim costs appear to have been stable in the last few years, although the emergence of new or expanding heads of damage does not tend to proceed smoothly but rather is more “lumpy”.

### 8.10.2 Analysis of past rates of superimposed inflation

We have reviewed the rate of inflation of claims costs by settlement year for the last 10 years for mesothelioma claims. We have inflated claim costs to current money terms by base inflation of 4% per annum.

**Figure 8.13: Inflated average mesothelioma awards: 1996 to 2006**



The chart can be used to imply the rate of inflation of claim awards over and above base inflation (i.e. it measures the rate of superimposed inflation) in any one year or an annualised rate of superimposed inflation over a longer-term.

The chart shows the “best fit” of the rate of growth of inflated claim awards using two possible models:

- A linear fit – which assumes that the average inflated award is a linearly increasing function (such that the monetary increase from year to year is fixed); and
- An exponential fit – which assumes that the rate of increase in the average inflated awards (i.e. the rate of superimposed inflation) is constant.

It should be noted that the actual rate of inflation within any one year, and the extent to which superimposed inflation arises in any one year is not in itself readily estimable but rather is a function of a whole range of factors. It can be inferred from Table 8.1 and Figure 8.13, that the average rate of inflation can be extremely volatile from year to year, with figures as low as -9% and as high as +17%.

The actuarial approach for this report is to take an average view to be applied over the long-term noting that there will necessarily be deviations from this average on an annual basis.

Using the chart and these models of best fit, we have the following observations in relation to the rate of superimposed inflation:

- The linear fit of the last 10 years' experience implies a rate of superimposed inflation of around 3.3% per annum;
  - The exponential fit of the last 10 years' experience implies the rate of superimposed inflation to be around 4.0% per annum;
  - Over the last five years, the annualised rate of superimposed inflation has been 0%;
  - In the last three years, there has been almost no superimposed inflation, largely due to the contraction in certain heads of damage;
  - Over a more prolonged period (e.g. 15 years) the rate of inflation of claims costs has been about 2% lower than that over the last 10 years. That is, implied superimposed inflation has been around 1.5% per annum to 2.0% per annum; and
  - Step changes in average claim costs typically reflect the impact of:
    - Emerging new heads of damage (such as Sullivan vs. Gordon and Griffiths vs. Kerkemeyer); and
    - Changes in the contribution rate of the Liable Entities to the overall settlements.
-

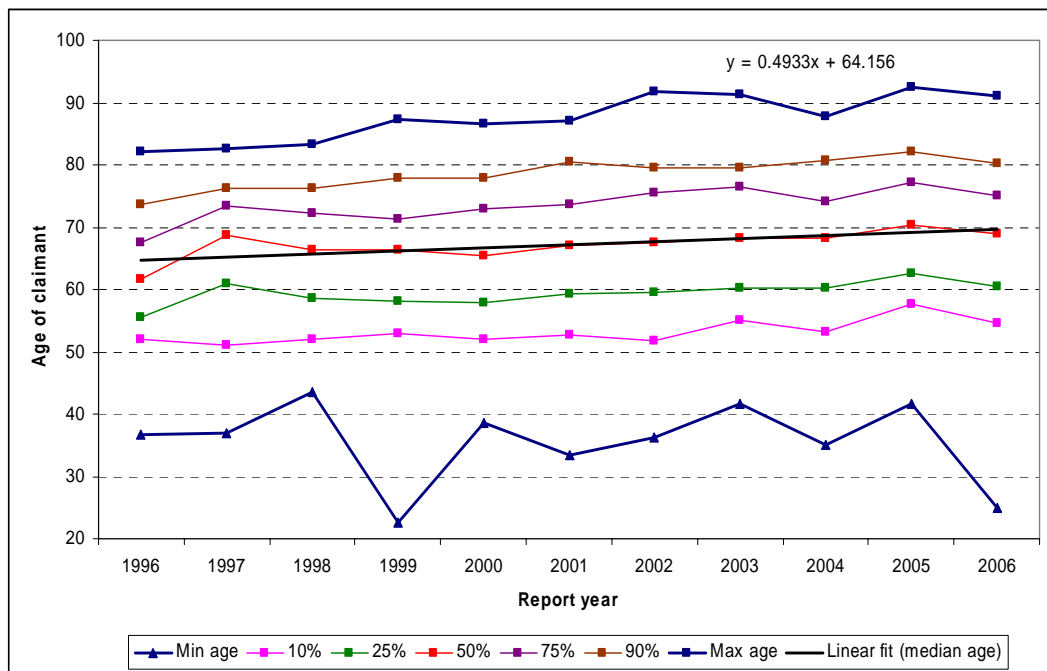
Weighing all of this evidence together, we have adopted an assumed rate of future superimposed inflation of 2.25% per annum, noting in particular that this rate is intended to be a longer-term rate of inflation.

### 8.11 Ageing of claimants

We have analysed the age pattern of the claimants to understand how this is trending over time. This is important in consideration of the extent of both base and superimposed inflation in claims costs as a result of the age of claimants. Young claimants will be associated with higher awards, owing to the earnings replacement component. Furthermore, greater awards for loss of expectation of life would be expected.

Within our assessment of a reasonable level of base inflation to assume in Section 6.2.4 we noted the impact of claimant ageing as one factor leading to lower base inflation than is strictly implied by the financial markets.

**Figure 8.14: Age profile of mesothelioma claimants by report year**



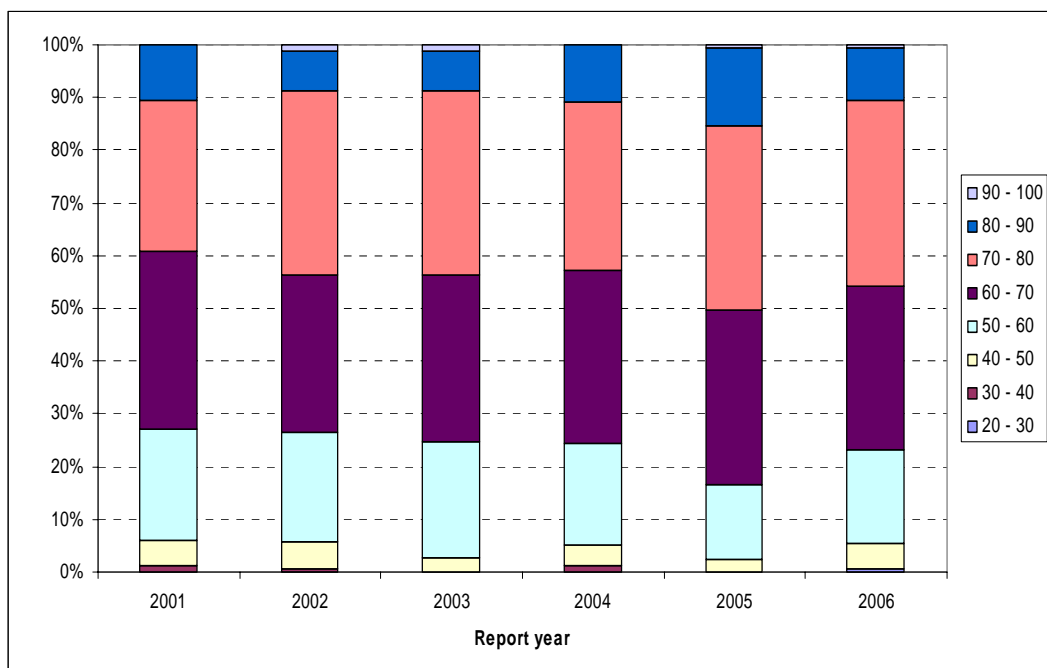
The chart indicates that claimants are generally continuing to age. The claims experience does not indicate a considerable increase in the number (and proportion) of younger claimants. We note the claim reported in 2006/07 involving a 25-year old claimant. However, the chart indicates that the trend for all of the lines in the graph (other than the minimum age) is upwards indicating that there is a gradual ageing of the population of claimants.

The chart also indicates that the average age of claimants is increasing by around 0.5 years each year, with the average age now about 70 years.

This has the effect of negating some aspects of emerging claims inflation. This is because part of the award relates to economic loss and loss of expectation of life and awards for these are in part a function of age.

We observe the fall in average ages between 2005/06 and 2006/07. However, this appears to be due to 2005/06 comprising a considerably different age demographic of claimants than other years, as seen by the following chart.

**Figure 8.15: Age cohorting of mesothelioma claimants by decade of age**



### 8.12 Summary assumptions

The following table provides a summary of our average claim cost assumptions at this valuation, and those assumed at the previous valuation.

**Table 8.9: Summary average claim cost assumptions**

	Current valuation assumption	Previous valuation assumption
Mesothelioma	250,000	260,000
Asbestosis	95,000	97,500
Lung Cancer	125,000	125,000
ARPD & Other	90,000	90,000
Wharf	100,000	100,000
Workers Compensation	125,000	135,000
Mesothelioma large claims allowance (excl. defendant legal costs)	Average size = \$1.65m  Frequency = 2.0%  Loading = \$33,000 per claim	Average size = \$1.65m  Frequency = 1.6%  Loading = \$26,400 per claim

## 9 ANALYSIS OF CLAIMS EXPERIENCE – NIL SETTLEMENT RATES

### 9.1 Nil settlement rate

We have modelled the nil settlement rates, being the number of nil settlements expressed as a percentage of the total number of settlements (nil and non-nil). The following table shows the observed nil settlement rates by disease type and by settlement year.

**Table 9.1: Nil settlement rates by class and disease type**

Plaintiff Settlement Year	Mesothelioma	Asbestos	Lung Cancer	ARPD & Other	Wharf	Workers Compensation
1994/95	18%	24%	43%	50%	43%	53%
1995/96	17%	8%	36%	25%	33%	80%
1996/97	20%	32%	19%	33%	100%	71%
1997/98	33%	20%	23%	59%	0%	84%
1998/99	26%	50%	11%	30%	100%	90%
1999/00	10%	15%	27%	17%	17%	77%
2000/01	6%	11%	6%	14%	45%	83%
2001/02	16%	13%	30%	13%	25%	86%
2002/03	9%	3%	19%	15%	50%	80%
2003/04	10%	3%	26%	7%	54%	95%
2004/05	9%	14%	24%	10%	0%	94%
2005/06	12%	8%	40%	27%	18%	93%
2006/07	15%	13%	32%	54%	0%	95%

*Note: Throughout this section the date convention used in tables and charts is that (for example) 2006/07 indicates the financial year running from 1 April 2006 to 31 March 2007. Furthermore, the label "2006" (for example) in charts would indicate the financial year running from 1 April 2006 to 31 March 2007*

It should be noted that some of the nil settlement rate in these tables have changed since the last valuation report (particularly for the more recent years). This reflects ongoing activity on the claims files that can be re-opened with settlement and recovery amounts modified over time.

It also reflects the impact of ACS splitting claims and creation of new claim records previously referred to. This is because such splitting of claims has the effect of increasing the number of settlements without necessarily increasing the number of nil settlements, since the splitting relates to claims where cross-claim recoveries can be pursued.

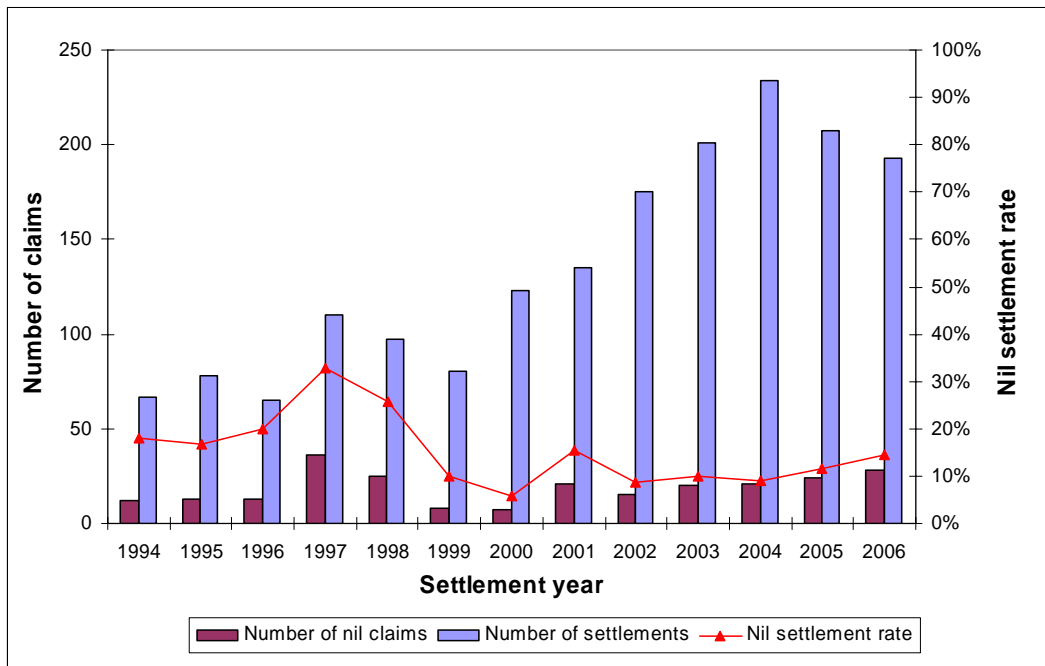
This means that for any given year, the number of nil claims does not change but the total number of claims increases, thereby reducing the observed nil rate.

## 9.2 Mesothelioma claims

The nil settlement rates for mesothelioma have shown some degree of volatility between settlement years.

Figure 9.1 shows the number of claims settled for nil cost, the total number of claims settled and the implied nil settlement rate for each settlement year.

**Figure 9.1: Mesothelioma nil claims experience: 1994 to 2006**





During the last seven years, the rate has varied between 6% and 16%.

In considering the future nil settlement rate assumption, we note the following:

- Based on the current data, the last three years (to 2006/07) have averaged 12%, the last four years have averaged 11% and the last five years have averaged 11%;
- The experience in 2006/07 has shown an increased nil settlement rate to 15%;
- As noted in the footnote to Table 9.1, data has developed since our last valuation and the trend has been downwards; and
- Overall, the claims experience has been suggestive of some downwards trends, except in relation to the actual experience in 2006/07.

Furthermore, in setting our assumption for the future nil settlement rate, we have also had regard to the average claim cost assumptions we have adopted.

We have done this because the nil settlement rate and the average cost per non-nil claim are inextricably inter-linked. In setting the nil settlement rate we have considered the impact this has on the implied average cost per attritional claim for each settlement year. This could also be thought of, for a given settlement year, as:

$$\text{Average cost per non-nil claim} \times (1 - \text{nil settlement rate})$$

It is the combination of the two assumptions which ultimately determines the overall cost of the liabilities and we have therefore given consideration to each of the assumptions separately, and in combination, when determining our valuation assumptions.

The following table shows the trends in this “average cost per claim” measure since 1994/95, in inflated money terms.

**Table 9.2: Average cost per attritional mesothelioma claim**

Plaintiff Settlement Year	Average cost per non-nil claim	Nil settlement rate	Average cost per claim
1994/95	228,021	18%	187,182
1995/96	171,345	17%	142,788
1996/97	173,566	20%	138,853
1997/98	172,407	33%	115,983
1998/99	185,811	26%	137,922
1999/00	206,809	10%	186,128
2000/01	233,512	6%	220,223
2001/02	273,744	16%	231,162
2002/03	248,406	9%	227,114
2003/04	233,633	10%	210,386
2004/05	245,799	9%	223,740
2005/06	244,452	12%	216,110
2006/07	246,902	15%	211,082

Overall this average cost per claim has been a little more stable than each of the underlying elements separately. The overall average cost per claim has varied between \$210,000 and \$231,000 over the last six years in 2006/07 money terms.

Taking all of these factors into consideration we have reduced the assumed future nil settlement rate to 11.5%. A reduction in the nil settlement rate increases the liability.

Combining the assumed nil settlement rate of 11.5% with the assumed average cost per attritional non-nil claim of \$250,000 we imply an average cost per claim of \$221,250 for the 2006/07 year. This is a reduction of approximately 3% relative to that implied at the previous valuation, \$228,800.

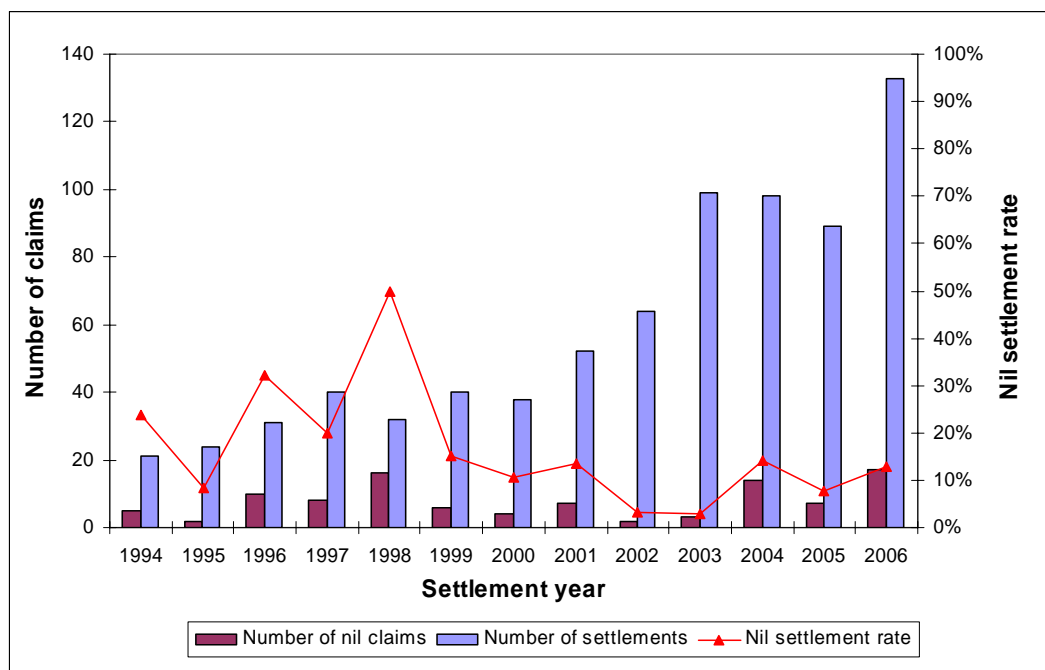
In determining the appropriateness of this implied assumption, we note in particular that:

- The most recent complete year's experience (2006/07) has been \$211,000;
- Recent experience over the last few years may be slightly understated, owing to the impact of *CSR vs. Eddy* upon past settlement awards, as *Sullivan vs. Gordon* benefits were reintroduced in the NSW Government legislation, the Civil Liability Amendment Bill 2006; and
- Historic experience could be understated slightly owing to the impact of the South Australia reforms.

### 9.3 Asbestosis claims

As with mesothelioma, the historic asbestosis nil settlement rates have been fairly volatile.

**Figure 9.2: Asbestosis nil claims experience: 1994 to 2006**



We have reviewed the averages rate over the last 3, 4 and 5 years in determining our assumption.

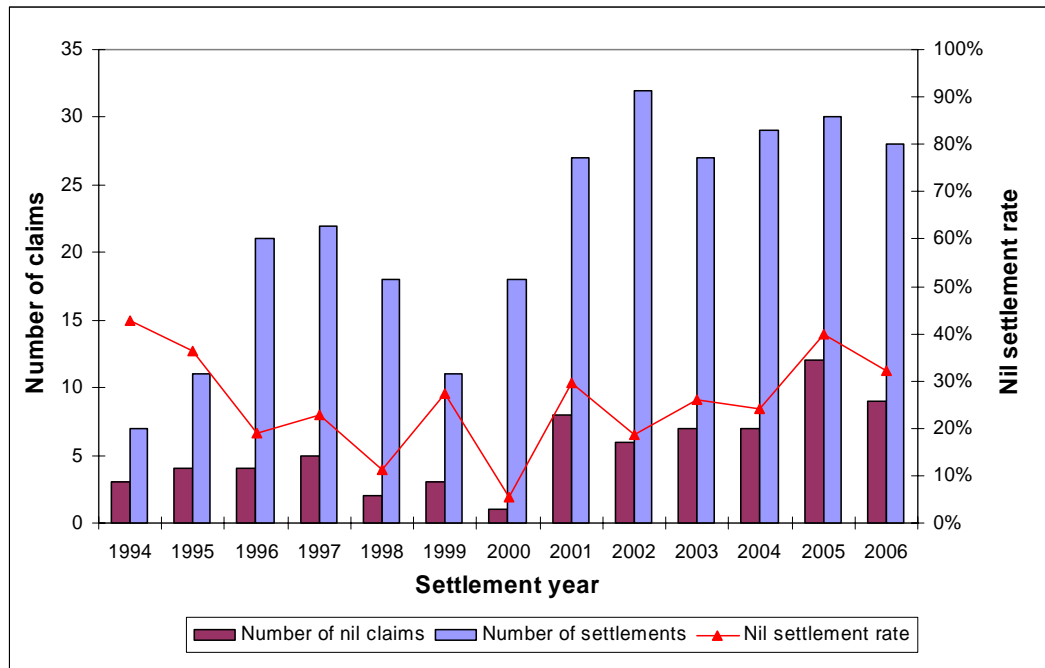
The last three years (to 2006/07) have averaged 12%, the last four years have averaged 10% and the last five years have averaged 9%.

In these circumstances we have assumed a nil settlement rate of 9.5%, unchanged from our previous valuation.

#### 9.4 Lung cancer claims

As with mesothelioma, the historic asbestosis nil settlement rates have been fairly volatile.

**Figure 9.3: Lung cancer nil claims experience: 1994 to 2006**



The average of the last three years (to 2006/07) for lung cancer claims has been 32%, the last four years have averaged 31% and the last five years have averaged 28%.

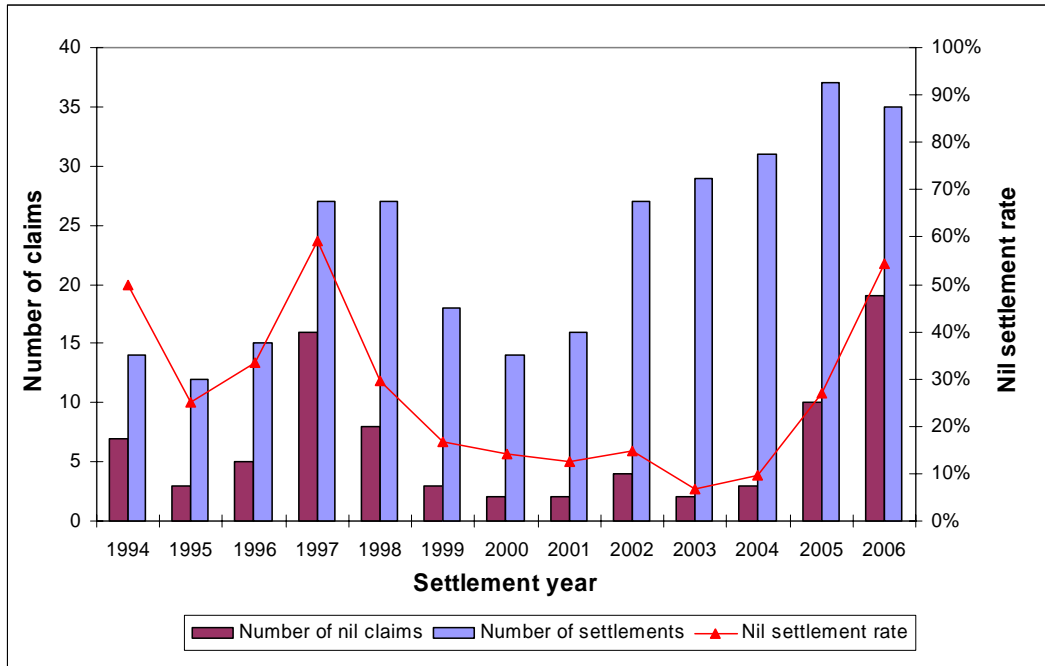
The nil settlement rate observed in these averages is influenced by the high nil settlement rate for 2005/06 (40%) and 2006/07 (32%) which are higher than the rates observed since 1994/95. In these circumstances we have selected 32% as the future nil settlement rate. This is an increase from the assumption made at the previous valuation.

We note that this rate could be affected in the future by legal changes to the division and acceptability of claims in relation to claimants who have also smoked and the contribution of smoking to the incidence of lung cancer. At this time, we have no evidence to make any specific adjustment to the assumption for that factor.

### 9.5 ARPD & Other claims

As with other disease types, there has been significant volatility in the historic nil settlement rates, given the low numbers of claims for this disease.

**Figure 9.4: ARPD & Other nil claims experience: 1994 to 2006**



The average for the last three years (to 2006/07) for ARPD & Other claims has been 31%, the average for the last four years has been 26% and the average for the last five years has been 24%.

The nil settlement rate observed for 2006/07 is 54%. We have not placed significant credibility on the most recent year (2006/07) in selecting our nil settlement rate assumption at this stage.

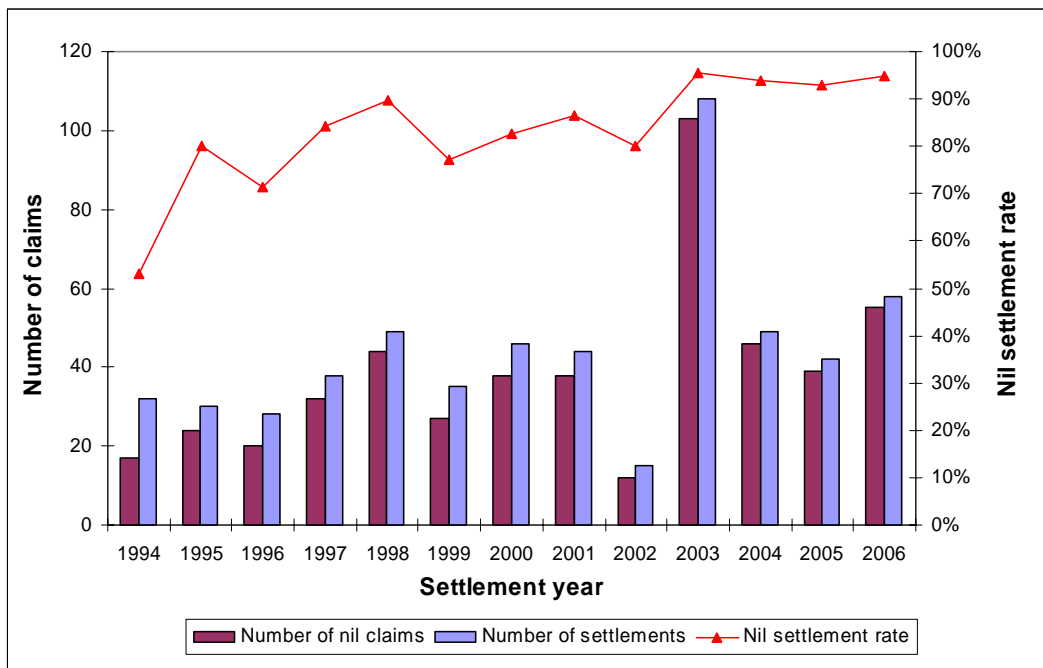
In these circumstances, we have selected 20% as our nil settlement rate assumption for this class of disease. This is unchanged from our previous assumption.

### 9.6 Workers Compensation claims

The nil settlement rates for Workers Compensation are high and are reflective of the portion of claims whose costs are fully met by a Workers Compensation Scheme or Policy. The proportion of such claims which are fully met by insurance will have increased over time and are likely to continue to do so in the future.

This trend can be observed in the following chart, which shows that the nil settlement rate has risen from 50% in 1994 to in excess of 90% for each of the last four years.

**Figure 9.5: Workers Compensation nil claims experience: 1994 to 2006**



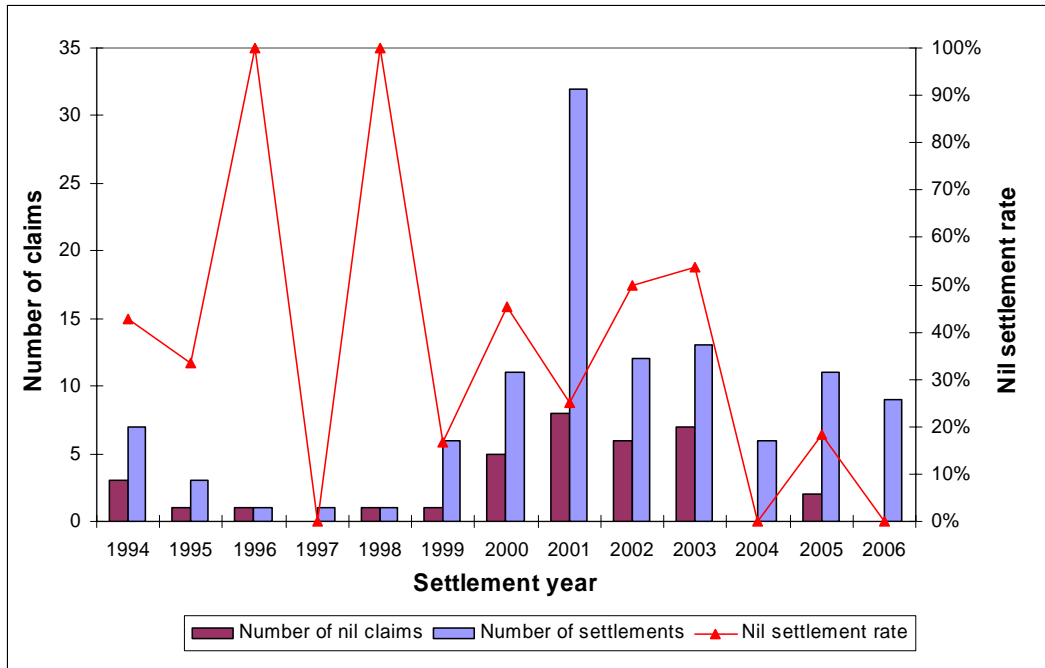
The average nil settlement rate of the last three years (to 2006/07) is 94%, the average of the last four years is 95% and the average of the last five years is 94%.

Based on continuing upward trends in the nil settlement rate, we have selected a rate of 93% at this valuation, slightly increased from our previous assumption of 92%.

### 9.7 Wharf claims

For wharf claims, the average of the last three years is 8%, the average of the last four years is 23% and the average of the last five years is 29%. We have selected 25% as our valuation assumption which is unchanged from our previous assumption. Given the low volume of claims activity for Wharf claims, this assumption is not material to the liability assessment.

**Figure 9.6: Wharf nil claims experience: 1994 to 2006**



### 9.8 Summary assumptions

The following table provides a summary of our nil settlement rate assumptions at this valuation, and those assumed at the previous valuation.

**Table 9.3: Summary nil settlement rate assumptions**

	Current valuation assumption	Previous valuation assumption
Mesothelioma	11.5%	12%
Asbestosis	9.5%	9.5%
Lung Cancer	32%	30%
ARPD & Other	20%	20%
Wharf	25%	25%
Workers Compensation	93%	92%

## **10 PRODUCT AND PUBLIC LIABILITY INSURANCE PROGRAMME**

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### **10.1 Overview**

Until 31 March 1985, the Liable Entities had in place General and Products liability insurance covers with a \$1m primary policy layer.

In addition, until 31 May 1986, the Liable Entities maintained further “umbrella” insurance contracts, with varying retentions and policy limits. That is, the contracts paid all costs arising from claims with exposure in a specified year from the retention up to the relevant policy limit. All claim costs in relation to a given exposure year in excess of the limit would be retained by the Liable Entities.

Product liability claims were insured under these contracts on an “in the aggregate” basis whilst public liability claims were insured on an “each and every loss” basis.

These contracts were placed amongst a number of insurance providers on a claims occurring basis.

From 31 May 1986, the insurance contracts were placed on a claims made basis in relation to asbestos-related product and public liability cover.

The umbrella policies were placed as follows:

- For the period up to June 1976, the insurance policies were written on a claims occurring basis. The insurance was provided by QBE but the cover provided by these policies was commuted in June 2000 for a consideration of \$3.1m per annum for the following 15 years.
  - For the period from June 1976 to 31 May 1986, the insurance policies were written on a claims occurring basis. CE Heath acted as the underwriting agent and insured the risk in Australia and also into Lloyd’s of London and the London Market. However, during this period both CE Heath Underwriting Agencies Pty Ltd (CEHUA) and CE Heath Underwriting & Insurance (Australia) Pty Ltd (CEH U&I) also insured some of the risk, reinsuring their placement on a facultative basis.
  - For the period 1986/87 to 1989/90, the insurance policies were written on a claims made basis. CE Heath acted as the underwriting agent and insured the risk into Lloyd’s of London and the London Market.
-



- For the period 1990/91 to 1996/97, the insurance policies were written on a claims made basis. However, CE Heath Casualty & General Insurance Ltd (later HIH Casualty & General) acted as the insurer of the programme and reinsured it on a facultative basis into Lloyd's of London and the London Market. CE Heath Casualty & General retained some share on some of the layers.

We understand that defence legal costs are additional to the cover.

We have allowed for the benefits of the insurance arrangements of the Liable Entities based on information provided to us by AICFL relating to the insurance programme.

The methodology describing our approach for valuing the Insurance Recoveries is detailed in Section 5.9.

## **10.2 Allowance for Insurance Recoveries**

It should be noted that only product and public liability Insurance Recoveries are allowed for within our liability assessment, and only in relation to the period of exposure and insurance placement up to 31 May 1986.

Insurance protection purchased from 31 May 1986 onwards was placed on a "claims made" basis and as such may not provide protection or recoveries against the cost of future claim notifications made by claimants against the Liable Entities. We have therefore, for the purposes of this report, made no allowance for the value of insurance contracts placed from 1986 onwards in our liability assessment.

We note that a claim of approximately \$66m has been made by Amaca on behalf of the Liable Entities against HIH and related entities in relation to the insurance programme for the 1990/91 to 1996/97 years. This claim is presently being considered by the liquidators of HIH and we have not, for the purposes of this report, attempted to estimate any recovery for it at this time.

It should be noted that our decision is an actuarial one and is not based on consideration of the legal arguments that might be presented by Amaca, by HIH or by the reinsurers. We present no legal opinion, and have not based our assessment on any such legal opinion, as to the admissibility of the claim or the expected recovery under the claim.

To the extent recovery is made against this claim, the net asset position of the AICF Trust would improve and would reduce the future funding requirement by JHINV.

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We have allowed for the value of the QBE commutation entered into in June 2000 which involves the payment of a consideration of \$3.1m per annum for 15 years to 30 June 2014.

Where a claim filed under a Scheme of Arrangement has been accepted and payment made, we have assumed that the insurance liabilities of that entity to the Liable Entities have been fully discharged and no further recoveries fall due.

### **10.3 Bad debt allowance on Insurance Recoveries**

We have made allowance for bad debts on future Insurance Recoveries within our valuation by use of the default rates in Appendix A. These have been sourced from Standard & Poor's Global Fixed Income Research, January 2007 and are based on bond default rates.

Where additional information regarding the expected payout rates of solvent and insolvent Schemes of Arrangement is available we have instead taken the expected payout rates to assess the credit risk allowance to be made in our liability assessment.

We have considered the credit rating of the insurers of the Liable Entities as at March 2007 and applied the relevant credit rating default rates to the expected future cashflows by year, treaty and insurer.

In relation to those claims occurring contracts where CEHUA or CEH U&I insured some of the risks (and then facultatively reinsured that risk), we have assumed, for the purposes of this report, that cut-through from the reinsurers directly to the Liable Entities will not take place and that these Insurance Recoveries will therefore rank alongside other creditors of the HIH Group. We note that this assumption is not based on legal opinion and we pass no such opinion.

Were cut-through to be achieved, whether under Section 562A(4) of the Corporations Act or under Section 6 of the Law Reform (Miscellaneous Provisions) Act or on some other basis, this would be expected to increase the level of Insurance Recoveries, as the financial health of the reinsurers to the HIH Group is generally better than that of the HIH Group itself, so that a lower bad debt charge would apply.

We understand that various legal issues associated with the applicability of Section 562 of the Corporations Act to reinsurance recoveries of the HIH Liquidator is currently the subject of an appeal to the House of Lords in the UK. The appeal is set down for hearing in December 2007 and a decision is not expected until early 2008.

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#### 10.4 Expected Insurance Recoveries

The following table shows the Insurance Recoveries and the bad debt allowances that we have made within our valuation assessment on both a discounted and an undiscounted basis.

**Table 10.1: Insurance recoveries at 31 March 2007**

	<b>Undiscounted (\$m)</b>	<b>Discounted (\$m)</b>
Gross Liability	3,298.9	1,571.2
QBE Recoveries	(24.8)	(19.7)
Product and Public liability recoveries	(545.9)	(234.1)
Bad Debt Allowance	82.5	37.8
<b>Net Liability after Bad Debt</b>	<b>2,810.8</b>	<b>1,355.1</b>

As such, Insurance Recoveries (after allowing for bad debt) support approximately 14% of the gross liabilities.

The overall bad debt allowance amounts to around 15% of the expected Insurance Recoveries.

In determining our net liability assessment, we have assumed that the insurance policies of the Liable Entities will continue to respond to relevant claims we have projected as they fall due. Other than making a general credit risk ("bad debt") allowance in valuing the Insurance Recoveries, we have assumed they will otherwise be fully recovered.

To the extent that:

- one or more significant insurers fail in the future; and/or
- insurers dispute payments due to the Liable Entities; and/or
- legal cases change the way in which insurances respond to claims (e.g. due to changing legal interpretations of the "date of loss"); and/or
- insurance assets may be subject to claims by non-Australian claimants; and/or



- insurers negotiate commutations of their obligations to the Liable Entities for more or less than our valuation allowance;

the net liabilities of the Liable Entities would vary accordingly. For example an event resulting in a loss of 10% of the anticipated Insurance Recoveries included in our valuation (in addition to the general bad debt allowance) would increase the net liability by approximately \$20 million.

## 11 VALUATION RESULTS

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### 11.1 Central estimate liability

At 31 March 2007, our central estimate of the liabilities of the Liable Entities (the Discounted Central Estimate) to be met by the AICF Trust taking credit for the anticipated cost savings from the implementation of procedural reforms resulting from the NSW Dust Diseases Tribunal reforms is \$1,355.1m (September 2006: \$1,554.8m).

Within that assessment, we have estimated the future cost savings arising from the procedural reforms in NSW as being \$29.5m (September 2006: \$35.2m). The reduction is partly due to the reduction in the gross liabilities and partly due to some of the previously projected savings having now been crystallised.

We have also estimated the savings that could arise if similar reforms were introduced (where applicable) across the other States. We estimate this potential saving at \$19.6m (September 2006: \$23.3m).

All of the above liability figures are discounted and are net of cross-claim recoveries and Insurance Recoveries.

We have not allowed for the future Operating Expenses of the AICF Trust or the Liable Entities in the liability assessments.

The following table shows a summary of our central estimate liability assessment and compares the current assessment with our previous valuation.

**Table 11.1: Comparison of central estimate of liabilities**

	March 2007			September 2006	March 2006
	\$m			\$m	\$m
	Gross of insurance recoveries	Insurance recoveries	Net of insurance recoveries	Net of insurance recoveries	Net of insurance recoveries
Total projected cashflows (uninflated)	1,489.3	216.3	1,273.0	1,442.3	1,401.7
Future inflation allowance	1,809.6	271.8	1,537.8	1,726.6	1,677.4
Total projected cash-flows with inflation	3,298.9	488.1	2,810.8	3,168.9	3,079.2
Discounting allowance	(1,727.8)	(272.1)	(1,455.6)	(1,614.0)	(1,562.2)
<b>Net present value liabilities</b>	<b>1,571.2</b>	<b>216.0</b>	<b>1,355.1</b>	<b>1,554.8</b>	<b>1,517.0</b>

*Note: This table has been restated compared with previous valuation reports. Our base scenario is now "net of NSW cost savings". Previously, the base scenario was "before NSW cost savings". Accordingly the figures for 30 September 2006 and 31 March 2006 have changed compared with those disclosed in previous valuation reports.*

## **11.2 Comparison with previous valuation**

In the absence of any change to the claim projection assumptions from our 30 September 2006 valuation, other than allowing for the changes in the discount rate, we would have projected a Discounted Central Estimate liability of \$1,504.6m (net of NSW cost savings) as at 31 March 2007.

Consequently, our revised assessment at 31 March 2007 represents a decrease of \$149.5m from that assessment.

The decrease in that net liability estimate is principally a consequence of:

- A reduction in the projected number of future mesothelioma claims recognising the lower reporting activity in the last two years;
- A reduction in average claim awards and legal costs for some disease types;
- An increase in the assumed rate of recovery from cross-claims; and
- Actual experience in the 6-month period being better than forecast, with fewer claims reported at a lower cost as well as savings being achieved on claims which were not settled as at 30 September 2006;

offset by

- An increase in the projected number of future asbestosis claims recognising the experience in the last twelve months; and
- An increase in the assumed incidence of large (>\$1m) mesothelioma claims.

The following table shows an analysis of the change in our liability assessments from September 2006 to March 2007.

For comparison, we have also shown the change in our liability assessment over the previous six month period to 30 September 2006 and the total change over the last financial year.

**Table 11.2: Analysis of change: March 2006 to September 2006 and March 2007**

	March 2006 to Sept 2006 \$m	Sept 2006 to March 2007 \$m	March 2006 to March 2007 \$m
<b>Net liability at start of valuation period allowing for cost savings in NSW only</b>	<b>1,517.0</b>	<b>1,554.8</b>	<b>1,517.0</b>
Expected net claims payments	(35.1)	(33.2)	(68.3)
Unwind of discount / interest charge	41.0	45.7	86.7
<b>Expected liability at end of valuation period</b>	<b>1,522.9</b>	<b>1,567.3</b>	<b>1,535.4</b>
Change in discount rate	(0.4)	(62.7)	(63.1)
<b>Expected net liability at end of valuation period adjusted for discount rate</b>	<b>1,522.5</b>	<b>1,504.6</b>	<b>1,472.3</b>
Impact of Change in valuation bases:			
- Claim numbers	62.6	(90.9)	(28.3)
- Nil settlement rate	(8.5)	3.2	(5.3)
- Average claims costs and legal costs	(50.2)	(34.7)	(84.9)
- Claim inflation	43.4		43.4
- Cross claim recoveries		(14.4)	(14.4)
- Insurance recoveries (bad debt allowance)		(2.6)	(2.6)
- Emerging experience on reported claims and pending claims	(15.0)	(10.1)	(25.1)
<b>Total development in net liability</b>	<b>32.3</b>	<b>(149.5)</b>	<b>(117.2)</b>
<b>Net liability at end of valuation period allowing for cost savings in NSW only</b>	<b>1,554.8</b>	<b>1,355.1</b>	<b>1,355.1</b>



### 11.3 Claims and legal costs

We have estimated the amount of plaintiff legal costs contained within settlements made on an “inclusive” basis and plaintiff and defence legal costs that have been separately identified.

We have estimated that legal costs currently represent approximately 21% of the total gross expenditure, or 26% of the gross claims settlement amounts.

Applying these to our valuation projections result in \$286.3m of legal costs (net of future cost savings in NSW).

**Table 11.3: Breakdown of components of net central estimate liabilities**

	March 2007	Sept 2006
	\$m	\$m
Net claim costs (excl Claims Legal Costs)	1,068.8	1,230.3
Total Claims Legal Costs (plaintiff and defendant costs)	286.3	324.5
<b>Net Liability</b>	<b>1,355.1</b>	<b>1,554.8</b>
Claims Legal Costs, as % of gross costs of settlements	<b>22.2%</b>	22.1%
Claims Legal Costs, as % of net costs of settlements	<b>26.8%</b>	26.4%

*Note: The net present value of the Insurance Recoveries have been assessed as \$216.0m for the March 2007 valuation; \$237.9m for the September 2006 valuation; \$241.2m for the March 2006 valuation.*

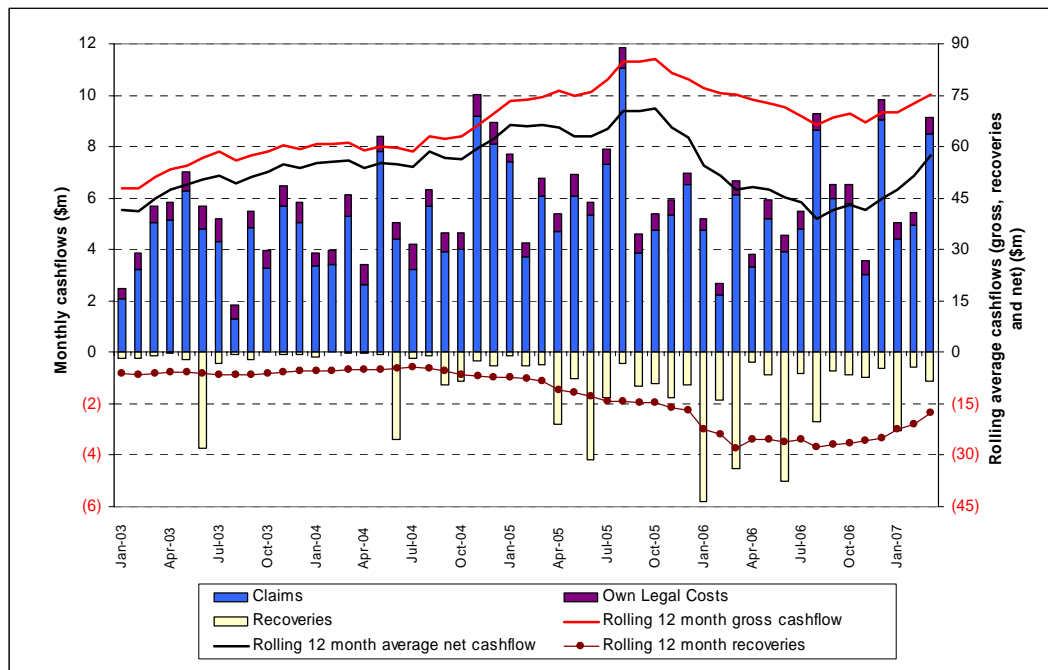
## 11.4 Cashflow projections

### 11.4.1 Past cashflow expenditure

It is worth contextualising the projected rate of future expenditure with that exhibited in the past.

The following chart shows the monthly rate of expenditure relating to asbestos-related claim settlements over the last four years.

**Figure 11.1: Past claim-related expenditure of the Liable Entities:  
 1 January 2003 to 31 March 2007**



Cashflow payments in the 12 months to 31 March 2007 were approximately \$75m gross of insurance and other recoveries and \$57m net of insurance and other recoveries.

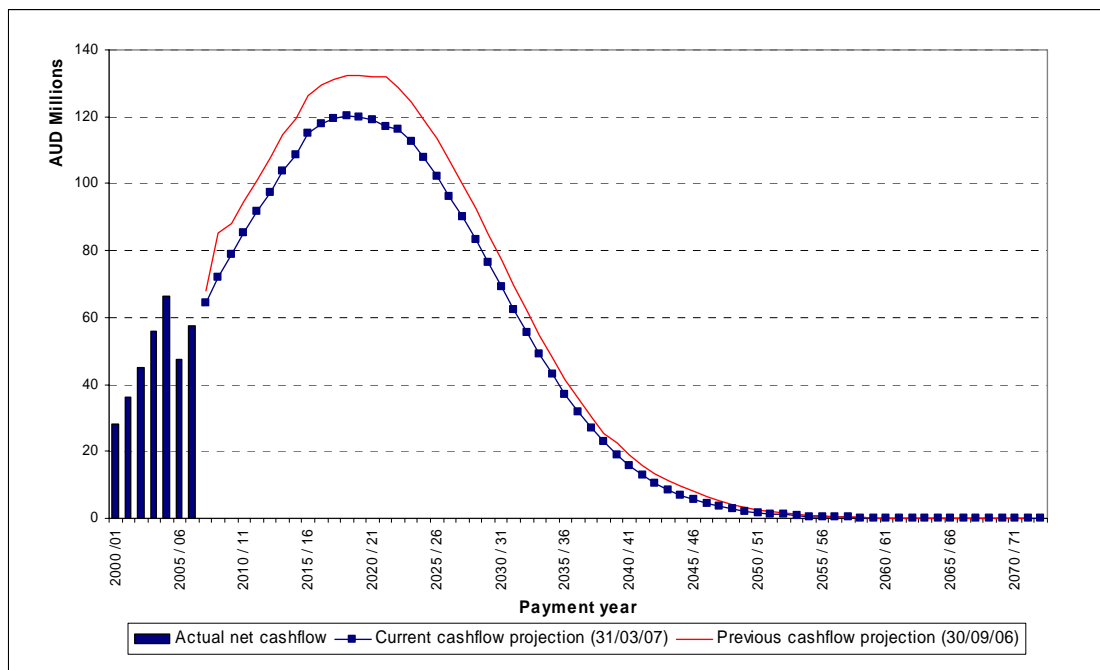
By comparison, cashflow payments in the 12 months to 31 March 2006 were approximately \$75m gross of insurance and other recoveries and \$48m net of insurance and other recoveries; whilst in the 12-month period to 31 March 2005, the comparative cashflow figures were \$74m and \$66m respectively.

It should be noted that the above chart is compiled on a “cash basis” rather than an “accruals basis” so that the figures are not directly applicable to the actuarial basis of projection. However, the difference in timing should be relatively small (i.e. of the order of 1-2 months generally).

### 11.4.2 Future cashflow projections

Figure 11.2 shows a comparison of the actual annual net cashflows for all financial years since 2000/01, the projected net cashflows underlying our 31 March 2007 valuation and the projected net cashflow projection underlying our previous valuation.

**Figure 11.2: Annual cashflow projections – 31 March 2007 (\$m)**



The underlying projected cashflows for this chart are detailed in Appendix B.

The fall in projected future cashflow between the previous valuation and our current valuation is predominantly a result of the lower number of future mesothelioma claims which we are now assuming.

With a 10% reduction in the projected future number of mesothelioma claims, the proportionate fall in cashflow across most future years is also broadly 10%.

The peak cashflow is projected to arise in 2018/19, which is later than the projected peak in reporting of claims (2010/11 for mesothelioma). This lag reflects:

- the delay between claims reporting and claims settlement of approximately 1 year for mesothelioma and 2.5 years for non-mesothelioma; and

- the impact of claims inflation upon cashflow. Cashflow is a function of claim numbers and average costs. Until 2018/19, claim numbers reduce at a rate less than 6.6%, so that claims inflation more than offsets the fall in claim numbers and projected cashflow still increases.

Given the extremely long-tail nature of asbestos-related liabilities, a small change in an individual assumption can have a significant impact upon the cashflow profile of the liabilities.

### **11.5 Amended Final Funding Agreement calculations**

The Amended Final Funding Agreement sets out the basis on which payments will be made to the AICF Trust.

Additionally, there are a number of other figures specified within the Amended Final Funding Agreement that we are required to calculate. These are<sup>10</sup>:

- Discounted Central Estimate;
- Term Central Estimate; and
- Period Actuarial Estimate.

**Table 11.4: Amended Final Funding Agreement calculations at 31 March 2007 (\$m)**

	\$m
Discounted Central Estimate (net of cross-claim recoveries, Insurance and Other Recoveries)	1,355.1
Period Actuarial Estimate (net of cross-claim recoveries, gross of Insurance and Other Recoveries) comprising:	229.8
Discounted value of cashflow in 2007/08	73.8
Discounted value of cashflow in 2008/09	76.8
Discounted value of cashflow in 2009/10	79.1
Term Central Estimate (net of cross-claim recoveries, Insurance and Other Recoveries)	1,352.6

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<sup>10</sup> See Glossary of Terms in Appendix J for description of these items

It should be noted that the actual funding required at a particular date will depend upon a number of factors, including:

- the net asset position of the AICF Trust at that time;
- the free cash flow amount of the JHINV Group in the preceding financial year; and
- the Period Actuarial Estimate in the latest Annual Actuarial Report.

#### **11.6 Accounting liability calculations: JHINV**

The accounting liabilities for JHINV are determined in accordance with US GAAP which differs from Australian actuarial standards of liability determination.

The determination of the accounting liability to be established by JHINV is ultimately a decision for the Board of JHINV.

However, the Board of JHINV have indicated that the calculation of the accounting liability will, in part, be based upon the liabilities we have estimated within this report.

We set out below the basis upon which we have been advised the US GAAP accounting liability is to be calculated.

##### **11.6.1 US GAAP adjustments**

The cashflows used in the derivation of the accounting liability are “uninflated and undiscounted” (“UIUD”).

No credit is taken within the determination of the accounting liability under US GAAP for “cross claim recoveries” from third parties until such recoveries have been received.

Previously, an adjustment was also made in relation to an additional bad debt charge for Equitas. However, given the recent announcement by Berkshire Hathaway to acquire Equitas’ liabilities, this adjustment is no longer required and the accounting liability therefore assumes full recovery of any insurances held by Equitas.

Adjustments are then made by to allow for:

- The expected future direct claims handling costs projected to be incurred in settling all future claims;
  - The net assets or liabilities of the AICF; and
  - Tax deductibility of contributions by JHINV.
-

Appendix E contains a step-by-step analysis of the basis of derivation of the accounting liability of JHINV from our Discounted Central Estimate.

### 11.6.2 Results

The net accounting liability, in Australian Dollars, has reduced from A\$1,055.9m at 30 September 2006 to A\$968.8m at 31 March 2007.

This reduction in the accounting liability of A\$87.1m over the last six months is entirely due to changes in the actuarial valuation at 31 March 2007.

### 11.6.3 Explanation of change in JHINV accounting liability due to actuarial valuation

The impact of the actuarial valuation upon the accounting liability has been to generate an after-tax release of A\$87.1m in the last six months.

By contrast, our discounted central estimate valuation, as shown in Table 11.2, indicates a reduction of A\$199.7m (being A\$1,554.8m less A\$1,355.1m) over the same period.

Appendix E shows how the various liability assessments compare but in particular in the following table we explain the reasons why the movement in the JHINV accounting provision which results from the actuarial valuation changes is not as significant as the A\$199.7m.

**Table 11.5: Explaining the movement in the JHINV Accounting Provision by reference to the reduction in the Discounted Central Estimate (A\$m)**

	Increase / (Decrease) A\$m
<b>Change in Discounted Central Estimate</b>	<b>(199.7)</b>
Impact of inflation and discounting	30.4
<b>Change in uninflated and undiscounted central estimate</b>	<b>(169.3)</b>
Provision for claims handling costs	1.5
Other US GAAP adjustments	8.2
Changes to net assets of AICF (including actual payments made)	(35.2)
<b>Change in net accounting provision (pre-tax)</b>	<b>(124.5)</b>
<b>Change in net accounting provision (post-tax)</b>	<b>(87.1)</b>

### **11.7 AICFL: Allocation of central estimate liabilities to Liable Entities**

The accounting liabilities for AICFL are determined in accordance with Australian GAAP which differs from US GAAP and is more closely aligned with the Australian actuarial standards of liability determination.

The determination of the accounting liabilities of AICFL is ultimately a decision for the Board of AICFL.

However, we have been requested to provide an actuarially-assessed allocation of the central estimate liabilities set out in this report to each of the three entities (namely Amaca, Amaba and ABN60) to assist AICFL in completing their statutory financial statements.

The central estimate liabilities for each entity have been assessed on the basis of the overall figures contained within this report, with a separate allocation to each entity as follows:

- Gross liabilities (net of cross-claim recoveries),
- Allocation of insurance recoveries (separating QBE and other insurance recoveries); and
- Split between current and non-current liabilities.

Our approach in making this allocation, and the results of the central estimate allocation, are shown in Appendix F.

## **12 UNCERTAINTY**

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### **12.1 Overview**

There is uncertainty involved in any valuation of the liabilities of an insurance company or a self-insurer. The sources of such uncertainty include:

- Parameter error – this is the risk that the parameters and assumptions chosen ultimately prove not to be reflective of future experience.
- Model error – this is the risk that the model selected for the valuation of the liabilities ultimately proves not to be adequate for the projection of the liabilities.
- Legal and social developments – this is the risk that the legal environment in which claims are settled changes relative to its current and historic position thereby causing significantly different awards.
- Future actual rates of inflation.
- The general economic environment.
- Potential sources of exposure – this is the risk that there exist sources of exposure which are as yet unknown or unquantifiable, or for which no liabilities have yet been observed, but which may trigger future claims.

In the case of asbestos liabilities, these uncertainties are exacerbated by the extremely long latency period from exposure to onset of disease and notification of a claim. Asbestos-related claims often take in excess of 40 years from original exposure or event, compared with 4-5 years for many other compensation-type liabilities such as Comprehensive Third-Party injury liabilities or other Workers Compensation liabilities. Specific forms of uncertainty relating to asbestos-related disease liabilities include:

- The difficulty in quantifying the extent and pattern of past asbestos exposures and the number and incidence of the ultimate number of lives that may be affected by asbestos related diseases arising from such past asbestos exposures;
  - The propensity of individuals affected by diseases arising from such exposure to file common law claims against defendants;
  - The extent to which the Liable Entities will be joined in such future common law claims;
-



- The fact that the ultimate severity of the impact of the disease and the quantum of the claims that will be awarded will be subject to the outcome of events that have not yet occurred, including:
  - medical and epidemiological developments;
  - court interpretations;
  - legislative changes;
  - changes to the form and range of benefits for which compensation may be awarded (“heads of damage”);
  - public attitudes to claiming;
  - the potential for future procedural reforms in NSW and other States affecting the legal costs incurred in managing and settling claims;
  - potential third-wave exposures; and
  - social and economic conditions such as inflation.

## 12.2 Sensitivity testing

As we have noted above, there are many sources of uncertainty. Actuaries often perform “sensitivity testing” to identify the impact of different assumptions as to future experience, thereby providing an indication of the degree of parameter error risk to which the valuation assessment is exposed.

Sensitivity testing may be considered as being a mechanism for testing “what will the liabilities be if instead of choosing [x] for assumption [a] we chose [y]?” It is also a mechanism for identifying how the result will change if experience turns out different in a particular way relative to that which underlies the central estimate expectations. As such, it provides an indication of the level of variability inherent in the valuation.

We have performed some sensitivity tests of the results of our central estimate valuation. We have sensitivity tested the following factors:

- ***nil settlement rate***: 5 percentage points above and below our best estimate assumption.
  - ***average claim cost of a non-nil claim***: 10% above and below our best estimate assumption.
  - ***peak year of claims***: increase/decrease by 1, 3 and 5 years.
-

- **number of claims notified:** 5% above and below our best estimate assumption.
- **superimposed inflation:** 2.25% per annum superimposed inflation for 5 years reducing to -2% per annum after a further five years and remaining at -2% per annum thereafter; and 6.25% per annum superimposed inflation for the next five years, linearly reducing to 2.25% per annum after a further five years and remaining at 2.25% per annum thereafter.
- **discount rates:** 1 percentage point above and below our best estimate assumption.
- **base inflation:** 1 percentage point above and below our best estimate assumption.

There are other factors which influence the liability assessment and which could be sensitivity tested, including:

- The cross-claim recovery rate;
- The pattern of claim notifications; and
- The pattern and delay of claim settlements from claim notification.

We have not sensitivity tested these factors noting them to be of less financial significance or uncertainty individually, although in aggregate they could be of more significance.

We have not sensitivity tested the value of Insurance Recoveries as these uncertainties relate to legal risks and disputation risks, and it is not possible to parameterise a sensitivity test in an informed manner.

### 12.3 Results of sensitivity testing

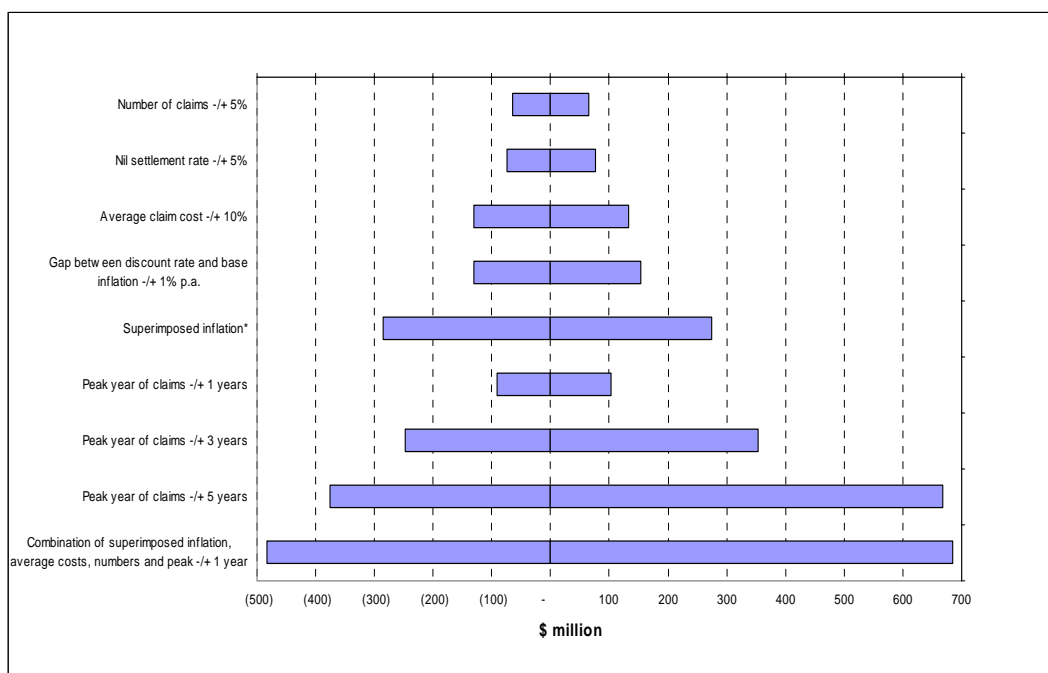
Figure 12.1 shows the impact of various individual sensitivity tests on the Discounted Central Estimate of the liabilities, and of a combined sensitivity test of a number of factors.

It should be noted that although we have tested multiple scenarios of each assumption, one cannot gauge an overall potential range by simply adding these tests together.

It should also be noted that because of the interactions between assumptions, the maximum range will not be the sum of the constituent parts. Rather it is important to recognise that it is unlikely that all assumptions would deteriorate together, and there are often compensating upsides to the downsides that can arise. This is especially so when considering the inter-dependencies and correlations between parameters, such as higher inflation often being associated with higher discount rates: the former would increase the liabilities whilst the latter would decrease the liabilities.

As such, in the figure below, we have considered the relationship between base inflation and the discount rate as the key sensitivity test rather than each assumption independently.

**Figure 12.1: Sensitivity testing results – Impact around the Discounted Central Estimate (in \$m)**



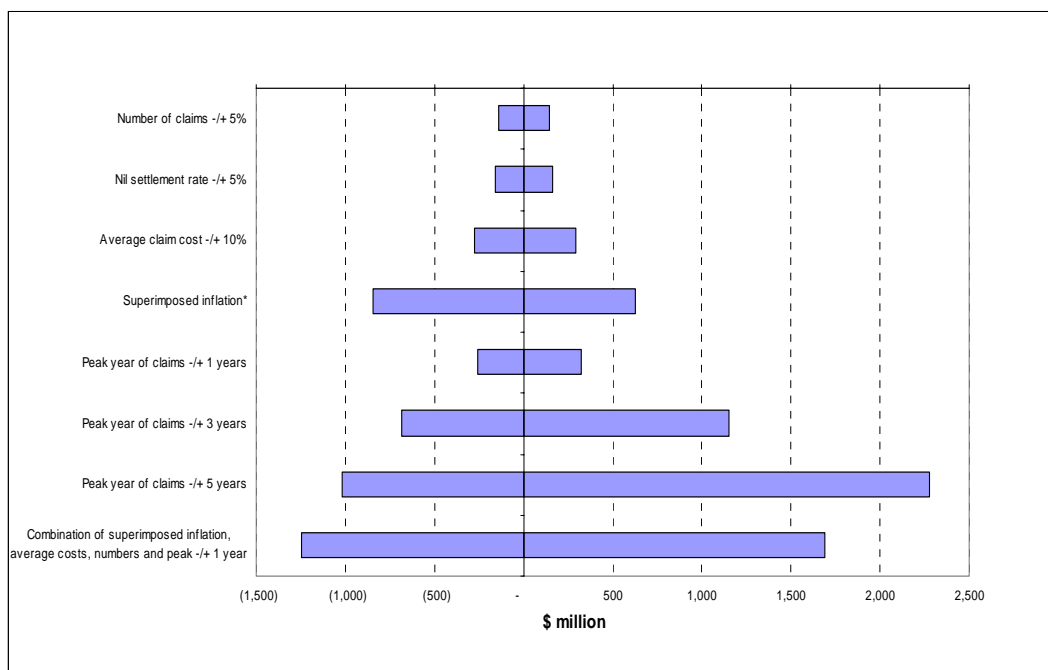
\* The superimposed inflation sensitivity tests are for 6.25% per annum for 5 years reducing to 2.25% per annum; and 2.25% per annum for 5 years reducing to -2% per annum.

Whilst our combined sensitivity test of a number of factors (including superimposed inflation, average claim costs and numbers of claims) indicates a range around the Discounted Central Estimate of liabilities of -\$500m to +\$700m (i.e. \$0.9bn to \$2.0bn), the actual cost of liabilities could fall outside that range depending on the out-turn of the actual experience.

The above chart implies that the single most sensitive assumption is potentially the peak year of mesothelioma claims reporting against the Liable Entities. Shifting the peak year of mesothelioma claims reporting by 5 years from 2010/11 to 2015/2016 for mesothelioma would imply an increase in the future number of mesothelioma claims reported of around 50%.

We have also performed the sensitivity analysis on the undiscounted cashflows. The chart below shows how the results change for the undiscounted cashflow projections for each of the scenarios.

**Figure 12.2: Sensitivity testing results – Impact around the central estimate (undiscounted) (in \$m)**



\* The superimposed inflation sensitivity tests are for 6.25% per annum for 5 years reducing to 2.25% per annum; and 2.25% per annum for 5 years reducing to -2% per annum.

Whilst our combined sensitivity test of a number of factors (including superimposed inflation, average claim costs and numbers of claims) indicates a range around the central estimate of liabilities on an undiscounted basis of -\$1.2bn to +\$2.3bn (i.e. \$1.6bn to \$5.1bn), the actual cost of liabilities could fall outside that range depending on the out-turn of the actual experience.

**Table 12.1: Summary results of sensitivity analysis**

	<b>Undiscounted</b>	<b>Discounted</b>
Central estimate	\$2.81bn	\$1.36bn
Range around the central estimate	-\$1.2bn to +\$2.3bn	-\$0.5bn to +\$0.7bn
Range of liability estimates	\$1.6bn to \$5.1bn	\$0.9bn to \$2.0bn

# **APPENDICES**

## A. Credit rating default rates by duration

Rating	Yr. 1	Yr. 2	Yr. 3	Yr. 4	Yr. 5	Yr. 6	Yr. 7	Yr. 8	Yr. 9	Yr. 10	Yr. 11	Yr. 12	Yr. 13	Yr. 14	Yr. 15
AAA	0.00%	0.00%	0.09%	0.19%	0.29%	0.43%	0.50%	0.62%	0.66%	0.70%	0.70%	0.70%	0.70%	0.76%	0.83%
AA+	0.00%	0.07%	0.07%	0.14%	0.21%	0.29%	0.37%	0.37%	0.37%	0.37%	0.37%	0.37%	0.37%	0.37%	0.37%
AA	0.00%	0.00%	0.00%	0.09%	0.21%	0.29%	0.39%	0.53%	0.65%	0.78%	0.88%	0.96%	1.11%	1.19%	1.24%
AA-	0.02%	0.09%	0.21%	0.34%	0.48%	0.65%	0.81%	0.95%	1.07%	1.20%	1.34%	1.51%	1.57%	1.71%	1.79%
A+	0.05%	0.10%	0.26%	0.47%	0.63%	0.80%	1.02%	1.18%	1.38%	1.57%	1.79%	2.03%	2.26%	2.51%	2.73%
A	0.07%	0.19%	0.32%	0.44%	0.63%	0.85%	1.06%	1.29%	1.52%	1.85%	2.12%	2.27%	2.43%	2.52%	2.82%
A-	0.06%	0.22%	0.35%	0.53%	0.79%	1.11%	1.57%	1.87%	2.14%	2.33%	2.42%	2.56%	2.67%	2.80%	2.93%
BBB+	0.16%	0.50%	1.00%	1.43%	1.92%	2.46%	2.86%	3.23%	3.74%	4.14%	4.54%	4.77%	5.16%	5.74%	6.39%
BBB	0.25%	0.59%	0.93%	1.52%	2.14%	2.72%	3.25%	3.84%	4.34%	4.90%	5.53%	6.02%	6.55%	6.77%	7.19%
BBB-	0.33%	1.11%	1.94%	3.04%	4.07%	5.04%	5.77%	6.47%	7.00%	7.67%	8.26%	8.84%	9.42%	10.26%	10.90%
BB+	0.57%	1.54%	3.12%	4.62%	5.94%	7.36%	8.65%	9.25%	10.32%	11.18%	11.76%	12.31%	12.80%	13.37%	14.17%
BB	0.86%	2.67%	4.92%	6.99%	9.02%	10.92%	12.36%	13.73%	14.81%	15.70%	16.88%	17.81%	18.24%	18.34%	18.44%
BB-	1.54%	4.47%	7.62%	10.72%	13.39%	15.86%	17.76%	19.68%	21.34%	22.57%	23.58%	24.32%	25.30%	26.01%	26.62%
B+	2.70%	7.46%	12.04%	15.91%	18.75%	20.87%	22.86%	24.53%	25.95%	27.41%	28.62%	29.59%	30.64%	31.71%	32.59%
B	7.10%	14.23%	19.47%	23.21%	25.77%	28.03%	29.45%	30.56%	31.48%	32.48%	33.42%	34.45%	35.58%	36.39%	37.26%
B-	10.11%	18.61%	24.89%	29.10%	32.20%	34.48%	36.44%	37.67%	38.44%	38.94%	39.48%	39.87%	40.09%	40.32%	40.58%
CCC+	26.29%	34.73%	39.96%	43.19%	46.22%	47.49%	48.61%	49.23%	50.95%	51.83%	52.57%	53.34%	53.95%	54.59%	54.59%
L	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
NR	4.39%	8.66%	12.47%	15.59%	18.07%	20.13%	21.81%	23.20%	24.48%	25.60%	26.59%	27.43%	28.25%	28.94%	29.55%
CEHUA	75.00%	75.00%	75.00%	75.00%	75.00%	75.00%	75.00%	75.00%	75.00%	75.00%	75.00%	75.00%	75.00%	75.00%	75.00%
CEHU&I	95.00%	95.00%	95.00%	95.00%	95.00%	95.00%	95.00%	95.00%	95.00%	95.00%	95.00%	95.00%	95.00%	95.00%	95.00%
CIC	65.00%	65.00%	65.00%	65.00%	65.00%	65.00%	65.00%	65.00%	65.00%	65.00%	65.00%	65.00%	65.00%	65.00%	65.00%
R	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

Source: Standard and Poor's Global Fixed Income Research, January 2007.

CEHUA, CEHU&I and CIC default rates have been estimated by KPMG Actuaries based on HIH Scheme Information, available at [www.hih.com.au](http://www.hih.com.au)

**Notes:**

These rates are not used for those solvent and insolvent Schemes of Arrangement where the payout rates are known or have been estimated. In those cases, the payout rate has been used to determine the credit rating default rates.

L relates to Lloyds' of London and Equitas.

NR relates to companies which are Not Rated.

R relates to companies which have been subject to Regulatory Action regarding solvency.

The credit ratings used for individual companies are as at March 2007.



## B. Actuarial valuation assumptions

### B.1 Total number of claims notifications (past & future)

	Current valuation	Previous valuation
Mesothelioma	6,080	6,510
Asbestosis	3,134	2,791
Lung Cancer	879	893
ARPD & Other	778	915
Wharf	185	186
Workers Compensation	1,682	1,772

### B.2 Latency model (from mid-point of exposure)

	Current valuation		Previous valuation	
	Mean (years)	Std Dev (years)	Mean (years)	Std Dev (years)
Mesothelioma	35	10	35	10
Asbestosis	30	10	30	10
Lung Cancer	35	10	35	10
ARPD & Other	30	11	30	11
Wharf	n/a	n/a	n/a	n/a
Workers Compensation	n/a	n/a	n/a	n/a

### B.3 Peak year of claim notifications

	Current valuation	Previous valuation
Mesothelioma	2010/11	2010/11
Asbestosis	2006/07	2006/07
Lung Cancer	2010/11	2010/11
ARPD & Other	2006/07	2006/07
Wharf	2000/01	2000/01
Workers Compensation	2006/07	2006/07

#### **Notes for B.4 to B.6:**

<sup>1</sup> Average costs for the current valuation are in mid 2006/07 money terms

<sup>2</sup> Average costs for the previous valuation are in mid 2006/07 money terms

**B.4 Projected average Liable Entities' share of claim award costs of non-nil settlements (pre cost savings)**

	Current valuation <sup>1</sup>	Previous valuation <sup>2</sup>
Mesothelioma	250,000	260,000
Asbestosis	95,000	97,500
Lung Cancer	125,000	125,000
ARPD & Other	90,000	90,000
Wharf	100,000	100,000
Workers Compensation	125,000	135,000
Mesothelioma large claims allowance	\$1,650,000 average size 2.0% incidence rate \$33,000 per claim	\$1,650,000 average size 1.6% incidence rate \$26,400 per claim

**B.5 Projected average Liable Entities' defendant costs of nil settlements  
(pre cost savings)**

	Current valuation <sup>1</sup>	Previous valuation <sup>2</sup>
Mesothelioma	15,000	17,500
Asbestosis	15,000	15,000
Lung Cancer	7,500	7,500
ARPD & Other	10,000	10,000
Wharf	2,500	2,500
Workers Compensation	2,500	2,500

**B.6 Projected average Liable Entities' share of defendant claims legal costs  
of non-nil settlements (pre cost savings)**

	Current valuation <sup>1</sup>	Previous valuation <sup>2</sup>
Mesothelioma	22,500	25,000
Asbestosis	22,500	25,000
Lung Cancer	20,000	20,000
ARPD & Other	20,000	25,000
Wharf	15,000	15,000
Workers Compensation	15,000	15,000

**B.7 Nil claim settlement rate**

	Current valuation	Previous valuation
Mesothelioma	11.5%	12%
Asbestosis	9.5%	9.5%
Lung Cancer	32%	30%
ARPD & Other	20%	20%
Wharf	25%	25%
Workers Compensation	93%	92%

**B.8 Cross-claim recoveries and Other Recoveries rate**

	Current valuation	Previous valuation
Cross-claim recoveries rate	3.00%	2.00%
Other Recoveries rate	0.00%	0.00%
Total recoveries rate	3.00%	2.00%

**B.9 Margin in case estimates**

	Current valuation	Previous valuation
Assumed surplus as a % of case estimates	20.0% of the award amount	15.0% of the award amount

**B.10 Economic assumptions excluding discount rate**

	Current valuation	Previous valuation
Base inflation	4.25% per annum	4.25% per annum
Superimposed inflation	2.25% per annum	2.25% per annum
Total claim inflation	6.60% per annum	6.60% per annum

**B.11 Discount rate by year**

Year	Current valuation	Previous valuation
1	6.36%	6.02%
2	6.27%	5.84%
3	6.14%	5.69%
4	6.02%	5.57%
5	5.91%	5.48%
6	5.82%	5.42%
7	5.76%	5.38%
8	5.71%	5.37%
9+	5.67%	5.37%

### C. Projected cashflows (\$m)

Payment Year	Mesotheliom			ARP & Other	Defendant Legal Costs	Workers Compensation		Wharf Claims	Wharf Legal Costs	Baryulgil	Cross Claim Recoveries	Gross	Insurance	Net
	a	Asbestosis	Lung Cancer			on Claims	on Legal Costs							
2007 / 2008	55.2	10.9	3.1	1.7	5.5	0.4	0.1	0.6	0.0	0.6	2.1	76.2	11.9	64.3
2008 / 2009	60.4	12.9	3.1	2.1	6.3	0.4	0.1	0.6	0.0	0.6	2.3	84.2	12.2	72.0
2009 / 2010	66.0	14.4	3.1	2.3	6.9	0.5	0.1	0.7	0.1	0.6	2.6	92.1	13.4	78.7
2010 / 2011	71.4	15.5	3.3	2.5	7.4	0.5	0.1	0.7	0.1	0.6	2.8	99.4	14.1	85.3
2011 / 2012	76.6	16.4	3.6	2.7	8.1	0.5	0.1	0.8	0.1	0.6	3.0	106.3	14.8	91.6
2012 / 2013	81.6	17.2	3.8	2.8	8.9	0.5	0.1	0.7	0.1	0.5	3.1	113.1	15.7	97.3
2013 / 2014	86.3	17.8	4.1	2.9	9.6	0.6	0.1	0.7	0.1	0.5	3.3	119.4	15.6	103.8
2014 / 2015	90.4	18.3	4.3	3.0	10.1	0.6	0.1	0.7	0.1	0.5	3.4	124.5	16.0	108.5
2015 / 2016	94.0	18.7	4.5	3.0	10.4	0.6	0.2	0.6	0.1	0.4	3.6	128.9	13.8	115.1
2016 / 2017	96.9	19.0	4.7	3.1	10.6	0.6	0.2	0.6	0.1	0.4	3.7	132.3	14.6	117.8
2017 / 2018	99.0	19.1	4.8	3.1	10.8	0.6	0.2	0.5	0.1	0.4	3.7	134.8	15.5	119.3
2018 / 2019	100.3	19.1	5.0	3.1	11.0	0.6	0.2	0.5	0.1	0.4	3.8	136.3	16.2	120.1
2019 / 2020	100.8	19.0	5.1	3.1	11.0	0.6	0.2	0.4	0.1	0.3	3.8	136.8	16.9	119.9
2020 / 2021	100.6	18.8	5.2	3.1	11.0	0.6	0.2	0.4	0.1	0.3	3.8	136.2	17.3	118.9
2021 / 2022	99.5	18.4	5.2	3.0	10.8	0.6	0.2	0.4	0.0	0.3	3.7	134.5	17.5	117.0
2022 / 2023	97.7	17.8	5.2	2.9	10.5	0.6	0.2	0.3	0.0	0.2	3.7	131.8	15.4	116.4
2023 / 2024	95.1	17.1	5.1	2.8	10.2	0.5	0.1	0.3	0.0	0.2	3.6	128.0	15.4	112.6
2024 / 2025	91.8	16.3	5.0	2.7	9.8	0.5	0.1	0.3	0.0	0.2	3.4	123.3	15.7	107.6
2025 / 2026	88.0	15.4	4.9	2.5	9.3	0.5	0.1	0.3	0.0	0.2	3.3	117.8	15.7	102.1
2026 / 2027	83.5	14.4	4.7	2.4	8.8	0.5	0.1	0.2	0.0	0.1	3.1	111.7	15.4	96.3
2027 / 2028	78.7	13.4	4.5	2.2	8.3	0.4	0.1	0.2	0.0	0.1	2.9	105.0	15.0	90.0
2028 / 2029	73.4	12.3	4.3	2.0	7.7	0.4	0.1	0.2	0.0	0.1	2.7	97.8	14.6	83.3
2029 / 2030	67.9	11.3	4.0	1.8	7.1	0.4	0.1	0.2	0.0	0.1	2.5	90.4	14.0	76.3
2030 / 2031	62.3	10.3	3.8	1.7	6.5	0.3	0.1	0.1	0.0	0.1	2.3	82.8	13.5	69.3
2031 / 2032	56.6	9.3	3.5	1.5	5.9	0.3	0.1	0.1	0.0	0.1	2.1	75.3	12.7	62.5
2032 / 2033	51.0	8.3	3.2	1.4	5.3	0.3	0.1	0.1	0.0	0.1	1.9	67.8	12.1	55.7
2033 / 2034	45.6	7.4	3.0	1.2	4.8	0.2	0.1	0.1	0.0	0.0	1.7	60.6	11.5	49.1
2034 / 2035	40.4	6.5	2.7	1.1	4.2	0.2	0.1	0.1	0.0	0.0	1.5	53.8	10.8	43.0
2035 / 2036	35.5	5.7	2.4	0.9	3.7	0.2	0.1	0.1	0.0	0.0	1.3	47.3	10.1	37.2
2036 / 2037	30.9	5.0	2.2	0.8	3.3	0.2	0.0	0.1	0.0	0.0	1.1	41.2	9.3	31.9
2037 / 2038	26.6	4.3	1.9	0.7	2.8	0.1	0.0	0.0	0.0	0.0	1.0	35.6	8.6	27.1
2038 / 2039	22.8	3.7	1.7	0.6	2.4	0.1	0.0	0.0	0.0	0.0	0.9	30.6	7.8	22.8
2039 / 2040	19.3	3.1	1.5	0.5	2.1	0.1	0.0	0.0	0.0	0.0	0.7	26.0	7.1	18.9
2040 / 2041	16.2	2.7	1.3	0.4	1.8	0.1	0.0	0.0	0.0	0.0	0.6	22.0	6.4	15.6
2041 / 2042	13.5	2.2	1.1	0.4	1.5	0.1	0.0	0.0	0.0	0.0	0.5	18.4	5.7	12.7
2042 / 2043	11.2	1.9	1.0	0.3	1.2	0.1	0.0	0.0	0.0	0.0	0.4	15.3	4.9	10.3
2043 / 2044	9.2	1.6	0.8	0.3	1.0	0.0	0.0	0.0	0.0	0.0	0.3	12.6	4.2	8.3
2044 / 2045	7.4	1.3	0.7	0.2	0.8	0.0	0.0	0.0	0.0	0.0	0.3	10.3	3.5	6.7
2045 / 2046	6.0	1.1	0.6	0.2	0.7	0.0	0.0	0.0	0.0	0.0	0.2	8.3	2.9	5.4
2046 / 2047	4.8	0.9	0.5	0.1	0.6	0.0	0.0	0.0	0.0	0.0	0.2	6.7	2.3	4.4
2047 / 2048	3.8	0.7	0.4	0.1	0.4	0.0	0.0	0.0	0.0	0.0	0.1	5.3	1.8	3.5
2048 / 2049	3.0	0.6	0.3	0.1	0.4	0.0	0.0	0.0	0.0	0.0	0.1	4.2	1.4	2.8
2049 / 2050	2.3	0.4	0.3	0.1	0.3	0.0	0.0	0.0	0.0	0.0	0.1	3.3	1.1	2.2
2050 / 2051	1.8	0.4	0.2	0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.1	2.6	0.9	1.7
2051 / 2052	1.4	0.3	0.2	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.1	2.0	0.7	1.3
2052 / 2053	1.0	0.2	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	1.5	0.5	1.0
2053 / 2054	0.8	0.2	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	1.2	0.4	0.8
2054 / 2055	0.6	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.3	0.6
2055 / 2056	0.4	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.2	0.4
2056 / 2057	0.3	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.2	0.3
2057 / 2058	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.1	0.2
2058 / 2059	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.1	0.2
2059 / 2060	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.1	0.1
2060 / 2061	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.1	0.1
2061 / 2062	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1
2062 / 2063	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
2063 / 2064	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2064 / 2065	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2065 / 2066	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2066 / 2067	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2067 / 2068	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2068 / 2069	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2069 / 2070	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2070 / 2071	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2071 / 2072	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2072 / 2073	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>TOTAL</b>	<b>2,430.3</b>	<b>451.8</b>	<b>134.6</b>	<b>73.6</b>	<b>260.6</b>	<b>14.4</b>	<b>3.8</b>	<b>11.7</b>	<b>1.2</b>	<b>8.6</b>	<b>91.6</b>	<b>3,298.9</b>	<b>488.1</b>	<b>2,810.8</b>



*Valuation of the asbestos-related disease liabilities of the  
Liable Entities to be met by the AICF Trust  
31 March 2007*

## D. Projected discounted cashflows (\$m)

Payment Year	Mesotheliom			ARP & Other	Defendant Legal Costs	Workers		Wharf Claims	Wharf Legal Costs	Baryulgil	Cross Claim Recoveries	Gross	Insurance	Net
	a	Asbestosis	Lung Cancer			Compensati on Claims	Compensati on Legal Costs							
2007 / 2008	53.5	10.6	3.0	1.6	5.4	0.4	0.1	0.6	0.0	0.6	2.0	73.8	11.5	62.3
2008 / 2009	55.1	11.8	2.8	1.9	5.7	0.4	0.1	0.6	0.0	0.6	2.1	76.8	11.1	65.7
2009 / 2010	56.6	12.4	2.7	2.0	5.9	0.4	0.1	0.6	0.0	0.5	2.2	79.1	11.5	67.6
2010 / 2011	57.8	12.6	2.7	2.0	6.0	0.4	0.1	0.6	0.0	0.5	2.2	80.5	11.4	69.1
2011 / 2012	58.5	12.5	2.7	2.0	6.2	0.4	0.1	0.6	0.0	0.4	2.3	81.2	11.3	70.0
2012 / 2013	58.9	12.4	2.8	2.0	6.4	0.4	0.1	0.5	0.0	0.4	2.3	81.6	11.4	70.2
2013 / 2014	58.9	12.1	2.8	2.0	6.6	0.4	0.1	0.5	0.0	0.3	2.3	81.4	10.6	70.8
2014 / 2015	58.3	11.8	2.8	1.9	6.5	0.4	0.1	0.4	0.0	0.3	2.2	80.3	10.4	70.0
2015 / 2016	57.4	11.4	2.7	1.9	6.3	0.4	0.1	0.4	0.0	0.3	2.2	78.7	8.4	70.3
2016 / 2017	56.0	11.0	2.7	1.8	6.1	0.3	0.1	0.3	0.0	0.2	2.1	76.5	8.4	68.0
2017 / 2018	54.1	10.4	2.6	1.7	5.9	0.3	0.1	0.3	0.0	0.2	2.0	73.7	8.5	65.2
2018 / 2019	51.9	9.9	2.6	1.6	5.7	0.3	0.1	0.2	0.0	0.2	2.0	70.5	8.4	62.1
2019 / 2020	49.4	9.3	2.5	1.5	5.4	0.3	0.1	0.2	0.0	0.2	1.9	67.0	8.3	58.7
2020 / 2021	46.6	8.7	2.4	1.4	5.1	0.3	0.1	0.2	0.0	0.1	1.8	63.1	8.0	55.1
2021 / 2022	43.6	8.0	2.3	1.3	4.7	0.3	0.1	0.2	0.0	0.1	1.6	59.0	7.7	51.3
2022 / 2023	40.5	7.4	2.1	1.2	4.4	0.2	0.1	0.1	0.0	0.1	1.5	54.7	6.4	48.3
2023 / 2024	37.3	6.7	2.0	1.1	4.0	0.2	0.1	0.1	0.0	0.1	1.4	50.3	6.1	44.2
2024 / 2025	34.1	6.0	1.9	1.0	3.6	0.2	0.1	0.1	0.0	0.1	1.3	45.8	5.8	40.0
2025 / 2026	30.9	5.4	1.7	0.9	3.3	0.2	0.0	0.1	0.0	0.1	1.2	41.4	5.5	35.9
2026 / 2027	27.8	4.8	1.6	0.8	2.9	0.2	0.0	0.1	0.0	0.0	1.0	37.2	5.1	32.0
2027 / 2028	24.8	4.2	1.4	0.7	2.6	0.1	0.0	0.1	0.0	0.0	0.9	33.1	4.7	28.3
2028 / 2029	21.9	3.7	1.3	0.6	2.3	0.1	0.0	0.1	0.0	0.0	0.8	29.2	4.3	24.8
2029 / 2030	19.2	3.2	1.1	0.5	2.0	0.1	0.0	0.0	0.0	0.0	0.7	25.5	4.0	21.5
2030 / 2031	16.6	2.7	1.0	0.4	1.7	0.1	0.0	0.0	0.0	0.0	0.6	22.1	3.6	18.5
2031 / 2032	14.3	2.3	0.9	0.4	1.5	0.1	0.0	0.0	0.0	0.0	0.5	19.0	3.2	15.8
2032 / 2033	12.2	2.0	0.8	0.3	1.3	0.1	0.0	0.0	0.0	0.0	0.5	16.2	2.9	13.3
2033 / 2034	10.3	1.7	0.7	0.3	1.1	0.1	0.0	0.0	0.0	0.0	0.4	13.7	2.6	11.1
2034 / 2035	8.6	1.4	0.6	0.2	0.9	0.0	0.0	0.0	0.0	0.0	0.3	11.5	2.3	9.2
2035 / 2036	7.2	1.2	0.5	0.2	0.8	0.0	0.0	0.0	0.0	0.0	0.3	9.6	2.0	7.5
2036 / 2037	5.9	1.0	0.4	0.2	0.6	0.0	0.0	0.0	0.0	0.0	0.2	7.9	1.8	6.1
2037 / 2038	4.8	0.8	0.4	0.1	0.5	0.0	0.0	0.0	0.0	0.0	0.2	6.5	1.6	4.9
2038 / 2039	3.9	0.6	0.3	0.1	0.4	0.0	0.0	0.0	0.0	0.0	0.1	5.2	1.3	3.9
2039 / 2040	3.1	0.5	0.2	0.1	0.3	0.0	0.0	0.0	0.0	0.0	0.1	4.2	1.2	3.1
2040 / 2041	2.5	0.4	0.2	0.1	0.3	0.0	0.0	0.0	0.0	0.0	0.1	3.4	1.0	2.4
2041 / 2042	2.0	0.3	0.2	0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.1	2.7	0.8	1.9
2042 / 2043	1.5	0.3	0.1	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.1	2.1	0.7	1.4
2043 / 2044	1.2	0.2	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	1.6	0.6	1.1
2044 / 2045	0.9	0.2	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	1.3	0.4	0.8
2045 / 2046	0.7	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.3	0.6
2046 / 2047	0.5	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.3	0.5
2047 / 2048	0.4	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.2	0.4
2048 / 2049	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.1	0.3
2049 / 2050	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.1	0.2
2050 / 2051	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.1	0.2
2051 / 2052	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.1	0.1
2052 / 2053	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1
2053 / 2054	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1
2054 / 2055	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
2055 / 2056	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2056 / 2057	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2057 / 2058	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2058 / 2059	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2059 / 2060	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2060 / 2061	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2061 / 2062	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2062 / 2063	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2063 / 2064	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2064 / 2065	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2065 / 2066	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2066 / 2067	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2067 / 2068	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2068 / 2069	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2069 / 2070	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2070 / 2071	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2071 / 2072	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2072 / 2073	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>TOTAL</b>	<b>1,150.9</b>	<b>222.4</b>	<b>59.9</b>	<b>36.1</b>	<b>123.4</b>	<b>7.2</b>	<b>1.8</b>	<b>7.0</b>	<b>0.7</b>	<b>5.5</b>	<b>43.6</b>	<b>1,571.2</b>	<b>216.0</b>	<b>1,355.1</b>





## E. Derivation of US GAAP accounting liability of JHINV

The following tables show how the US GAAP accounting liability established by JHINV is derived from the valuation estimates contained within this report.

For comparison, we have shown the derivation of the net liability figures for 30 September 2006 and 31 March 2006 also.

### Step 1 – KPMGA estimate of uninflated and undiscounted liabilities (AUD)

The first step is to derive the uninflated and undiscounted liability from the Discounted Central Estimate.

This is shown in Section 11 of this report to be derived as follows:

	31 March 2007 Valuation			30 Sept 2006	31 March 2006
	Gross	Insurance	Net	Net	Net
Discounted Central Estimate	1,571.2	216.0	1,355.1	1,554.8	1,517.0
Discounting allowance	1,727.8	272.1	1,455.6	1,614.0	1,562.2
Inflated, Undiscounted Central Estimate	3,298.9	488.1	2,810.8	3,168.9	3,079.2
Inflation allowance	(1,809.6)	(271.8)	(1,537.8)	(1,726.6)	(1,677.4)
<b>Uninflated and Undiscounted liability</b>	<b>1,489.3</b>	<b>216.3</b>	<b>1,273.0</b>	<b>1,442.3</b>	<b>1,401.7</b>

**Step 2 – US GAAP adjustments (AUD)**

These include adjustments for:

- Removal of recoveries arising from cross-claims;
- Future direct claims handling allowance on uninflated & undiscounted basis; and
- Gross-up for recoveries from workers compensation insurers – although the net liability impact is zero;
- Net assets (or net liabilities) of AICF.

	31 March 2007 Valuation			30 Sept 2006	31 March 2006
	Gross	Insurance	Net	Net	Net
<b>Uninflated, Undiscounted liabilities</b>	<b>1,489.3</b>	<b>216.3</b>	<b>1,273.0</b>	<b>1,442.3</b>	<b>1401.7</b>
Cross-claim recoveries (on UIUD basis)	39.6	0.0	39.6	29.1	28.7
Equitas bad debt charge	0.0	0.0	0.0	2.3	2.0
Claims handling costs	69.2	0.0	69.2	67.7	67.7
<b>Asbestos liability</b>	<b>1,598.1</b>	<b>216.3</b>	<b>1,381.8</b>	<b>1,539.6</b>	<b>1,500.2</b>
Workers Compensation Additional Liability	98.2	98.2	0.0	0.0	0.0
Net Liabilities / (Assets) of AICF	2.2	0.0	2.2	(33.0)	(71.6)
<b>Accounting Liability (pre-tax)</b>	<b>1,698.5</b>	<b>314.5</b>	<b>1,384.0</b>	<b>1,508.4</b>	<b>1,428.6</b>

**Step 3 – Identification of tax asset (AUD)**

	31 March 2007 Valuation			30 Sept 2006	31 March 2006
	Gross	Insurance	Net	Net	Net
<b>Accounting Liability (pre tax)</b>	<b>1,698.5</b>	<b>314.5</b>	<b>1,384.0</b>	<b>1,508.4</b>	<b>1,428.6</b>
Deferred tax asset (30%)	509.5	94.4	415.2	452.5	428.6
<b>Net accounting liability (post tax)</b>	<b>1,189.0</b>	<b>220.2</b>	<b>968.8</b>	<b>1,055.9</b>	<b>1,000.0</b>

**Step 4 – Conversion to US Dollars**

	31 March 2007 Valuation			30 Sept 2006	31 March 2006
	Gross	Insurance	Net	Net	Net
<b>Net accounting liability (post tax) - AUD</b>	<b>1,189.0</b>	<b>220.2</b>	<b>968.8</b>	<b>1,055.9</b>	<b>1,000.0</b>
Exchange rate	1.2395	1.2395	1.2395	1.3365	1.3975
<b>Net accounting liability (post tax) - USD</b>	<b>959.2</b>	<b>177.6</b>	<b>781.6</b>	<b>790.0</b>	<b>715.6</b>

Note: The net accounting liability figures of A\$1,055.9m and US\$790.0m at 30 September 2006 were quoted in the JHINV Q2 2007 “Management’s Analysis of Results” released on 13 November 2006.

Note: The net accounting liability figures of A\$1,000.0m and US\$715.6m at 31 March 2006 were quoted in the JHINV Q4 2006 “Management’s Analysis of Results” released on 15 May 2006.

## F. Allocation of central estimate of liabilities between Liable Entities

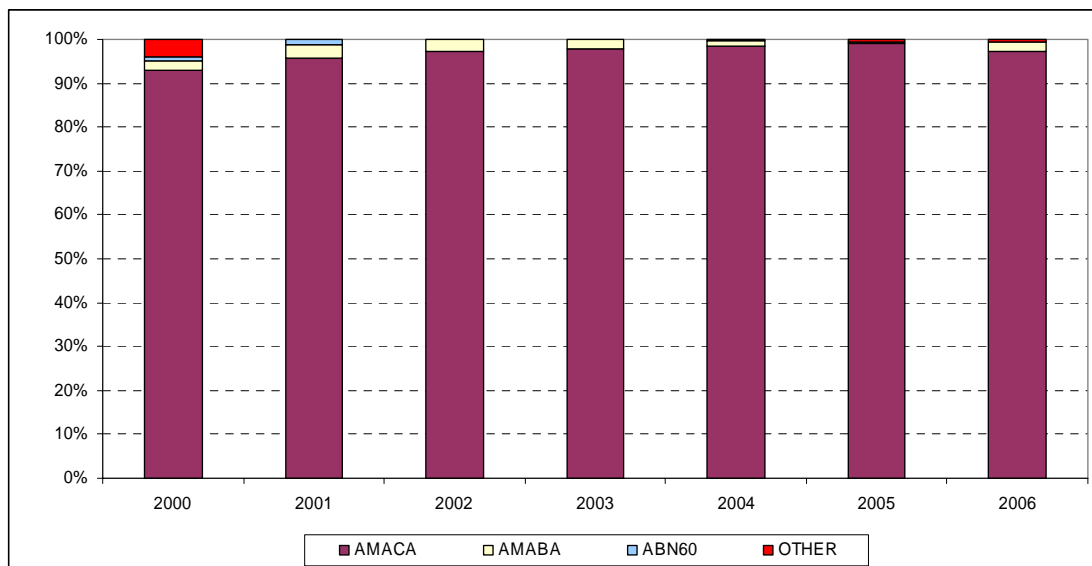
### Approach

Our approach has been to separately allocate the liabilities between the following components:

- Open (or pending) claims;
- IBNR claims; and
- Baryulgil (“Marlew Claims”).

For open claims we are able to directly allocate the cost of claims to individual entities.

For IBNR claims, we have based our allocation on the recent mix of claims reporting by entity. The chart below shows that more than 96% of claims relate to Amaca at present.



For Baryulgil claims, historically the mix has been 70% related to Amaca and 30% related to ABN60. However, we understand that the legislation treats any Marlew Claims as a claim against Amaca. We have therefore allocated all potential future costs in relation to Baryulgil as Amaca-related claims.

For insurance (other than QBE) and cross-claim recoveries, we have allocated these recoveries to each entity in proportion to the allocated gross liabilities.

### Allocation Assumptions

Our allocation assumptions for each of the categories of claim are as follows:

	Open claims	Gross IBNR	Baryulgil	QBE recoveries
Amaca Pty Ltd	98.49%	97.65%	100.00%	96.00%
Amaba Pty Ltd	1.49%	2.20%	0.00%	4.00%
ABN60 Pty Ltd	0.02%	0.15%	0.00%	0.00%

### Results

The tables below provide our analysis separately for discounted central estimate liabilities split by:

- Gross, insurance and net liabilities; and
- Current and non-current liabilities (being liabilities due payable in the next 12 months and those due payable after more than 12 months).

We have allocated and identified QBE separately to other insurance recoveries for A-IFRS purposes.

Note that these figures do not include any claims handling expenses and separate allowance for this is required to be made by AICFL.

**Discounted central estimate of liabilities**

	<b>Gross (\$m)</b>	<b>QBE receivable (\$m)</b>	<b>Insurance (\$m)</b>	<b>Net (\$m)</b>
Amaca Pty Ltd	1,535.0	18.9	191.8	<b>1,324.3</b>
Amaba Pty Ltd	33.9	0.8	4.2	<b>28.9</b>
ABN60 Pty Ltd	2.3	0.0	0.3	<b>2.0</b>
<b>Total</b>	<b>1,571.2</b>	<b>19.7</b>	<b>196.3</b>	<b>1,355.1</b>

**Current liabilities**

	<b>Gross (\$m)</b>	<b>QBE receivable (\$m)</b>	<b>Insurance (\$m)</b>	<b>Net (\$m)</b>
Amaca Pty Ltd	72.4	2.9	8.3	<b>61.2</b>
Amaba Pty Ltd	1.3	0.1	0.2	<b>1.1</b>
ABN60 Pty Ltd	0.0	0.0	0.0	<b>0.0</b>
<b>Total</b>	<b>73.7</b>	<b>3.0</b>	<b>8.5</b>	<b>62.2</b>

**Non-current liabilities**

	<b>Gross (\$m)</b>	<b>QBE receivable (\$m)</b>	<b>Insurance (\$m)</b>	<b>Net (\$m)</b>
Amaca Pty Ltd	1,462.6	16.1	183.4	<b>1,263.1</b>
Amaba Pty Ltd	32.6	0.7	4.1	<b>27.8</b>
ABN60 Pty Ltd	2.3	0.0	0.3	<b>2.0</b>
<b>Total</b>	<b>1,497.4</b>	<b>16.7</b>	<b>187.8</b>	<b>1,292.9</b>

These results imply that approximately 98% of costs are projected to relate to Amaca; approximately 2% are projected to relate to Amaba; and approximately 0.1% are projected to relate to ABN60.

**Uncertainties in by-entity projections**

As already indicated within this report, the projection of future asbestos liabilities is subject to significant uncertainty.

The allocation of the overall liability projections between individual entities adds an additional level of uncertainty, which arises because the subdivision of data to each entity reduces the credibility of the projection even further.

Additionally, the projection of which of the Liable Entities will be joined in future claims is all the more uncertain as it is influenced by the action of plaintiff lawyers as to whom they name in a "Statement of Claim".

Accordingly, such estimates are less readily predictable and deviations from the estimates by entity as contained above should therefore be expected.



*Valuation of the asbestos-related disease liabilities of the  
Liable Entities to be met by the AICF Trust  
31 March 2007*

## G. Additional claims information disclosures at 31 March 2007

<b>Australia</b>					
Twelve months ended					
	March 31, 2007	March 31, 2006	March 31, 2005	March 31, 2004	March 31, 2003
Number of claims filed	463	346	489	379	402
Number of claims dismissed	121	97	62	119	29
Number of claims settled or otherwise resolved	416	405	402	316	231
Average settlement amount per claim (AUS)	166,164	151,883	157,594	167,450	204,194
<b>New Zealand</b>					
Twelve months ended					
	March 31, 2007	March 31, 2006	March 31, 2005	March 31, 2004	March 31, 2003
Number of claims filed	0	0	0	0	0
Number of claims dismissed	0	0	0	0	2
Number of claims settled or otherwise resolved	0	0	0	0	1
Average settlement amount per claim (AUS)	0	0	0	0	2,000
<b>Unknown - Court not identified</b>					
Twelve months ended					
	March 31, 2007	March 31, 2006	March 31, 2005	March 31, 2004	March 31, 2003
Number of claims filed	0	6	7	1	7
Number of claims dismissed	3	10	20	15	0
Number of claims settled or otherwise resolved	5	12	2	0	3
Average settlement amount per claim (AUS)	12,165	198,892	47,000	0	37,090
<b>USA</b>					
Twelve months ended					
	March 31, 2007	March 31, 2006	March 31, 2005	March 31, 2004	March 31, 2003
Number of claims filed	1	0	0	0	0
Number of claims dismissed	1	0	3	1	0
Number of claims settled or otherwise resolved	0	0	1	0	0
Average settlement amount per claim (AUS)	0	0	228,293	0	0
<b>Australia</b>					
As of					
	March 31, 2007	March 31, 2006	March 31, 2005		
Number of claims pending	490	556	712		
<b>New Zealand</b>					
As of					
	March 31, 2007	March 31, 2006	March 31, 2005		
Number of claims pending	-	-	-		
<b>Unknown - Court not identified</b>					
As of					
	March 31, 2007	March 31, 2006	March 31, 2005		
Number of claims pending	13	20	36		
<b>USA</b>					
As of					
	March 31, 2007	March 31, 2006	March 31, 2005		
Number of claims pending	1	1	1		
<b>Summary</b>					
As of					
	March 31, 2007	March 31, 2006	March 31, 2005	March 31, 2004	March 31, 2003
Number of open cases at beginning of year	586	749	743	814	671
Number of new cases	464	352	496	380	409
Number of closed cases	546	524	490	451	266
Number of open cases at end of year	504	577	749	743	814
Average Settlement per Settled Claim (AUS)	164,335	153,236	157,223	167,450	201,200
Average Settlement per Closed Claim (AUS)	126,713	121,945	129,949	117,327	177,752

**Notes:**

1. Data for 2006 only relates to 11 months data as that was the information upon which the 31 March 2006 valuation report was based and the 12 months data was not available at the time of release of the financial statements of James Hardie Industries NV
2. The location of the court has been used as the location indicator with any Australian state implying "Australia". "Unknown - Court not identified" refers to claims where the location of the Court is blank or described as "Other" in the current claims database.
3. The "Average Settlement per Settled Claim (AUS)" is defined as the sum of settlement amount divided by the number of claims settled where the settlement amount does not equal zero.
4. The "Average Settlement per Closed Claim (AUS)" is the sum of settlement amount divided by the number of closed claims, so including claims where the settlement amount is equal to zero.
5. A claim being dismissed relates to the case being closed and the Liable Entities' share of the settlement amount being equal to zero.
6. The settlement amount is equal to the Liable Entities' share of the plaintiff award and plaintiff legal fees, so this excludes any legal costs relating to defence by the Liable Entities.



## H. Pending claims reserve adequacy additional analysis

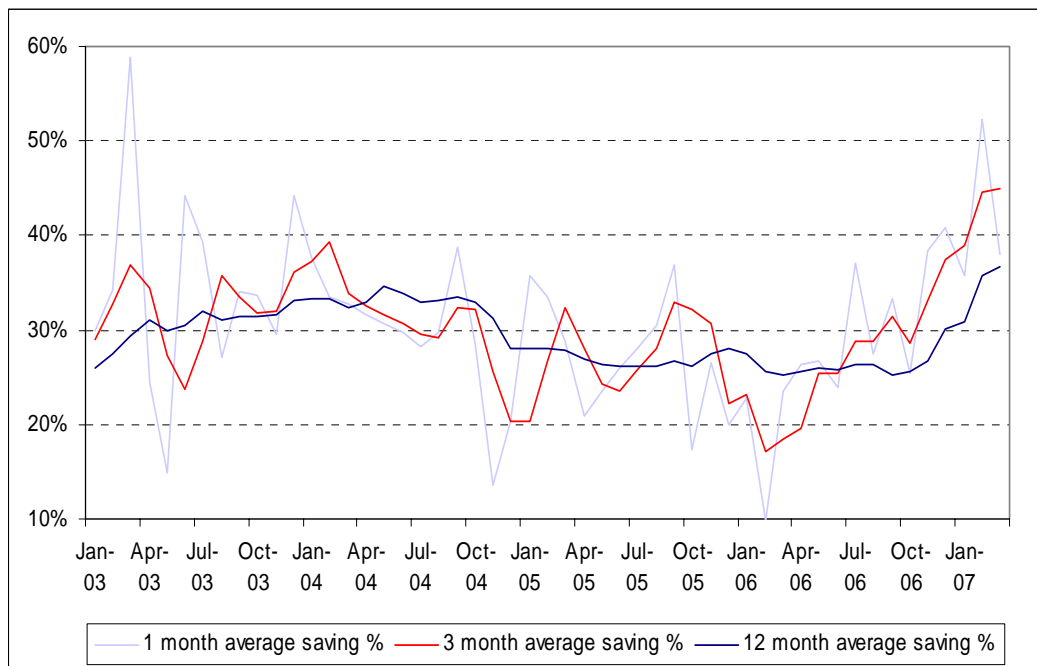
### H.1 Amaca's own analysis

The following chart shows the results of Amaca's own analysis of the past adequacy of case estimates (on a case-by-case basis).

The analysis seems to suggest that historically the level of savings that have eventuated from case estimates have been as high as 35% (averaged over a 12 month period) during 2004 although this has generally been stable at around 27% during 2006 and has shown a slight rise towards 30% in the latter part of 2006 and early part of 2007.

The chart shows the savings averaged over a 3-month, a 12-month and 1-month period.

The chart seems to be supportive of our inference that there is some degree of prudence in the existing case estimates.



Note: Based on Amaca Monthly Management Reports to 31 March 2007

## H.2 Actuarial estimate of future savings on pending claims

In assessing the degree of redundancy in case reserves, we have undertaken a projection of the future settlement cost of pending claims and compared this to the case reserves for such claims. Our projection is based on a blending of the following actuarial techniques:

- Projection of future claim payments by year of notification using triangulation techniques as described in Section 5.5 and compare with the case reserves for those claims; and
- Projection of future average cost per claim for reported, but not finalised claims, by year of notification. The average cost is assessed by reference to the delay from when the claim was reported to when the claim settles (this method is known as the PPCF method).

The results of our analysis are shown in the following tables:

### Estimated savings on pending claims – Mesothelioma

Notification Year	Case Estimate	Projected Estimate	% projected saving
Pre-2003	762,076	337,725	56%
2003	728,895	733,197	-1%
2004	1,833,104	1,233,070	33%
2005	3,908,481	3,342,453	14%
2006	20,749,739	17,999,963	13%
<b>Total</b>	<b>27,982,295</b>	<b>23,646,409</b>	<b>15%</b>

**Estimated savings on pending claims – Non-mesothelioma**

<b>Notification Year</b>	<b>Case Estimate</b>	<b>Projected Estimate</b>	<b>% projected saving</b>
Pre-2003	6,337,718	4,385,420	31%
2003	1,033,974	737,743	29%
2004	2,883,677	2,607,708	10%
2005	3,610,786	3,234,240	10%
2006	13,889,653	12,845,348	8%
<b>Total</b>	<b>27,755,808</b>	<b>23,810,458</b>	<b>14%</b>

**Estimated savings on pending claims – All**

<b>Notification Year</b>	<b>Case Estimate</b>	<b>Projected Estimate</b>	<b>% projected saving</b>
Pre-2003	7,099,794	4,723,144	33%
2003	1,762,869	1,470,940	17%
2004	4,716,781	3,840,778	19%
2005	7,519,267	6,576,693	13%
2006	34,639,392	30,845,311	11%
<b>Total</b>	<b>55,738,103</b>	<b>47,456,867</b>	<b>15%</b>

## I. Australian asbestos consumption and production data: 1920-2002

Figures in this table are in 000's metric tonnes

Year	Production	Import	Export	Consumption
1920	0	0	0	0
1921	1,182	0	0	1,182
1922	742	0	0	742
1923	217	0	0	217
1924	78	0	0	78
1925	51	0	0	51
1926	0	0	0	0
1927	11	0	0	11
1928	12	0	0	12
1929	255	3,679	0	3,934
1930	82	0	0	82
1931	128	1,200	0	1,328
1932	130	0	0	130
1933	279	2,676	0	2,955
1934	170	2,471	0	2,641
1935	170	4,423	0	4,593
1936	239	7,817	0	8,056
1937	298	6,199	0	6,497
1938	173	11,179	0	11,352
1939	78	10,081	0	10,159
1940	489	14,097	0	14,586
1941	251	14,220	0	14,471
1942	331	20,176	0	20,507
1943	678	14,229	0	14,907
1944	764	14,091	0	14,855
1945	1,629	9,131	32	10,728
1946	620	18,697	496	18,821
1947	1,377	14,246	652	14,971
1948	1,327	14,857	278	15,906
1949	1,645	14,767	346	16,066
1950	1,617	29,536	385	30,768
1951	2,558	25,289	588	27,259
1952	4,059	24,686	868	27,877
1953	4,970	28,784	1,631	32,123
1954	4,713	26,406	2,298	28,821
1955	5,352	42,677	3,287	44,742
1956	8,670	32,219	6,859	34,030
1957	13,098	23,235	11,644	24,689
1958	13,900	34,721	9,315	39,306
1959	15,959	34,223	11,584	38,598
1960	13,940	36,609	7,410	43,139
1961	14,952	32,947	7,196	40,703
1962	16,443	34,915	8,695	42,663
1963	11,941	32,704	2,347	42,298
1964	12,191	38,299	6,500	43,990
1965	10,326	46,179	4,295	52,210
1966	12,024	49,243	4,146	57,121
1967	647	46,950	2,254	45,343
1968	799	59,590	718	59,671
1969	734	52,739	162	53,311
1970	739	57,250	367	57,622
1971	756	71,777	174	72,359
1972	16,884	61,682	2,387	76,179
1973	43,529	61,373	27,810	77,092
1974	30,863	57,051	29,191	58,723
1975	47,922	69,794	24,524	93,192
1976	60,642	60,490	40,145	80,987
1977	50,601	54,267	20,510	84,358
1978	62,383	42,061	37,094	67,350
1979	79,721	23,735	54,041	49,415
1980	92,418	25,239	51,172	66,485
1981	45,494	20,960	38,576	27,878
1982	18,587	20,853	15,578	23,862
1983	3,909	10,113	4,460	9,562
1984	0	14,432	22	14,410
1985	0	12,194	0	12,194
1986	0	10,597	0	10,597
1987	0	6,294	0	6,294
1988	0	2,072	0	2,072
1989	0	2,128	0	2,128
1990	0	1,706	0	1,706
1991	0	1,342	0	1,342
1992	0	1,533	0	1,533
1993	0	2,198	0	2,198
1994	0	1,843	0	1,843
1995	0	1,488	0	1,488
1996	0	1,366	0	1,366
1997	0	1,556	0	1,556
1998	0	1,471	0	1,471
1999	0	1,316	0	1,316
2000	0	1,246	0	1,246
2001	0	945	0	945
2002	0	515	0	515

## J. Glossary of terms

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The following provides a glossary of terms upon which we have relied in preparing our report.

The operation of these definitions cannot be considered in isolation but instead need to be considered in the context of the totality of the Amended Final Funding Agreement.

**AICF** means the trustee of the Asbestos Injuries Compensation Fund from time to time, in its capacity as trustee, initially being Asbestos Injuries Compensation Fund Limited.

**AICF Funded Liability** means:

- (a) any Proven Claim;
- (b) Operating Expenses;
- (c) Claims Legal Costs;
- (d) any claim that was made or brought in legal proceedings against a Former James Hardie Company commenced before 1 December 2005;
- (e) Statutory Recoveries within the meaning and subject to the limits set out in the Amended Final Funding Agreement;
- (f) a claim or category of claim which James Hardie and the NSW Government agree in writing is a "AICF Funded Liability" or a category of "AICF Funded Liability".

but in the cases of paragraphs (a), (c) and (d) excludes any such liabilities or claims to the extent that they have been recovered or are recoverable under a Worker's Compensation Scheme or Policy

**Claims Legal Costs** means all costs, charges, expenses and outgoings incurred or expected to be borne by AICF or the Former James Hardie Companies, in respect of legal advisors, other advisors, experts, court proceedings and other dispute resolution methods in connection with Personal Asbestos Claims and Marlew Claims but in all cases excluding any costs included as a component of calculating a Proven Claim.

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**Concurrent Wrongdoer** in relation to a personal injury or death claim for damages under common law or other law (excluding any law introduced or imposed in breach of the restrictions on adverse regulatory or legislative action against the James Hardie Group under the Amended Final Funding Agreement, and which breach has been notified to the NSW Government in accordance with Amended Final Funding Agreement), means a person whose acts or omissions, together with the acts or omissions of one or more Former James Hardie Companies or Marlew or any member of the James Hardie Group (whether or not together with any other persons) caused, independently of each other or jointly, the damage or loss to another person that is the subject of that claim.

**Contribution Claim** means a cross-claim or other claim under common law or other law (excluding any law introduced or imposed in breach of the restrictions on adverse regulatory or legislative action against the James Hardie Group under the Amended Final Funding Agreement, and which breach has been notified to the NSW Government in accordance with Amended Final Funding Agreement):

- (a) for contribution by a Concurrent Wrongdoer against a Former James Hardie Company or a member of the James Hardie Group in relation to facts or circumstances which give rise to a right of a person to make a Personal Asbestos Claim or a Marlew Claim; or
- (b) by another person who is entitled under common law (including by way of contract) to be subrogated to such a first mentioned cross-claim or other claim;

**Discounted Central Estimate** means the central estimate of the present value (determined using the discount rate used within the relevant actuarial report) of the liabilities of the Former James Hardie Companies and Marlew in respect of expected Proven Claims and Claims Legal Costs, calculated in accordance with the Amended Final Funding Agreement.

**Excluded Claims** are any of the following liabilities of the Former James Hardie Companies:

- (i) personal injury or death claims arising from exposure to Asbestos outside Australia;
  - (ii) personal injury or death claims arising from exposure to Asbestos made outside Australia;
  - (iii) claims for economic loss (other than any economic loss forming part of the calculation of an award of damages for personal injury or death) or loss of property, including those relating to land remediation and/or Asbestos or Asbestos products removal, arising out of or in connection
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with Asbestos or Asbestos products manufactured, sold, distributed or used by or on behalf of the Liable Entities;

- (iv) any Excluded Marlew Claim;
- (v) any liabilities of the Liable Entities other than AICF Funded Liabilities.

**Excluded Marlew Claim** means a Marlew Claim:

- (a) covered by the indemnities granted by the Minister of Mineral Resources under the deed between the Minister, Fuller Earthmoving Pty Limited and James Hardie Industries Limited dated 11 March 1996; or
- (b) by a current or former employee of Marlew in relation to an exposure to Asbestos in the course of such employment to the extent:
  - (i) the loss is recoverable under a Worker's Compensation Scheme or Policy; or
  - (ii) the Claimant is not unable to recover damages from a Marlew Joint Tortfeasor in accordance with the Marlew Legislation;
- (c) by an individual who was or is an employee of a person other than Marlew arising from exposure to Asbestos in the course of such employment by that other person where such loss is recoverable from that person or under a Worker's Compensation Scheme or Policy; or
- (d) in which another defendant (or its insurer) is a Marlew Joint Tortfeasor from whom the plaintiff is entitled to recover compensation in proceedings in the Dust Diseases Tribunal, and the Claimant is not unable to recover damages from that Marlew Joint Tortfeasor in accordance with the Marlew Legislation.

**Former James Hardie Companies** means Amaca, Amaba and ABN 60.

**Insurance and Other Recoveries** means any proceeds which may reasonably be expected to be recovered or recoverable for the account of a Former James Hardie Company or to result in the satisfaction (in whole or part) of a liability of a Former James Hardie Company (of any nature) to a third party, under any product liability insurance policy or public liability insurance policy or commutation of such policy or under any other contract, including any contract of indemnity, but excluding any such amount recovered or recoverable under a Worker's Compensation Scheme or Policy.

**Liable Entities** see Former James Hardie Companies

**Marlew** means Marlew Mining Pty Ltd (in liquidation), ACN 000 049 650, previously known as Asbestos Mines Pty Ltd.

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**Marlew Claim** means, subject to the limitation on Statutory Recoveries, a claim which satisfies one of the following paragraphs and which is not an Excluded Marlew Claim:

- (a) any present or future personal injury or death claim by an individual or the legal personal representative of an individual, for damages under common law or other law (excluding any law introduced or imposed in breach of the restrictions on adverse regulatory or legislative action against the James Hardie Group under the Amended Final Funding Agreement, and which breach has been notified to the NSW Government in accordance with the Amended Final Funding Agreement) which:
    - (i) arose or arises from exposure to Asbestos in the Baryulgil region from Asbestos Mining Activities at Baryulgil conducted by Marlew, provided that:
      - A. the individual's exposure to Asbestos occurred wholly within Australia; or
      - B. where the individual has been exposed to Asbestos both within and outside Australia, the amount of damages included in the Marlew Claim shall be limited to the amount attributable to the proportion of the exposure which caused or contributed to the loss or damage giving rise to the Marlew Claim which occurred in Australia;
    - (ii) is commenced in New South Wales in the Dust Diseases Tribunal; and
    - (iii) is or could have been made against Marlew had Marlew not been in external administration or wound up, or could be made against Marlew on the assumption (other than as contemplated under the Marlew legislation) that Marlew will not be in the future in external administration;
  - (b) any claim made under compensation to relatives legislation by a relative of a deceased individual (or personal representative of such a relative) or (where permitted by law) the legal personal representative of a deceased individual in each case where the individual, but for such individual's death, would have been entitled to bring a claim of the kind described in paragraph (a); or
  - (c) a Contribution Claim relating to a claim described in paragraphs (a) or (b).
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**Marlew Joint Tortfeasor** means any person who is or would be jointly and severally liable with Marlew in respect of a Marlew Claim, had Marlew not been in external administration or wound up, or on the assumption that Marlew will not in the future be, in external administration or wound up other than as contemplated under the Marlew Legislation.

**Payable Liability** means any of the following:

- (a) any Proven Claim (whether arising before or after the date of this deed);
- (b) Operating Expenses;
- (c) Claims Legal Costs;
- (d) any liability of a Former James Hardie Company to the AICFL, however arising, in respect of any amounts paid by the AICFL in respect of any liability or otherwise on behalf of the Former James Hardie Company;
- (e) any claim that was made or brought in legal proceedings against a Former James Hardie Company commenced before 1 December 2005;
- (f) if regulations are made pursuant to section 30 of the Transaction Legislation and if and to the extent the AICFL and James Hardie have notified the NSW Government that any such liability is to be included in the scope of Payable Liability, any liability of a Former James Hardie Company to pay amounts received by it from an insurer in respect of a liability to a third party incurred by it for which it is or was insured under a contract of insurance entered into before 2 December 2005; and
- (g) Statutory Recoveries within the meaning and subject to the limits set out in the Amended Final Funding Agreement,

but in the cases of paragraphs (a), (c) and (e) excludes any such liabilities or claims to the extent that they have been recovered or are recoverable under a Worker's Compensation Scheme or Policy.

**Period Actuarial Estimate** means, in respect of a period, the central estimate of the present value (determined using the discount rate used in the relevant actuarial report) of the liabilities of the Former James Hardie Companies and Marlew in respect of expected Proven Claims and Claims Legal Costs (in each case which are reasonably expected to become payable in that period), before allowing for Insurance and Other Recoveries, calculated in accordance with the Amended Final Funding Agreement.

**Personal Asbestos Claim** means any present or future personal injury or death claim by an individual or the legal personal representative of an individual, for damages under common law or under other law (excluding any law introduced or imposed in breach of the restrictions on adverse regulatory or legislative action against the James Hardie Group under the Amended Final Funding Agreement, and which breach has been notified to the NSW Government under the Amended Final Funding Agreement) which:

- (a) arises from exposure to Asbestos occurring in Australia, provided that:
  - (i) the individual's exposure to Asbestos occurred wholly within Australia; or
  - (ii) where the individual has been exposed to Asbestos both within and outside Australia, damages included in the Marlew Claim shall be limited to the amount attributable to the proportion of the exposure which caused or contributed to the loss or damage giving rise to the Personal Asbestos Claim which occurred in Australia;
- (b) is made in proceedings in an Australian court or tribunal; and
- (c) is made against:
  - (i) all or any of the Liable Entities; or
  - (ii) any member of the James Hardie Group from time to time;
- (d) any claim made under compensation to relatives legislation by a relative of a deceased individual (or personal representative of such a relative) or (where permitted by law) the legal personal representative of a deceased individual in each case where the individual, but for such individual's death, would have been entitled to bring a claim of the kind described in paragraph (a); or
- (e) a Contribution Claim made in relation to a claim described in paragraph (a) or (b)

but excludes all claims covered by a Worker's Compensation Scheme or Policy.

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**Proven Claim** means a proven Personal Asbestos Claim in respect of which final judgment has been given against, or a binding settlement has been entered into by, a Former James Hardie Company, to the extent to which that entity incurs liability under that judgment or settlement, or a Proven Marlew Claim.

**Statutory Recoveries** means any statutory entitlement of the NSW Government or any Other Government or any governmental agency or authority of any such government (“Relevant Body”) to impose liability on or to recover an amount or amounts from any person in respect of any payments made or to be made or benefits provided by a Relevant Body in respect of claims (other than as a defendant or in settlement of any claim, including a cross-claim or claim for contribution).

**Term** means the period

- (i) from the date on which the principal obligations under the Amended Final Funding Agreement will commence to 31 March 2045,
- (ii) as may be extended in accordance with the terms of the Amended Final Funding Agreement.

**Term Central Estimate** means the central estimate of the present value (determined using the discount rate used in the relevant Annual Actuarial Report) of the liabilities of the Former James Hardie Companies and Marlew in respect of expected Proven Claims and Claims Legal Costs (in each case reasonably expected to become payable in the relevant period) after allowing for Insurance and Other Recoveries during that period, from and including the day following the end of the Financial Year preceding that Payment Date up to and including the last day of the Term (excluding any automatic or potential extension of the Term, unless or until the Term has been extended).

**Workers Compensation Scheme or Policy** means any of the following:

- (a) any worker’s compensation scheme established by any law of the Commonwealth or of any State or Territory;
  - (b) any fund established to cover liabilities under insurance policies upon the actual or prospective insolvency of the insurer (including without limitation the Insurer Guarantee Fund established under the Worker’s Compensation Act 1987 (NSW)); and
  - (c) any policy of insurance issued under or pursuant to such a scheme.
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