

#### **KPMG Actuaries Pty Limited**

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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 2010** 

PREPARED FOR ASBESTOS INJURIES COMPENSATION FUND LIMITED (AICFL)

27 May 2010



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27 May 2010

Dallas Booth
Chief Executive Officer
Asbestos Injuries Compensation Fund Limited
Suite 1, Level 7, 233 Castlereagh Street
Sydney NSW 2000

Cc Russell Chenu, Chief Financial Officer, James Hardie Industries SE Leigh Sanderson, Consultant, Department of Premier and Cabinet, The State of New South Wales

The Board of Directors, Asbestos Injuries Compensation Fund Limited

Dear Dallas,

# 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.

The report is effective as at 31 March 2010 and has taken into account claims data and information provided to us by AICFL as at 31 March 2010.

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

Yours sincerely

Neil Donlevy MA FIA FIAA

N Donlung

Director

**KPMG Actuaries Pty Limited** 

Fellow of the Institute of Actuaries

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Fellow of the Institute of Actuaries of

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**KPMG Actuaries Ptv Limited** 

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Australia



#### **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 (now known as James Hardie Industries SE) (hereafter referred to as "James Hardie"), 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 and this is detailed in our Engagement Letter dated 25 November 2009.

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 liability for Baryulgil claims is deemed to be a liability of Amaca by virtue of the James Hardie (Civil Liability) Act 2005 (NSW). Under Part 4 of that Act, Amaca is liable for "Marlew Asbestos Claims" or "Marlew Contribution Claims" as defined in that Act.

Our valuation is on a central estimate basis and is intended to be effective as at 31 March 2010. It has been based on claims data and information as at 31 March 2010 provided to us by AICFL.

# Overview of Recent Claims Experience and comparison with previous forecasts

#### Claim Numbers

Claims reporting for mesothelioma has shown a reduction in the year. There have been 262 claims reported in 2009/10 compared with 304 claims reported in 2008/09.

The reduction in claims reporting activity has mainly arisen in Victoria, Queensland and South Australia.

For non-mesothelioma claims, there have been 273 claims reported in 2009/10 compared to 317 claims reported in 2008/09. Within this, there has been a significant reduction in reporting activity for asbestosis (40 fewer claims) but this has been offset to some extent by increases in other disease types.

The following table shows the comparison of actual experience with that which had been forecast at the previous valuation.



Table E.1: Comparison of claim numbers

	Actual	Expected	Ratio of Actual to Expected (%)
Mesothelioma	262	300	87%
Asbestosis	121	162	75%
Lung Cancer	39	33	118%
ARPD & Other	51	48	106%
Wharf	3	9	33%
Workers	59	60	98%
Total	535	612	87%

#### Average Claim Awards

Average claims awards in 2009/10 have typically been below, or in line with, expectations.

There have been five large mesothelioma claim settlements (being claims in excess of \$1m) in 2009/10. This is in line with our annual allowance of five large claims. Total claims expenditure on large claims has been 15% below expectations, reflecting lower average settlement sizes of large claims, although we note that random variability in the size of large claims is not unusual.

The following table shows the comparison of actual experience with that forecast.

Table E.2: Comparison of average claim size of non-nil claims

	Actual (\$)	Expected (\$)	Ratio of Actual to Expected (%)
Mesothelioma	246,395	281,200	88%
Asbestosis	99,740	98,100	102%
Lung Cancer	104,757	122,000	86%
ARPD & Other	89,275	90,200	99%
Wharf	58,401	106,100	55%
Workers	105,700	132,600	80%
Mesothelioma Large Claims Costs	5 claims @ \$1,586,000 = \$7,930,000	5 claims @ \$1,857,000 = \$9,285,000	85%



#### Cashflow expenditure: gross and net

Gross cashflow expenditure, at \$103m, was 10% below expectations.

Net cashflow expenditure, at \$86m, was 11% below expectations.

At the end of the third quarter of 2009/10, actual net expenditure (\$72.0m) was almost exactly in line with our expectations (\$72.4m). However, net cashflow in the fourth quarter was only \$14m (compared with an expectation of \$24m).

We have investigated this and we have identified that the number of claim settlements (110) in the fourth quarter was approximately 25% below expectations and 25% below the level of settlement activity experienced in the first three quarters.

Furthermore, 20% of these claims were settled for nil, i.e. only 88 claims were settled with liability against the Liable Entities during the fourth quarter.

Ratio of **Expected** Actual to Actual (\$M) (\$M) **Expected** 103.2 114.2 **Gross Cashflow** 90% Insurance and Other (16.9)(17.7)95% Recoveries 86.3 96.5 Net Cashflow 89%

**Table E.3: Comparison of cashflow** 

The following chart shows the composition of the cashflow between current and prior years' reported claims over the last six years.

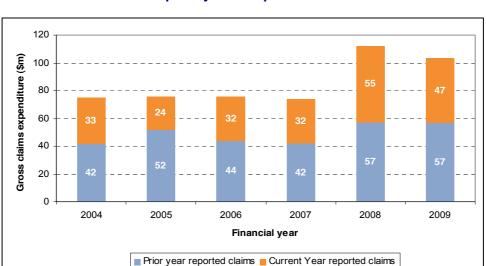


Figure E.1: Composition of gross expenditure between current and prior years' reported claims



The 14% reduction in payments in relation to claims that had been reported in the financial year (from \$55m in 2008/09 to \$47m in 2009/10) is in line with the lower numbers of claims reported in 2009/10 compared with 2008/09.

Payments in relation to prior years' reported claims have been at the same level as that observed in 2008/09 (approximately \$57m). This is not unreasonable because the number of pending claims at the start of each financial year has been broadly stable.

#### **Liability Assessment**

At 31 March 2010, our projected central estimate of the liabilities of the Liable Entities (the Discounted Central Estimate) to be met by the AICF Trust is \$1,536.7m (March 2009: \$1,781.6m).

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

**Table E.4: Comparison of central estimate of liabilities** 

		Mar-10		Mar-09
		\$m		\$m
	Gross of insurance recoveries	Insurance recoveries	Net of insurance recoveries	Net of insurance recoveries
Total projected cashflows (uninflated)	1,660.8	218.2	1,442.6	1,524.3
Future inflation allowance	1,680.5	216.7	1,463.8	1,599.2
Total projected cash-flows with inflation	3,341.2	434.9	2,906.4	3,123.5
Discounting allowance	(1,584.1)	(214.5)	(1,369.6)	(1,341.8)
Net present value liabilities	1,757.1	220.4	1,536.7	1,781.6



#### **Comparison with previous valuation**

In the absence of any change to the claim projection assumptions from our 31 March 2009 valuation, other than allowing for the changes in the discount rate, we would have projected a Discounted Central Estimate liability of \$1,609.2m as at 31 March 2010, i.e. a reduction of \$172.4m from our 31 March 2009 valuation result.

This reduction of \$172.4m is due to:

- A reduction of \$49.8m, being the net impact of expected claims payments (which reduce the liability) and the "unwind of discount" (which increases the liability and reflects the fact that cashflows are now one year nearer and therefore are discounted by one year less). The lower discount rates assumed at 31 March 2009 resulted in a low "unwind of discount" charged between 31 March 2009 and 31 March 2010.
- A reduction of \$122.6m resulting from the higher discount rates prevailing at 31 March 2010 compared with those at 31 March 2009.

Our liability assessment at 31 March 2010 of \$1,536.7m represents a further decrease of \$72.5m, which arises from changes to the claim projection assumptions.

The decrease of \$72.5m is principally a consequence of:

- A reduction in the projected future number of mesothelioma and asbestosis claims; and
- A reduction in average claim awards and legal costs for most disease types

#### offset by

- Lower assumed future nil settlement rates: and
- The rate of wage inflation being assumed for the three years to 31 March 2013 has increased (this had previously been lowered as a result of the Global Financial Crisis).

The following chart shows an analysis of the change in our liability assessments from March 2009 to March 2010.



1,800 122.6 Discounted central estimate (\$m) 1,600 1,500 1,400 1,300 1,200 Net Claims Payments (expected) Net Liability at 31 March 2009 Net Liability at 31 March 2010 Other Change in discount Expected net liability no actuarial changes Claim numbers Average claims costs rate

Figure E.2: Analysis of change in central estimate liability

Note: Green bars signal that this factor has given rise to an increase in the liability whilst light blue bars signal that this factor has given rise to a reduction in the liability

On an undiscounted basis, the liability has reduced from \$3,027m to \$2,906m, a reduction of \$121m (4% of the undiscounted liability).



#### **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.5: Amended Final Funding Agreement calculations** 

	\$m
Discounted Central Estimate (net of cross-claim recoveries, Insurance and Other Recoveries)	1,536.7
Period Actuarial Estimate (net of cross-claim recoveries, gross of Insurance and Other Recoveries) comprising:	328.8
Discounted value of cashflow in 2010/11	111.8
Discounted value of cashflow in 2011/12	107.3
Discounted value of cashflow in 2012/13	109.7
Term Central Estimate (net of cross-claim recoveries, Insurance and Other Recoveries)	1,534.1

The actual funding amount due 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 James Hardie Group in the preceding financial year; and
- the Period Actuarial Estimate in the latest Annual Actuarial Report.

<sup>&</sup>lt;sup>1</sup> See Glossary of Terms in Appendix H for description of these items



#### **Uncertainty**

Estimates of asbestos-related disease liabilities are subject to considerable uncertainty, significantly more than personal injury liabilities in relation to other causes, such as CTP or Workers Compensation claims.

It should therefore be expected that the actual emergence of the liabilities will vary from any estimate. As indicated in Figure E.3, depending on the actual out-turn of experience relative to that currently forecast, the variation could potentially be substantial.

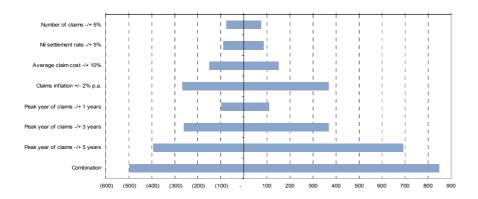
Thus, no assurance can be given that the actual liabilities of the Liable Entities to be met by the AICF Trust will not ultimately exceed the estimates contained in this Report and any such variation may be significant.

We have performed sensitivity testing to identify the impact of different assumptions upon the size of the liabilities.

We note that these sensitivity test ranges are not intended to correspond to a specified probability of sufficiency, nor are they intended to indicate an upper bound or a lower bound of all possible outcomes.

Figure: E.3 Sensitivity testing results – Impact around the Discounted

Central Estimate (in \$m)



The single most sensitive assumption shown in the chart 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 could imply an increase in the future number of mesothelioma claims reported of around 50%.



Table E.6: Summary results of sensitivity analysis

	Undiscounted	Discounted
Central estimate	\$2.91bn	\$1.54bn
Range around the central estimate	-\$1.1bn to \$2.2bn	-\$0.5bn to \$0.9bn
Range of liability estimates	\$1.8bn to \$5.1bn	\$1.0bn to \$2.4bn

Whilst the table above indicates a range around the discounted central estimate of liabilities of -\$500m and +\$900m, 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 2010 with individual claims listings;
- Accounting database at 31 March 2010 (which includes individual claims payment details); 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 2010.

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.

In Section 2 of this Report, we have discussed in more detail the conversion of historical claims data onto a new IT system.

#### **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.



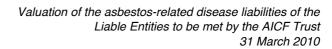
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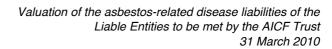




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#### 1 SCOPE AND PURPOSE

#### **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 (now known as James Hardie Industries SE) ("James Hardie"), 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

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.

#### 1.1.1 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 liability for Baryulgil claims is deemed to be a liability of Amaca by virtue of the James Hardie (Civil Liability) Act 2005 (NSW). Under Part 4 of that Act, Amaca is liable for "Marlew Asbestos Claims" or "Marlew Contribution Claims" as defined in that Act.

#### 1.1.2 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 1.2 and in Appendix H.

#### 1.1.3 Purpose of report

KPMG Actuaries has been retained by AICFL to provide an actuarial valuation report as required under the Amended Final Funding Agreement and this is detailed in our Engagement Letter dated 25 November 2009.

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 2010 and has been based on claims data and information as at 31 March 2010 provided to us by AICFL.



#### 1.2 Scope of report

We have been requested to provide an actuarial assessment as at 31 March 2010 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 2010.

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.

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 within 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 1.2.1).
- 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 considered by the management of AICFL.
- Makes no additional allowance for the inherent uncertainty of the liability assessment. That is, no additional provision (or risk margin) has been included in excess of a central estimate.

Readers of this Report may refer to our previous reports which are available at <a href="https://www.ir.jameshardie.com.au">www.ir.jameshardie.com.au</a> and <a href="https://www.aicf.org.au">www.aicf.org.au</a>.

#### 1.2.1 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 is met by a Workers Compensation Scheme or Policy of the Liable Entities is 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 may be available to meet such obligations.

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

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 owing to the application of these caps.



#### 1.2.3 Baryulgil ("Marlew Claims")

"Marlew Asbestos Claims" and "Marlew Contribution Claims" are deemed to be liabilities of Amaca. These claims specifically include:

- 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 the joint venture (Asbestos Mines Pty Ltd) established with Wunderlich in 1944 to begin mining at Baryulgil, 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 4.11.

#### 1.2.4 Risk Margins

Australian-licensed insurance companies are required to, and non-insurance companies commonly elect 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, 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.

#### 1.2.5 Discounting

We have determined a Discounted Central Estimate in this Report by discounting the projected future cashflows to 31 March 2010 using yields on Commonwealth Government Bonds.



Conceptually, the Discounted Central Estimate would normally represent an amount of money which, if fully provided in advance (i.e. as of 31 March 2010) 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.

One of the uncertainties in our valuation is the fact that fixed interest Commonwealth Government Bonds do not exist at most of the durations of our cashflow projection, with the maximum term of bonds being around 10 to 15 years.

This means we need to take a long-term view on bond yields that is not measured by market-observable rates of return.

Our approach at this valuation has been to take the bond yields implied by bond market prices, without adjustment, for the periods up to 10 years.

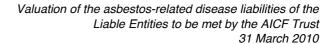
Thereafter, we have set the spot rate to be 1.25 percentage points above our underlying long-term wage inflation assumption of 4.75% per annum (before ageing allowance).

The combined effect is that our long-term spot rate is 6.00% per annum at durations 10+. This is unchanged from our previous valuation.

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.

#### 1.3 Areas of potential exposure

As identified in Section 1.2, there are other potential sources of claims exposure beyond those directly considered within this Report. However, 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 (compared to past and current levels of activity) 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 (we note the recent decisions in Amaca v Ellis [2010] HCA 5 and Evans v Queanbeyan City Council [2010] NSWDDT 7 which we understand are consistent with the previous decision in Judd v Amaca [2002] NSWDDT 25);
- 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 by Amaca in August 2006) nor for the risk of additional exposures from overseas. This is because, as noted in Section 1.2, the AICF Trust will not meet the cost of these claims as they are Excluded 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.

The number of pure home renovator claims reported has remained broadly stable since 2003/04 (at approximately 25 claims per annum). "Family" type exposures (e.g. childhood exposures, exposure through clothes washing) had been the main source of increase in claims reporting from 2004/05 to 2008/09, although these have shown a reduction of around 20% in 2009/10.

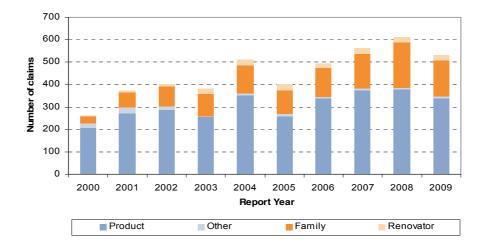
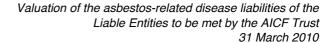


Figure 1.1: Mix of claims reported by nature of exposure

We have not allowed for a surge in third-wave 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.

#### 1.4 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.

In Section 2 of this Report, we have discussed in more detail the conversion of historical claims data onto a new IT system.

#### 1.5 Uncertainty

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

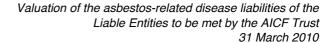
This is due to the fact that the ultimate disposition of future claims will be subject to the outcome of events that have not yet occurred. Examples of these events, as noted in Section 1.3, include jury decisions, court interpretations, legislative changes, epidemiological developments, medical advancements, 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.

#### 1.6 Distribution and use

The purpose of this Report is as stated in Section 1.2. 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. This Report will also be provided to the Board and management of James Hardie, the NSW Government, and to Ernst & Young in their capacity as auditors to both James Hardie and AICFL.





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

We understand that this Report will also be placed on AICFL'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.

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 Section 1.2.

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.

#### 1.7 Author of the report

This Report is authored 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.

This Report is co-authored by David Whittle, a Director of KPMG Actuaries and a Fellow of the Institute of Actuaries of Australia.

#### 1.8 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 self-insured entities, and which have purchased related insurance protection.

In preparing this Report, we have complied with the revised version of Professional Standard 300 of the Institute of Actuaries of Australia ("PS300"), "Valuation of General Insurance Claims". The revised standard is applicable for balance sheet dates occurring after 23 February 2010.

However, as we note in Section 1.2, this Report does not include an allowance for the future Operating Expenses of the AICF Trust (which are estimated by AICFL) and nor does it include any allowance for a risk margin to reflect the inherent uncertainty in the liability assessment.



#### 1.9 Control processes and review

This valuation report and the underlying analyses have been subject to technical review and peer review.

The technical review focuses on ensuring that the valuation models and supporting claims experience analyses that are carried out are done correctly and that the calculations are being correctly applied. The technical review also ensures that the data that is being used has been reconciled insofar as possible.

Peer review involves a review of the approach, the methods, the assumptions selected and the professional judgments applied.

Both the technical review and peer review processes are applied to the report as well as the valuation models.

#### 1.10 Funding position of the AICF Trust

This Report does not analyse nor provide any opinion on the current, or prospective, funding position of the AICF Trust.

This is because to do so requires consideration of the future financial performance of James Hardie.

This Report only provides analysis and opinion on the estimates of the future expenditure to be met by the AICF Trust.

#### 1.11 Basis of preparation of report

We have been advised by the management of AICFL to prepare the Report on a "going concern" basis (i.e. that we should assume that AICFL will be able to meet the cost of the liabilities of the Liable Entities as they fall due).

In this regard, we note the announcement in November 2009 that the Australian Government would provide a loan of up to \$160 million to the NSW Government that would go towards a loan facility of up to \$320 million to be made available by the NSW Government to AICFL to meet an expected short-term funding shortfall.



#### 2 DATA

### 2.1 Data provided to KPMG Actuaries

We have been provided with the following information by AICFL:

- Claims database at 31 March 2010 with individual claims listings;
- Accounting database at 31 March 2010 (which includes individual claims payment details); 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 2010.

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.

The data structures for the claims and accounting databases provided to us by AICFL as of 31 March 2010 are detailed in Appendix G.

#### 2.2 Data limitations

We have tested the consistency of the various data sets provided to us at different valuation dates. Sections 2.3 and 2.4 outline 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 internal administration 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.

## 2.3 Impact of new IT system upon data

#### 2.3.1 Overview

During the financial year ending 31 March 2010, AICFL implemented a new IT system. The system went "live" in mid-February 2010.



As part of the development of the new IT system, all claims records and claims histories from the old IT system were converted onto the new system.

The implementation of this new IT system has resulted in some modifications to existing claims and transaction fields, re-categorisation and re-grouping of existing fields and the development of new fields.

There has also been increased segmentation of the transactions into "heads of damage".

At the same time, corrections in relation to any data errors that had become apparent have also been made.

As a consequence of the change in the source and format of the claims and accounting data, some of the tables in this report have changed since the previous valuation.

#### 2.3.2 Reconciliation process

As part of the AICFL's transition to the new IT system, we undertook parallel testing of the data extract from the old IT system and the data extract from the new IT system as of 31 December 2009.

The testing focussed predominantly on the key fields that would affect the valuation result, namely:

- Disease type;
- Date of notification;
- Date of settlement;
- Claims award;
- Legal costs;
- Other costs;
- Recovery amounts.

However, as part of the reconciliation process, we compared all of the field values of each record to identify and resolve any material changes. Where material or financially significant changes had taken place, we sought to understand those changes and, (where required) AICFL made amendments or corrections to the data or the conversion process.

Whilst we cannot provide assurance as to the underlying data (because we do not undertake "auditing at source") the final outputs in relation to 31 December 2009 data closely reconcile from the two separate systems.



Therefore, the conversion and transfer of data to the new IT system has not materially changed the underlying claims data, or our results.

#### 2.3.3 Changes to the data fields

There have been a number of changes to the data fields.

Each claim record now has a new claim number protocol. This protocol applies equally to the old claim records and any new claims reported which are entered using the new IT platform.

However, for claims that were recorded on the old IT system, the old claim number is also stored. This allows us to reconcile and compare records from the new data extracts and the old data extracts.

For the old IT system, there were two settlement dates: namely the plaintiff settlement date and the client settlement date. The new IT system only has one settlement date: the client settlement date.

In our previous valuations, when we performed our analysis of average claim sizes, we used the plaintiff settlement year to segment the data. As this field is no longer being maintained, our analysis at this valuation will be conducted using "client settlement year". The use of this different definition will result in a number of tables (notably the average claim size and the nil settlement rate tables) being on a different basis to that previously reported.

Finally, the structure and content of the financial fields have changed, and the historical data has also changed.

The claims database extract now contains the following fields:

- Damages which in some cases are net of cross-claim recoveries, and which sometimes are gross of cross-claim recoveries. We are, however, able to identify which records are gross of cross-claims recoveries and which records are net of cross-claim recoveries. We have then restated all damages data to be gross of cross-claim recoveries;
- Costs;
- DDB reimbursements;
- Other costs (which include payments to Medicare); and
- Defence legal costs.



The accounting database extract contains the following fields:

- Damages which are gross of cross-claim recoveries;
- Costs;
- DDB reimbursements;
- Other costs;
- Payments to Medicare; and
- Defence legal costs.

We then map the financial data between the two databases into standardised groupings as follows:

Table 2.1: Grouping of financial data from claims and accounting databases

	CLAIMS DATABASE	ACCOUNTING DATABASE
Award	Damages (gross of cross-claims) <i>plus</i> DDB reimbursement <i>plus</i> Medicare (from Accounting Database)	Damages <i>plus</i> DDB reimbursements <i>plus</i> Medicare
Costs / Other	Costs <i>plus</i> Other <i>less</i> Medicare (from accounting database)	Costs <i>plus</i> Consulting
Defence legal costs	Defence legal costs	Defence legal costs

Note: Recovery amounts are available from the accounting database

#### 2.4 Data verification

We have also been able to undertake the usual reconciliation with the data provided at 31 March 2009.

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.

#### 2.4.1 Reconciliation with previous valuation's data

We have performed a reconciliation of the new claims database as at 31 March 2010, with that provided at 31 March 2009. Our findings are:

- Claims notifications: The new IT system contains 25 more claims reported to 31 March 2009 than the old IT system. These consisted of:
  - 4 new claims that are showing with a report date in March 2009;



- 19 new claims records relating to older reported claims that have resulted from splitting one claim record into two separate claim records (being a direct claim by the plaintiff and a crossclaim against a Liable Entity); and
- 2 claims that were re-categorised as being a cross-claim against a Liable Entity, when the previous information we had been provided with indicated a cross-claim by a Liable Entity
- Portfolio Category: 17 claims changed category. Of this, 13 records related to claims that we had previously categorised as "workers compensation" claims. Only 2 claims have been re-labelled as mesothelioma. In 15 of the 17 cases, the claims were reported prior to 2002. Therefore any changes in the categorisation would not affect the recent trends in claims reporting experience.
- Notification Date: 4 claims have changed their notification date by a material amount (which we have defined as a change of greater than one month).

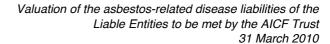
Changing and developing data is not unexpected or to be considered as adverse. Indeed, changing data is common to all claims administration systems. We do not consider the number of changes to be unreasonable.

# 2.4.2 Reconciliation of claims settlement amounts between claims and accounting databases

We have compared the payment records between the claims database and the accounting database from the earliest date to the current file position. Table 2.2 shows the results of this reconciliation for all claim transactions to date.

Table 2.2: Comparison of amounts from claims and accounting databases

CLAIMS DATABASE		ACCOUNTING DATABASE	
Damages (gross of recoveries,			
excluding medicare)	687.4	Damages (gross of recoveries)	688.8
Costs	18.1	Costs	18.7
DDB	5.4	DDB	5.4
Other (inc Medicare)	5.8	Consulting	3.1
		Medicare	3.0
Defence legal costs	85.6	Defence legal costs	107.6
Total Value	802.3	Total Value	826.6
Total Value Standardisation	802.3	Total Value	826.6
		Total Value  Award plus Medicare plus DDB	<b>826.6</b> 697.2
Standardisation	695.8	7500	52515
Standardisation Award plus Medicare plus DDB	695.8	Award plus Medicare plus DDB	697.2
Standardisation Award plus Medicare plus DDB Costs / Other	695.8 20.9 85.6	Award plus Medicare plus DDB Costs / Other	697.2 21.8





The standardisation is the most relevant comparison because, as noted earlier, the two database extracts allocate the information (in relation to Medicare) in slightly different ways.

Once the standardisation has been undertaken, the two datasets reconcile very closely for claims awards and the "costs / other" categories.

The variation for the award component is less than \$1.5m (or 0.2% of the total amount).

The main difference between the two datasets is in relation to legal costs.

It has always been the case that the claims database (particularly in relation to older claims records) does not fully capture the legal cost components. We continue to place limited reliance on that database for our analysis of legal costs.

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

This results in the following overall totals being used in our analysis:

- \$698.8m for the claims award component;
- \$21.8m for the costs / other component; and
- \$107.6m for the defence legal costs component.

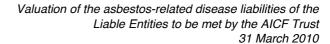
This approach, of taking the maximum value for each claims record, will result in some minor prudence in our overall analysis although the amount of prudence is not material in the context of the size of the potential liabilities and the underlying uncertainty in any valuation estimating future claims costs over the next 40 years or more.

#### 2.5 Data conclusion

We have not verified the underlying data nor undertaken "auditing at source".

We have assumed that any material data issues will have been identified by the Approved Auditor of AICFL (Ernst & Young) during their testing and would have been notified to us.

We have tested the data for internal consistency with the data provided at the previous valuation (31 March 2009) and we have also "parallel-tested" the data from the new IT system and the old IT system (as of 31 December 2009).





Based on that testing and reconciliation, and subject to the limitations described in Section 1.4, we have formed the view that:

- The data is generally consistent between valuations, with any differences in the data being readily explainable;
- The financial data appears to reconcile reasonably between the two data sources (the claims database and the accounting database);
- The data from the two IT systems (as of 31 December 2009) appears
  to reconcile reasonably well, providing evidence that the data
  conversion and migration has not, of itself, given rise to any data
  integrity issues;
- 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.



# 3 VALUATION METHODOLOGY AND APPROACH

## 3.1 Previous valuation work and methodology changes

We have maintained the core valuation methodology adopted at our previous valuation at 31 March 2009.

## 3.2 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. 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 expected future incidence of mesothelioma and other diseases and also the past rate of co-joining of the Liable Entities;
- 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 2009/10 (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 is net of any insurance proceeds from a Workers Compensation Scheme or Policy);
- 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 size 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/other 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 nonnil amounts in a period by the inflated average non-nil claim costs (including the "large claims loading") and plaintiff/other and defence legal costs for that period;
- 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) after making allowance for the assumed settlement pattern of pending claims;



- This gives the projected future gross cashflow for each future financial year;
- Adjust projected cashflow for the impact of the cap on DDB reimbursements:
- 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 Government fixed interest bonds at the valuation date, and a flat long term spot rate of 6.00% per annum for cashflows from ten years onwards, 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 or all investigations we undertake. 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 AICF and James Hardie and runs from 1 April to 31 March, so that a 2008 reported claim would be a claim notified in the period 1 April 2008 to 31 March 2009. Similarly a 2009 settlement would be a claim settled in the period 1 April 2009 to 31 March 2010.

## 3.3 Disease type and class subdivision

## 3.3.1 Claims records excluded from our analysis

We have excluded 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.



We have also excluded "insurance recovery" claims records. This is because the insurance recovery record is a separate record that exists for claims records where an insurance recovery is due. In other words, the claim against the Liable Entity has already been included in our analysis and the insurance recovery record exists for operational purposes only.

## 3.3.2 Categories of claim

We have sub-divided the remaining claims into the following groups:

- Product and Public Liability;
- Workers Compensation, being claims by current and former employees of the Liable Entities; and
- Wharf claims, being claims by individuals whose occupations involved working on the docks or wharves, or where part of their exposure related to wharves.

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 insurance 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 such claims likely have a different exposure and incidence profile compared to product and public liability claims.

## 3.3.3 Categories of disease

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

We have split the data by disease because there is sufficient volume of claims to do so, because different disease types display substantially different average claim sizes, and because the incidence pattern of future notifications is also expected to vary between the different disease types.

We have not divided the Workers Compensation or wharf claims data by disease type, given their 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").

This means that if a product or public liability claim has mesothelioma as one of its listed diseases, it is automatically included as a mesothelioma claim. If a product or public liability 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 product or public liability 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.

#### 3.4 Numbers of future claims notifications

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 stable market share, but thereafter were not involved in asbestos products;
- The average period over which claimants are typically exposed; and
- The statistical distribution of the latency period from average exposure for each disease type, together with the underlying parameters (the mean and the standard deviation) of the latency model.

Statistically speaking, the projected peak incidence of mesothelioma is not equal to the peak year of production (or consumption) plus the average latency of mesothelioma (being 35 years).

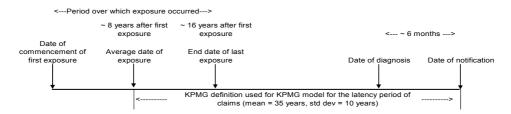
Instead, the projected peak of claims reporting derived from our model is a function of the overall shape of the exposure and the full distribution of the latency period. In statistical terminology, the projected claims incidence curve is a "convolution" of the statistical distribution of averaged consumption and the statistical distribution of the latency period.

Furthermore, because the exposure model is not a symmetrical distribution (although the latency model is a symmetrical distribution), the notification pattern will not be symmetrically distributed around the peak year.



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

Figure 3.1: Timeline of exposure, latency and claim reporting



### 3.4.1 Exposure Model

We have constructed a proxy for an "exposure model" by reference to statistics showing the levels of 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' exposure.

We start by constructing an exposure index from the annual consumption of asbestos within Australia from 1900-2002.<sup>2</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. In any event, we have made separate explicit allowance for mining activities at Baryulgil within our liability assessment.

Figure 3.1 shows measures of the production and consumption of asbestos in Australia in the period 1920 to 2002.

<sup>&</sup>lt;sup>2</sup> World Mineral Statistics Dataset, British Geological Survey, <u>www.mineralsuk.com</u>

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



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.

100,000
90,000
70,000
60,000
40,000
20,000
10,000
10,000
Production Consumption Averaged Consumption

Figure 3.2: Consumption and production indices – Australia 1930-2002

Source: World Mineral Statistics Dataset, British Geological Survey, www.mineralsuk.com R Virta, USGS Website Annual Yearbook The data underlying this chart is shown in Appendix F.

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.

The analysis supporting the 16-year average exposure period assumption is detailed in Section 4.8.1.

It is the averaged consumption which is used, together with an assumption about the statistical distribution of the latency period, as a basis for projecting future mesothelioma claims numbers.

There is an implicit assumption within the use of the "averaged consumption" to derive the level of future claim notifications that:

 the consumption of asbestos is directly correlated with, and a suitable proxy for, the number of people exposed to asbestos in any year; and



 the rate of incidence of individuals developing an asbestos-related disease arising from exposure to asbestos is the same for each exposure year and is independent of the type of asbestos used.

### 3.4.2 Latency model

Our assumption is that the latency pattern (from the average date of exposure) for all disease types is statistically distributed with a normal distribution.

The parameters (i.e. the mean and standard deviation) of the distribution have been set by reference to previous work undertaken by Professor Berry et al<sup>3</sup>, by Jim Leigh et al<sup>4</sup> and by Yeung et al<sup>5</sup>.

The parameters for the mean and, in particular, for the standard deviation have also been set taking into account the claims experience of the Liable Entities to date.

The parameters vary by disease type.

The analysis supporting the selection of these parameters is detailed in Section 4.9.

### 3.4.3 Projecting the claims notification curve using the exposure and latency model

Our methodology is to take each year of exposure, using "average consumption" of asbestos in tonnage for that year, and project an index of the number of claims we project to emerge in each future reporting year resulting from that exposure year.

The latency period is assumed to be normally distributed with a mean and a standard deviation which vary by disease type.

This means that for any given exposure year, the peak incidence of reporting claims would be (in the case of mesothelioma) 35 years after the average exposure date from that exposure year.

We then aggregate together the claims notification index curves projected for each exposure year to produce an overall curve which shows the index of claim notifications arising from all exposure periods.

<sup>&</sup>lt;sup>3</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>&</sup>lt;sup>4</sup> Malignant Mesothelioma in Australia: 1945-2000; J. Leigh et al (2002)

<sup>&</sup>lt;sup>5</sup> Distribution of Mesothelioma Cases in Different Occupational Groups and Industries, 1979-1995; P. Yeung, A. Rogers, A. Johnson (1999)



The curve is described as an index because consumption is used as a proxy measure for the number of individuals exposed and because we don't know what proportion of those people who were exposed will develop asbestos-related diseases.

Therefore the methodology produces a shape of the number of claims, rather than an absolute level of the number of claims to be reported.

This methodology provides not only the shape of claims reporting as an index but it also projects the peak year of incidence of mesothelioma claims reported to the Liable Entities and the rate of decay in claims reporting levels after the peak year of incidence.

The model projects the peak year of incidence for mesothelioma claims 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.

These are summarised in Section 4.10.

# 3.4.4 Calibrating the curve index to current reporting experience

We take the claim curve index and then calibrate the number of notifications in each future year by reference to the recent levels of claims reporting and the number of claims we have projected for the 2010/11 financial year.

This approach implicitly assumes that:

- The future rate of incidence of asbestos-related diseases manifesting as a result of a past exposure to asbestos will remain stable;
- The "propensity to claim" by individuals will remain stable; and
- The rate of co-joining Liable Entities in claims will remain stable.

Our analysis and assumptions are detailed in Section 4.

### 3.5 Incidence of claim settlements from future claim notifications

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

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, and monetary amount, of settlements in each financial year for each disease type.



Our analysis and assumptions selected are detailed in Section 7.7.

## 3.6 Average claim costs of IBNR claims

#### 3.6.1 Attritional claims

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 \$1.170m in 2009/10 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 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 / other costs of a non-nil "attritional" claim.
- Average defence legal costs of a non-nil "attritional" claim.
- Average defence 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 (i.e. mid 2009/10 money terms) using a base inflation index (of 4% per annum). This allows 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 analysis for the defence legal costs for nil and non-nil claims and for plaintiff legal / other costs in respect of non-nil claims (together "Claims Legal Costs").

Our analysis and assumptions are detailed in Section 5.



### 3.6.2 Large claims loading

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.

Our analysis and assumptions are detailed in Section 5.8.

### 3.6.3 Future inflation of average 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.

Our analysis and assumptions in relation to claims inflation are detailed in Section 7.

## 3.7 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.

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

Our analysis and assumptions selected are detailed in Section 6.

### 3.8 Pending claims

### 3.8.1 Definition of pending claims

At 31 March 2010, there were 529 claims for which claim awards have not yet been fully 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 three 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.

## 3.8.2 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 terms 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 3.5 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 due to limited data volumes and the impact of Workers Compensation insurance upon the data.

### 3.8.3 Findings

Our analysis has indicated that there is a degree of redundancy in 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 25%.

Amaca's own analysis also suggests that historically there have also been savings which have typically varied between 20% and 30%.

Furthermore, we have assessed whether the cost of claims reported up to and including 31 March 2009 has deteriorated compared to our prior estimate (as at 31 March 2009).

The table below shows that there has been no deterioration compared to the estimates we previously adopted and are currently adopting (both of which have already made allowance for a 25% saving on case estimates). This analysis lends further support to the view that the allowance we have made for the extent of redundancy in case estimates of 25% is reasonable and is being borne out by the actual experience.

Table 3.1: Change in cost of claims reported prior to 1 April 2009 during 2009/10 financial year

	Undiscounted Liability (\$m)
Estimates for pending claims at 31 March 2009	98.7
Payments made in 2009/10 in relation to claims reported up to 31 March 2009	56.6
Estimates for pending claims at 31 March 2010 in relation to claims reported up to 31 March 2009	39.0
Release / (strengthening)	3.1

Based on this analysis, we have maintained our assumption for the level of redundancy in case estimates on currently reported claims at 25% at this valuation (March 2009: 25%).

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 more than 90% of the cost of pending claims expected to be settled within the next six years.



#### 3.9 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.

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 product liability claims costs attached to any one year up to an overall aggregate limit for that year; and
- Public liability claims are covered by an "each and every loss" policy which provides cover for each public liability claim up to an individual limit for that year.

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

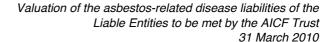
We make no allowance for the Workers Compensation cashflows in estimating the Insurance Recoveries, as the insurance programme only provides insurance cover to product and public liability exposures.

### 3.9.1 Programme 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 excess "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 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 (through to 30 June 2014).
- 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 31 May 1986 to 31 March 1989, 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 31 March 1989 to 31 March 1997, 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.

## 3.9.2 Modelling insurance recoveries on the claims occurring programme

Our methodology for projecting the future insurance recoveries to be collected by AICFL involves the following steps:

Identify the current contract positions for each insurance policy year.
 This assumes that all monies due have been collected, and does not allow for the impact of commutations that have taken place.



- We allocate the projected future gross cashflows to individual insurance policy years using an allocation basis that has been determined by reference to the exposure methodology used to project future claim numbers and also using a "period of exposure" and "time on risk" allocation.
- This gives a projection of how the insurance programme is utilised over time.

### This method allows us to evaluate:

- the total insurance recoveries due by payment year;
- how the insurance recoveries due will be assigned to each layer and therefore to each insurer; and
- identify and allow for when the individual layers are fully exhausted.

We then separately adjust the projected recoveries to exclude those projected future recoveries that are assigned to the participations of insurers who have already commuted their coverage with AICFL and the Liable Entities or who have settled by way of a Scheme of Arrangement.

#### 3.9.3 Commuted Contracts

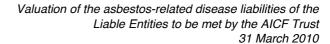
We have allowed for the value of the QBE commutation entered into in June 2000 which involves the payment of a consideration of \$3.1m per annum for 15 years to (and including) 30 June 2014.

## 3.9.4 Schemes of Arrangement

For the claims occurring period, where a claim filed against a company under a Scheme of Arrangement has been accepted and payment made, we have assumed that the insurance liabilities of that company to the Liable Entities have been fully discharged and no further recoveries fall due.

### 3.9.5 Unpaid insurance recoveries

We have not included within our estimate any allowance for insurance recoveries under the claims occurring period that are due but have not yet been collected ("unpaid balances"), as these are more appropriately dealt with as a debtor of AICFL. Such monies amount to approximately \$4m at 31 March 2010.





### 3.9.6 Claims made insurance protection from 31 May 1986 onwards

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. For the purpose of this Report, we have made no allowance for the value of insurance contracts placed from 1986 onwards in our liability assessment.

We note that a claim of approximately \$70m has been made by Amaca on behalf of the Liable Entities against HIH and related entities in relation to the insurance programme for the 1989/90 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.

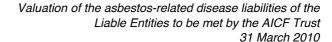
To the extent recovery is made against this claim, the net asset position of the AICF Trust would improve and this would reduce the future funding requirement by James Hardie.

### 3.9.7 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 2010 and are based on bond default rates.

We have considered the credit rating of the insurers of the Liable Entities as at March 2010 and applied the relevant credit rating default rates to the expected future cashflows by year, treaty and insurer.

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.





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 an actuarial valuation assumption and is not based on legal opinion and we pass no such opinion.

We note the House of Lords decision (*McGrath and Ors and another vs. Riddell and Ors, [2008] UKHL21*) passed down in April 2008 which has had the effect of remitting the reinsurance assets of HIH Group to Australia. Those assets are available for distribution in accordance with Australian law.

Whilst this decision assists in any potential applicability of Section 562A(4) of the Corporations Act to the reinsurance recoveries of the HIH Liquidator, the decision does not in itself enshrine or impose cut-through (any such application would be at the Court's discretion).

Accordingly, given the obstacles that still remain (in relation to any potential cut-through) we have not allowed for this beneficial decision to alter the value we have assigned to these insurance and reinsurance contracts at this valuation.

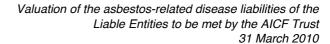
Were cut-through to be achieved, whether under Section 562A(4) of the Corporations Act or under Section 6 of the Law Reform (Miscellaneous Provisions) Act or on some other basis, this would be expected to increase the level of Insurance Recoveries, as the financial strength of the reinsurers to the HIH Group is generally better than that of the HIH Group itself, so that a lower bad debt charge would apply.

#### 3.10 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 the claims experience.

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.





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

Our analysis and assumptions selected are detailed in Section 7.7.

# 3.11 Discounting cashflows

Cashflows are discounted on the basis of yields available at the valuation date on Commonwealth fixed interest government bonds of varying coupon rates and durations to maturity (matched to the liability cashflows), with a long-term discount rate of 6.00% per annum assumed.

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.

Our selected assumptions for the discount rates are detailed in Section 7.5.



# 4 ANALYSIS OF CLAIMS EXPERIENCE – CLAIM NUMBERS

#### 4.1 Overview

We have begun by analysing the pattern of notifications of claims as shown in Table 4.1. This table shows the number of claim notifications by year and by disease category.

Table 4.1: Number of claims reported annually

						Workers
Report Year	Mesothelioma	Asbestosis	Lung Cancer	ARPD & Other	Wharf	Compensation
2000	126	46	30	21	26	38
2001	162	93	24	30	17	59
2002	182	94	36	41	15	49
2003	189	101	26	27	10	36
2004	266	121	34	26	6	62
2005	217	103	32	17	6	33
2006	220	165	35	30	6	43
2007	276	171	28	43	8	46
2008	304	161	39	46	12	59
2009	262	121	39	51	3	59
All Years	2,932	1,473	454	515	152	1,177

Note: Throughout Sections 4 to 6, the date convention used in tables and charts is that (for example) 2008/09 indicates the financial year running from 1 April 2008 to 31 March 2009. Furthermore, unless clearly identifying a calendar year, the label "2008" in charts or tables would indicate the financial year running from 1 April 2008 to 31 March 2009.

Historically, mesothelioma has accounted for more than 40% of claims by number. This percentage increased from 42% in 2001/02, peaking at 53% in 2005/06, and then falling to 49% in 2009/10.

Asbestosis has shown a significant increase, from less than 20% in 2000/01 to 33% in 2006/07 but reducing to 23% in 2009/10.



100% 90% 70% 60% 50% 40% 30% 20% 10% 2000 2001 2003 2004 2005 2007 2009 2000 Report year Mesothelioma ARPD & Other ■ Wharf Worker Asbestosis Lung Cancer

Figure 4.1: Proportion of claims by disease type

Since 1997, NSW has contributed around 50% of all claims reported. However, in the last five years, its proportion has shown a steady reduction and NSW now contributes slightly more than one-third of all claims by number (although a higher proportion by cost).

The reduction in the proportion of claims heard in NSW over the last five years has likely been a consequence of the decision in *BHP Billiton vs Schultz* [2004] HCA 61.

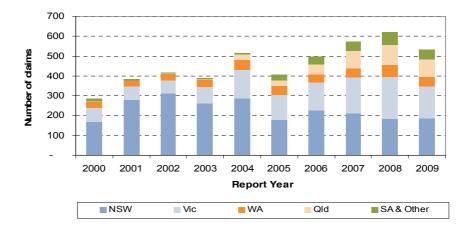


Figure 4.2: Mix of claims by state (all disease types)



#### 4.2 Mesothelioma claims

The incidence of mesothelioma claim notifications showed a steady rate of increase from 2001/02 to the 2003/04 financial year, to 189 claims. There was a further upward step in claim numbers during 2004/05 with 266 claims reported in the year.

Reporting activity reduced in 2005/06 and 2006/07, but increased to 276 claims reported in 2007/08 and 304 claims reported in 2008/09.

In 2009/10, there were 262 mesothelioma claims reported.

## 4.2.1 Monthly analysis of notifications

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

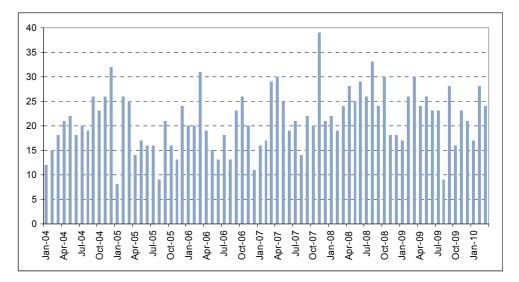


Figure 4.3: Monthly notifications of mesothelioma claims

#### It is observed that:

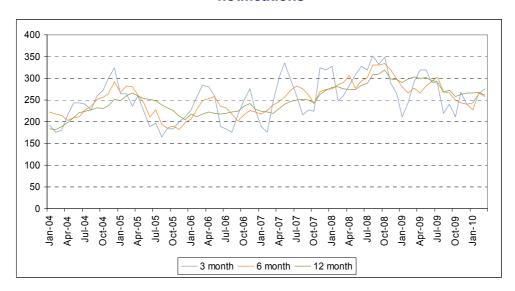
- The higher level of claims reporting of 2007/08 and 2008/09 has abated to some extent during 2009/10.
- Claims reporting in 2009/10 has been below expectations and in particular it showed a steady downward trend during the first three quarters of the financial year, whilst the fourth quarter returned towards levels typically observed.
- There is typically a degree of late development which takes place in the following financial year (e.g. the number of claims reported in 2008/09 has increased by 6 since the end of that financial year, and since the figures quoted in our previous valuation report).



## 4.2.2 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 4.4: Rolling annualised averages of mesothelioma claim notifications



It can be seen that the current annualised rolling averages are between 258 (6-month average) and 276 (3-month average).

Generally, over the last two years, the 6-month and 12-month averages have remained within the range of 230 to 330 claims per annum, although there was a period when the 6-month and 12-month average increased to between 310 and 330 claims per annum.

The 3-month averages have, not surprisingly, shown more volatility, varying between 210 and 350 over the last two years.

The 12-month rolling average showed a steady rate of decline from March 2009 through to October 2009 and has remained relatively stable since that time.

### 4.2.3 Claims notifications by State

We have analysed the number of claim notifications by State in which the claim is filed. Figure 4.5 shows the number of claims notified by year by State.



350 300 250 Number of claims 200 150 100 50 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 Report Year NSW ■ WA Vic DID = SA & Other

Figure 4.5: Number of mesothelioma claims by location of claim filing

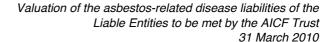
It is of note that for 2009/10:

- Overall, mesothelioma reporting activity is around 15% below the levels observed in 2008/09.
- Reporting activity in NSW (which contributes the highest number of mesothelioma claims against the Liable Entities) has remained at the levels observed in 2008/09.
- Reporting activity in Victoria has shown a significant reduction, being 19% lower than the level observed in 2007/08 and 2008/09.
- Claim activity in South Australia has also reverted more closely to previous levels, following a significant increase in 2008/09.

# 4.2.4 Base valuation assumption for number of mesothelioma claims

In setting a base valuation assumption for 2010/11, we need to consider whether the observations in the most recent year were one-off fluctuations or were part of a new trend.

In considering the reduction in activity in Victoria, we have observed that the lower claims activity mainly arose in the second and third quarters of 2009/10 (July through to December). In contrast, the first and fourth quarters were in line with the levels of activity observed in previous years.





Further analysis also indicates that the fall in activity in Victoria was observed for all disease types (25% across all disease types, 40% for asbestosis). This might indicate some general systemic change in Victoria or it might be indicative of an earlier exposure in Victoria, in which the exposure for the Liable Entities predominantly arose from power station exposures.

At this stage, the trend in Victoria is not sufficiently developed to be able to demonstrably support the hypothesis of an earlier exposure in Victoria.

Accordingly, we have given only partial credibility to the experience in 2009/10, until such time that further information emerges that supports the hypothesis of an earlier exposure in Victoria.

Based on the above observations, we have therefore assumed 288 claims for 2010/11, which equates to 24 claims per month. This is a slight reduction from the previous assumption of 25 claims per month.

#### 4.3 Asbestosis claims

It can be seen in Table 4.1 that for asbestosis, the number of claim notifications has shown a step change upwards since 2000/01 and then a gradual increase to 2003/04. There was then another upward step in 2006/07.

For the three years of claims reporting from 2006/07 to 2008/09, claims reporting activity has been reasonably stable, between 161 and 171 claims.

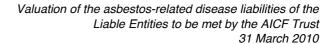
There were 121 claims reported in 2009/10.

As with mesothelioma, there has been much lower reporting activity in 2009/10. Again, we have observed that Victoria (which has historically been the most prevalent State for asbestosis claims, typically contributing more than one-third of all asbestosis claims against the Liable Entities) has shown a significant reduction, with claims reporting activity more than 40% lower than that observed in 2008/09.

It is not yet clear whether the experience in 2009/10 is aberrational or is the beginning of a new trend.

As with mesothelioma, we have given only partial credibility to the experience in 2009/10 at this time.

We have therefore estimated 144 asbestosis claims to be reported in 2010/11.





## 4.4 Lung cancer claims

For lung cancer claims, claim notifications have been reasonably steady and do not appear to have shown the same pattern of notification as mesothelioma and asbestosis.

There were 39 claims reported in 2008/09 and 2009/10.

We have estimated 36 lung cancer claims to be reported in 2010/11.

#### 4.5 ARPD & Other claims

For ARPD & Other claims, the number of claims reported has been increasing in recent years, with 43 claims reported in 2007/08 and 46 claims reported in 2008/09.

There were 51 claims reported in 2009/10, with particularly high claims reporting in the first quarter (16 claims) and the remaining three quarters being in line with expectations.

We have estimated 48 ARPD & Other claims to be reported in 2010/11.

## 4.6 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 62 claims in the last six years.

There were 59 claims reported in 2009/10 and this was in line with expectations for the year, and in line with 2008/09.

We have estimated 60 workers compensation claims to be reported in 2010/11.

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 (typically more than 80%), which results from the insurance arrangements in place.

For wharf claims, we have projected 6 claims to be notified in 2010/11. This compares with 3 claims reported in 2009/10 and 12 claims reported in 2008/09. Again, the financial impact of this source of claim is not material.



## 4.7 Summary of base claims numbers assumptions

In forming a view on the numbers of claims projected to be reported in 2010/11, we have taken into account the emerging experience in the latest financial year and a revised view of the expected numbers of claims reported based on recent trends.

As outlined in Sections 4.2 to 4.6, our assumptions as to the levels of claims numbers are as follows:

Table 4.2: Claim numbers experience and assumptions for 2010/11

	2008/09	First half of 2009/10 *	Second half of 2009/10 *	2009/10	2010/11 (projected)
Mesothelioma	304	266	258	262	288
Asbestosis	161	130	112	121	144
Lung Cancer	39	46	32	39	36
ARPD & Other	46	56	46	51	48
Wharf	12	4	2	3	6
Workers Compensation	59	74	44	59	60
Total	621	576	494	535	582

<sup>\*</sup> Annualised figures do not make allowance for any seasonality of reporting or for late development adjustments. They are calculated by multiplying the half-year experience by a factor of 2.

It can be seen that the first half of 2009/10 exhibited considerably lower reporting activity for mesothelioma and asbestosis claims, although this was partly offset by higher claims activity for lung cancer, workers compensation and ARPD & Other claims.

The second half of 2009/10 showed substantial reductions in claims reporting (41 fewer claims) relative to that observed in the first half of 2009/10. This reduction predominantly related to non-mesothelioma claims.

Our projection for 2010/11 of 582 claims compares with a previous projection (as at 31 March 2009) for 609 claims in 2010/11.

The decrease in the assumption predominantly reflects the lower reporting activity for mesothelioma and asbestosis, and some partial credibility being attached to that experience.



## 4.8 Exposure information

## 4.8.1 Average exposure period

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

100% 80% 60% 40% 16 20% 0% 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 Report year 0 - 5 **5** - 10 **10 - 15** \_\_\_\_ 15 - 20 \_\_\_\_ 25 - 30 20 - 25 30 - 35 35 - 40 40 - 45 45 - 50 **50** - 55 55 - 60 Average Exposure

Figure 4.6: Mix of claims by duration of exposure (years)

It can be seen that the average duration of exposure has generally varied between 15 years and 19 years, with an average of 16.1 years over the last five years and 16.5 years over the last ten years.

### 4.8.2 Exposure information from claims notified to date

We have 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 4.7: 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 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 all products ceased to be manufactured by 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.

To understand better these temporal trends, we have modelled claimants' exposures for each past claim report year.



100% 80% 60% 40% 20% 0% 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 Report year ■ Pre-1976 □ 1976-1980 ■ 1981-1985 □ 1986-2010

Figure 4.8: 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 period after 1975, 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 1981/82 to 1985/86.

# 4.9 Latency period of reported claims

Our latency model for mesothelioma is for the latency period 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 analysed the actual latency period of the reported claims of the Liable Entities in order to test the validity of those assumptions.

We have measured the average actual 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 Section 4.8, 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.

Furthermore, 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.

The charts below show the average latency observed for claims reported in each report year from 1997 to 2009, and the 25<sup>th</sup> percentile and 75<sup>th</sup> percentile observations.

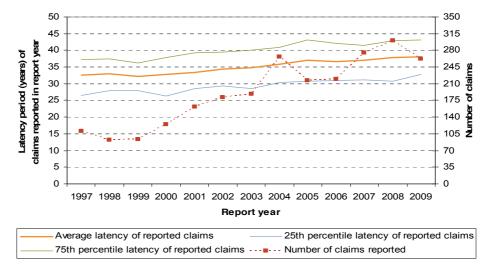
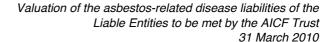


Figure 4.9: Latency of mesothelioma claims

The above chart indicates that the observed average latency period from the average exposure is currently around 38 years for mesothelioma.

For claims reported in 2009/10, the chart shows that the observed average latency period was 38 years.

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 and an implied standard deviation of around 11 years.





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

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 latency periods. Accordingly, any analysis of the observed average latency period of reported claims during the most recent 5 to 10 report years:

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

Over the last ten years, the observed average latency of mesothelioma claims reported in a report year has increased from 33 years to 38 years, increasing at a rate of about 0.5 years with every year that passes.

The observed average latency of claims reported in future report years should also be expected to show further upward trends in the coming years.

The currently observed standard deviation of the latency period is 7.8 years.

The claims experience to date and the assumptions selected seem to accord with epidemiological research in relation to mesothelioma, once the relevant adjustments to standardise onto a consistent terminology are made.

The trend in latency periods for other disease types is shown in the following charts.



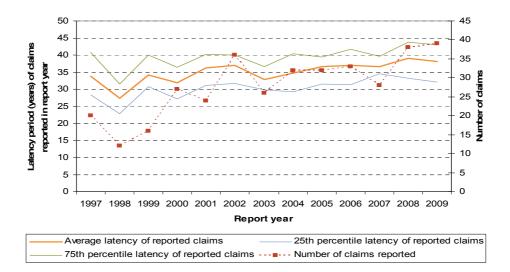
200
45
40
40
30
120
25
100
200
180
140
25
100
1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009

Report year

Average latency of reported claims
75th percentile latency of reported claims
75th percentile latency of reported claims
75th percentile latency of reported claims
Number of claims reported

Figure 4.10: Latency of asbestosis claims







| Subject | Subj

Figure 4.12: Latency of ARPD & Other claims

The average observed latency periods for the other disease types show a more surprising trend, appearing to be longer than epidemiological literature has tended to suggest.

A summary of our underlying latency assumptions by disease type are shown below. The mean and standard deviation values quoted are applied to a normal distribution model for the latency period.

Table 4.3: Assumed underlying latency distribution parameters from average date of exposure to date of notification

	Mean (years)	Std Dev (years)
Mesothelioma	35	10
Asbestosis	35	8
Lung Cancer	35	10
ARPD & Other	32	10
Wharf	n/a	n/a
Workers Compensation	n/a	n/a

These assumptions are unchanged from the previous valuation.

As an indication of the impact of how different assumptions would affect the incidence curve and therefore the number of IBNR claims:

- A lower standard deviation would lead to a faster decay in the number of claims being reported after the peak year (i.e. fewer IBNR claims).
- A higher mean latency period would increase the peak year (i.e. a higher number of IBNR claims).

2007/08



### 4.10 Peak year of claims and estimated future notifications

Workers Compensation

Based on the application of our exposure model and our latency model, and the assumptions contained explicitly or implicitly within those models, as described in detail in Section 3.4, the peak year of notification of claims reporting against the Liable Entities for each disease type is projected to be as follows:

Current **Previous** valuation valuation Mesothelioma 2010/11 2010/11 Asbestosis 2008/09 2008/09 Lung Cancer 2010/11 2010/11 ARPD & Other 2007/08 2007/08 Wharf 2000/01 2000/01

2007/08

Table 4.4: Peak year of claim notifications

In adopting these assumptions, we also considered various epidemiological views and models from both Australia and the UK, recognising that there are conflicting and widely diverging views as to when the peak might arise: with some projecting earlier peaks than we have assumed (e.g. Leigh & Driscoll 2003), whilst others project peak activity will be later than we have assumed (e.g. Clements et al, 2007).

In considering the relevance of the findings of the various epidemiological studies, we note the following:

- Many of the studies are based on developing 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.



 A national model of incidence may not be relevant to individual populations of claimants, as the timing of the exposure in an individual population of claimants may be different to the exposure profile for Australia as a whole.

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 each disease type for 2010/11 as summarised in Section 4.7.

Figure 4.13 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 revised expectations of claims reporting activity for 2010/11.

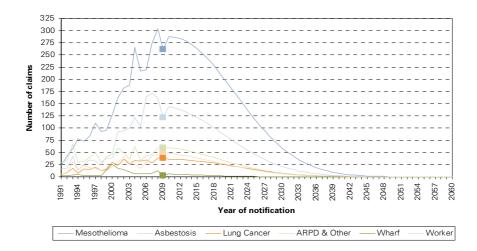
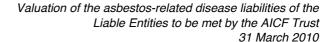


Figure 4.13: Expected future claim notifications by disease type

Note: The square dots indicate the claim notifications in 2009/10 for each disease type.

The partial recognition of the emerging experience in 2009/10 has decreased our projected ultimate number of claims compared with our previous valuation by 351 claims, the majority of which results from mesothelioma (189) and asbestosis (209) offset by some moderate increases in projected claim numbers for other disease types.





# 4.11 Baryulgil

Almost half of the claims settled which relate to asbestos mining activities at Baryulgil (as discussed previously in Section 1.2.3) have been settled with no liability against the Liable Entities; and for the remaining settled claims, the Liable Entities have typically borne around one-third to one-half of the settlement amount, 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 21 future claims reported, comprising 7 mesothelioma claims, 7 other product and public liability claims and 7 Workers Compensation claims.

We have assumed average claims and legal costs, net of Workers Compensation insurances, broadly in line with those described in Section 5.

Our projected liability assessment at 31 March 2010 of the additional provision (for claims not yet reported) that could potentially be required is an undiscounted liability of \$6.8m and a discounted liability of \$4.5m, all of which is deemed to be a liability of Amaca.



# 5 ANALYSIS OF EXPERIENCE – AVERAGE CLAIMS COSTS

#### 5.1 Overview

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

Table 5.1 shows how the average settlement costs for non-nil attritional claims have varied by client settlement year. All data have been converted into current money terms (i.e. mid 2009/10 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 5.1: Average attritional non-nil claim award (inflated to current money terms)

Client Settlement Year	Mesothelioma	Asbestosis	Lung Cancer	ARPD & Other	Wharf	Workers Compensation
2000	299,331	94,217	131,288	74,865	103,190	114,577
2001	348,209	129,736	155,547	149,618	69,949	49,855
2002	315,393	121,256	103,705	111,291	189,856	121,943
2003	279,410	127,341	139,786	114,820	132,036	131,593
2004	254,105	89,801	133,227	90,406	89,809	154,712
2005	235,874	82,329	62,303	83,381	91,234	141,614
2006	243,261	93,857	100,767	71,070	132,246	106,862
2007	241,527	85,124	118,327	51,696	34,214	282,761
2008	275,437	89,163	85,667	93,099	139,675	57,200
2009	246,395	99,740	104,757	89,275	58,401	105,700

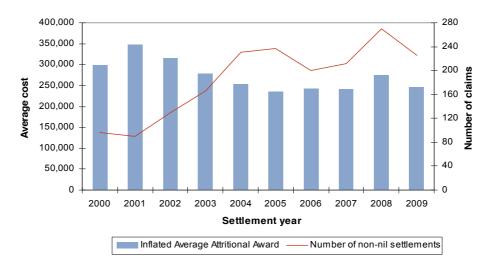
Note: The figures in this table and in the charts that follow have changed since the previous valuation because we are now using a different definition to segment the data: client settlement year as opposed to plaintiff settlement year. This has the effect of claims now being allocated to different years than they were previously.



#### 5.2 Mesothelioma claims

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

Figure 5.1: Inflated average awards and number of non-nil claims settlements for mesothelioma claims



The chart above shows the historic variability in average claim sizes for mesothelioma varying from \$230,000 to \$350,000 in 2009/10 money terms, although the last seven years have shown a greater degree of stability.

The average of the last three years is \$256,000; the average of the last four years is \$253,000 and the average of the last five years is \$250,000.

Additional analysis we have conducted demonstrates that the variation in awards has reflected changes in the contribution rate of the Liable Entities (i.e. the proportion of the total settlement costs for which the Liable Entities are held liable).

The reduction in the average size between 2008/09 and 2009/10 reflected:

- A lower contribution rate, reducing from 76% in 2008/09 to 72% in 2009/10;
- A higher incidence of claims settled for less than \$100,000 in 2009/10 (25% compared to 19% in 2008/09). Claims settled in 2008/09 also contained significantly more clams settled for between \$500,000 and \$1m.



Taking the above averages into consideration, and in particular noting the experience in 2008/09, we have adopted a valuation assumption of \$270,000 for mesothelioma claims in 2009/10 money terms, particularly noting the experience in 2008/09.

This assumption represents a 4% reduction in inflation-adjusted terms.

Table 5.2: Average mesothelioma claims assumptions

	Claim settlement year		
Valuation Report	2008/09	2009/10	
31-Mar-09	265,000	281,200	
31-Mar-10	n/a	270,000	

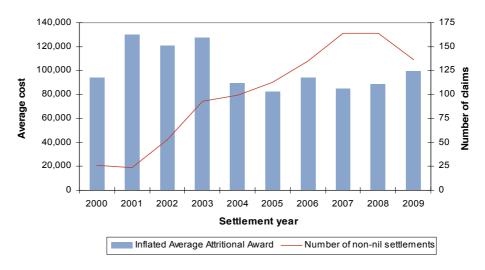
Note: 2008/09 settlements are in 2008/09 dollars whilst 2009/10 settlements are in 2009/10 dollars. The rate of inflation applied to the previous assumption of \$265,000 to convert into 2009/10 dollars is 6.1%. This is because at the previous valuation we had assumed that wage inflation would be 3.75% for 2009/10 owing to the GFC which, together with a 2.25% superimposed inflation assumption, led to a total claim inflation assumption for 2009/10 of 6.1%.



#### 5.3 Asbestosis claims

For asbestosis, it can be seen from Table 5.1 that in 2003/04 the average claim settlement was high relative to recent experience.

Figure 5.2: Inflated average awards and number of non-nil claims settlements for asbestosis claims



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 is \$91,000; the average of the last four years is \$92,000 and the average of the last five years is \$90,000. These averages are affected by the high number of claims settlements and the lower observed average settlement size for 2007/08.

We have adopted an assumption of \$100,000 in light of the recent increasing average claim size experience in 2009/10, whilst giving less credibility to the experience in 2007/08. This assumption represents a 2% increase in inflation-adjusted terms.

Table 5.3: Average asbestosis claims assumptions

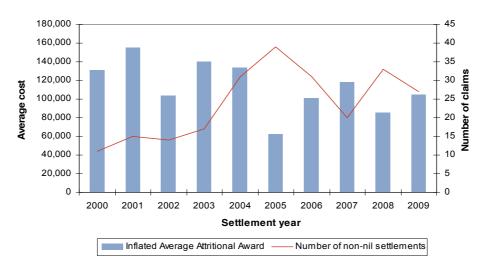
	Claim settlement year		
Valuation Report	2008/09	2009/10	
31-Mar-09	92,500	98,100	
31-Mar-10	n/a	100,000	



## 5.4 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 25 to 30 claims per annum).

Figure 5.3: Inflated average awards and number of non-nil claims settlements for lung cancer claims



The average of the last three years is \$100,000; the average of the last four years is \$100,000 and the average of the last five years is \$91,000.

At this valuation, we have adopted an average award size of \$110,000, taking into account the experience in 2009/10 and the volatility in past experience. This assumption represents a 10% reduction in inflation-adjusted terms.

Table 5.4: Average lung cancer claims assumptions

	Claim settlement year		
Valuation Report	2008/09	2009/10	
31-Mar-09	115,000	122,000	
31-Mar-10	n/a	110,000	

Note: 2008/09 settlements are in 2008/09 dollars whilst 2009/10 settlements are in 2009/10 dollars.

We are aware of the recent decisions in *Amaca v Ellis (Cotton) [2010] HCA 5* and *Evans v Queanbeyan City Council and Anor [2010] NSWDDT 7.* 

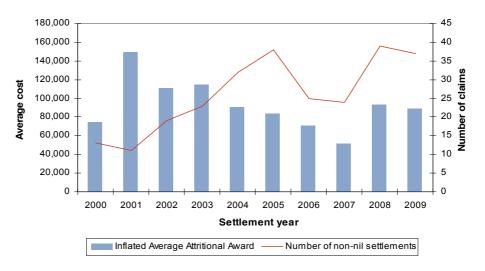
However, we have made no adjustment for these cases because we understand that the decisions in these two cases are consistent with the previous judgment in *Judd v Amaca* [2002] NSWDDT 25.



#### 5.5 ARPD & Other claims

Average award sizes over the last six years have been relatively stable, with the exception of 2007/08.

Figure 5.4: Inflated average awards and number of non-nil claims settlements for ARPD & Other claims



For ARPD & Other claims, the average of the last three years is \$82,000; the average of the last four years is \$80,000 and the average of the last five years is \$80,000.

We have adopted an average award size of \$90,000 recognising the experience between 2002/03 and 2009/10 (and largely ignoring the experience in 2006/07 and 2007/08). This assumption represents a very small reduction in inflation-adjusted terms.

Table 5.5: Average ARPD & Other claims assumptions

	Claim settlement year		
Valuation Report	2008/09	2009/10	
31-Mar-09	85,000	90,200	
31-Mar-10	n/a	90,000	

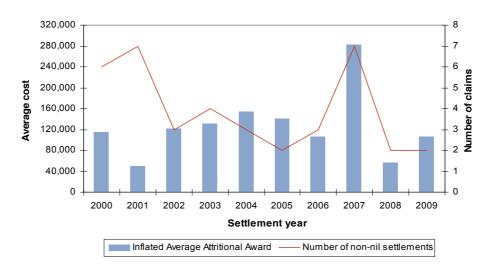


## 5.6 Workers Compensation claims

The average award for non-nil Workers Compensation claims has shown a large degree of volatility.

In 2007/08, there was a significant increase in average awards, although this is predominantly due to the impact of one large claim.

Figure 5.5: Inflated average awards and number of non-nil claims settlements for Workers Compensation claims



The average of the last three years is \$210,000; the average of the last four years is \$188,000 and the average of the last five years is \$182,000. These averages are affected by the higher volume of claim settlements in relation to 2007/08 which was also associated with a higher average award size, particularly due to the impact of that one large claim.

We have adopted \$130,000 as our valuation assumption. This represents a 2% reduction in inflation-adjusted terms. This assumption is not material to the overall liability given the high proportion of claims which are settled with no retained liability against the Liable Entities.

**Table 5.6: Average Workers Compensation claims assumptions** 

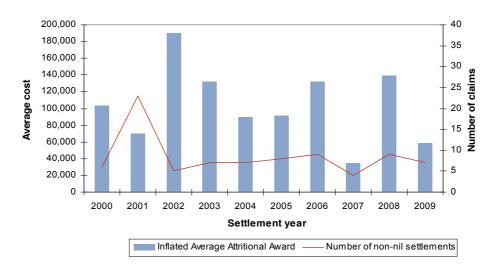
	Claim settlement year		
Valuation Report	2008/09	2009/10	
31-Mar-09	125,000	132,600	
31-Mar-10	n/a	130,000	



#### 5.7 Wharf claims

For wharf claims, the average of the last three years has been \$90,000; the average of the last four years has been \$103,000 and the average of the last five years has been \$101,000.

Figure 5.6: Inflated average awards and number of non-nil claims settlements for Wharf claims



The experience in 2008/09 was impacted by one large claim of almost \$500,000. In the absence of this claim, the average claim size would have been \$95,000.

We have adopted a valuation assumption of \$100,000 in current money terms. This assumption represents a 6% reduction in inflation-adjusted terms.

Given the small volume of wharf claims, this assumption is not financially significant.

Table 5.7: Average wharf claims assumptions

	Claim settlement year		
Valuation Report	2008/09	2009/10	
31-Mar-09	100,000	106,100	
31-Mar-10	n/a	100,000	



## 5.8 Large claim size and incidence rates

There have been 35 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.

4,500,000 4.000.000 3.500.000 3,000,000 2.500.000 2,000,000 1.500.000 1.000.000 500.000 2000 2006 2006 2006 2007 2008 Inflated Claim Aw ard Age of claimant at notification

Figure 5.7: Distribution of individual large claims by settlement year

In aggregate these claims have been settled for \$62.3m in current money terms, at an average cost of approximately \$1.78m. We have noted two claims of more than \$4m in current money terms.

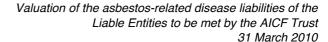
There are three mesothelioma claims (all reported in 2009/10) which have not yet been settled and for which the current case estimate is in excess of \$1m.

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

- Over the period 1997-2009 there have been 33 large claims at an incidence rate of 1.60% (i.e. the ratio of the number of large claims to the total number of non-nil mesothelioma claims).
- Over the period 2001-2009 there have been 27 large claims at an incidence rate of 1.51%.

We have assumed that there will be a large claim incidence rate of 1.67% prospectively over all future years. This is unchanged from our previous valuation assumption.

With approximately 300 mesothelioma claims settlements per annum projected, we are therefore projecting to observe 5 large claims per annum.





We have taken the average large claim size experienced from all years as our base assumption, given the small volume of such claims. This has resulted in an assumption of \$1.80m for the claim award.

Implicitly, this allows for the occasional \$4m claim at an incidence rate broadly equivalent to past experience (approximately one such claim every five years).

In relation to legal costs, we have made an additional allowance of \$50,000 per claim for plaintiff legal costs where such costs are made additional to, rather than inclusive with, the claims award. We have also made a separate allowance for defendant legal costs of \$100,000 per claim. We note that in the most recent three years, the average defence legal costs incurred for large claims has been approximately \$50,000 per claim. However, we note that prior to the most recent three years, average defence legal costs for large claims were considerably higher (in the order of \$150,000).

As a consequence, the overall loading per non-nil mesothelioma claim (including additional plaintiff legal costs) to make allowance for large claims is \$31,000 (being  $1.67\% \times 1,850,000$ ).

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 \$550,000 in actual money terms. Therefore we have made no allowance for large claims for other disease types.



# 5.9 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 5.8: Summary average claim cost assumptions

	Current Valuation	Previous Valuation
Mesothelioma	270,000	281,200
Asbestosis	100,000	98,100
Lung Cancer	110,000	122,000
ARPD & Other	90,000	90,200
Wharf	100,000	106,100
Workers Compensation	130,000	132,600
Mesothelioma Large Claims	Average Size: \$1.80m. Frequency: 1.67%	Average Size: \$1.86m. Frequency: 1.67%

Note: Both the current valuation assumption and the previous valuation assumption are expressed in 2009/10 money terms.



# 6 ANALYSIS OF CLAIMS EXPERIENCE – NIL SETTLEMENT RATES

## 6.1 Overview

We have analysed 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 6.1: Nil settlement rates

Client Settlement Year	Mesothelioma	Asbestosis	Lung Cancer	ARPD & Other	Wharf	Workers Compensatio n
2000	12%	16%	8%	19%	0%	87%
2001	28%	29%	42%	21%	18%	84%
2002	8%	9%	13%	17%	38%	80%
2003	7%	4%	23%	12%	67%	96%
2004	9%	8%	23%	9%	0%	94%
2005	10%	10%	26%	19%	20%	95%
2006	14%	10%	24%	40%	0%	95%
2007	13%	9%	29%	20%	76%	72%
2008	8%	9%	23%	13%	0%	91%
2009	9%	8%	18%	3%	0%	75%

Note: The figures in this table and in the charts that follow have changed since the previous valuation because we are now using a different definition to segment the data: client settlement year as opposed to plaintiff settlement year. This has the effect of claims now being allocated to different years than they were previously.



#### 6.2 Mesothelioma claims

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

Figure 6.1 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.

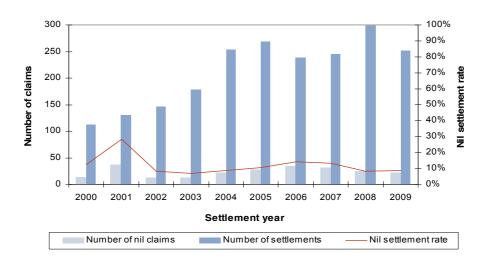


Figure 6.1: Mesothelioma nil claims experience

During the last six years, the nil settlement rate has varied between 8% and 14%.

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

- The last three years have averaged 10%, the last four years have averaged 11% and the last five years have averaged 11%;
- The experience in 2006/07 and 2007/08 showed an increased nil settlement rate to around 14%; and
- In 2008/09, the nil settlement rate fell to 8%, and in 2009/10 the nil settlement rate has been 9%.

Taking all of these factors into consideration and in particular the variability from year to year, we have reduced the assumed future nil settlement rate to 10% compared with our previous assumption of 12%.



## 6.3 Asbestosis claims

As with mesothelioma, the historic asbestosis nil settlement rates have been fairly volatile, albeit with some stability being observed in recent years.

200 100% 90% 80% 150 Number of claims 60% 100 50% 30% 50 20% 10% 0 0% 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 Settlement year Number of nil claims Number of settlements Nil settlement rate

Figure 6.2: Asbestosis nil claims experience

We have reviewed the average rate over the last 3, 4 and 5 years in determining our assumption.

The last three years have averaged 9%, the last four years have averaged 9% and the last five years have averaged 9%.

In these circumstances we have assumed a nil settlement rate of 9%, a reduction from our previous valuation assumption of 11%.



## 6.4 Lung cancer claims

Given the small volumes of claims, volatility in nil settlement rates for lung cancer claims is to be expected.

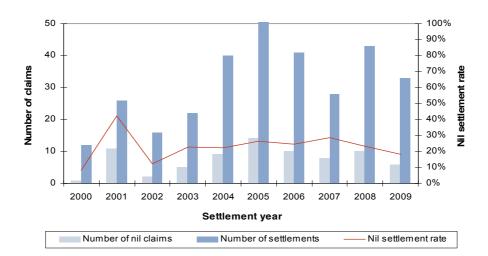


Figure 6.3: Lung cancer nil claims experience

The average nil settlement rate of the last three years has been 23%, the last four years have averaged 23% and the last five years have averaged 24%.

The chart shows a downward trend since 2007/08. In these circumstances we have selected 25% as the future nil settlement rate. This is a reduction from 30% 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.



## 6.5 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.

50 100% 90% 80% 40 Number of claims 30 60% 20 30% ⋽ 10 20% 10% 0 0% 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 Settlement year Number of nil claims Number of settlements Nil settlement rate

Figure 6.4: ARPD & Other nil claims experience

The average for the last three years for ARPD & Other claims has been 12%, the average for the last four years has been 19% and the average for the last five years has been 19%.

In these circumstances, we have selected 18% as our nil settlement rate assumption for this class of disease. This is a reduction from our previous valuation assumption of 20%.



## 6.6 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 have been relatively stable since 1997/98, typically varying between 80% and 90%.

The nil settlement rate has been in excess of 90% for five of the last seven years, and it has been above 80% for ten of the last twelve years.

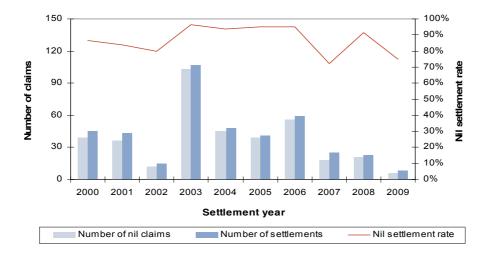


Figure 6.5: Workers Compensation nil claims experience

The average nil settlement rate of the last three years is 80%, the average of the last four years is 88% and the average of the last five years is 90%.

In these circumstances, we have selected a rate of 87% at this valuation, unchanged from our previous valuation assumption.



## 6.7 Wharf claims

For wharf claims, the average of the last three years is 39%, the average of the last four years is 31% and the average of the last five years is 29%, although these are affected by the high nil settlement rate in 2007/08.

We have selected 18% as our valuation assumption which is reduced from our previous valuation assumption of 20%. This has been selected based on the downward trends in the nil settlement rates observed (and prospectively assumed) for other disease types.

Given the extremely low volume of claims activity for Wharf claims, this assumption is highly subjective but is also not material to the liability assessment.

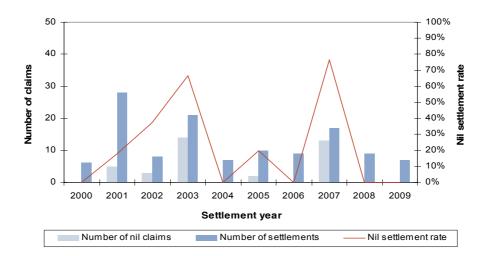


Figure 6.6: Wharf nil claims experience



# 6.8 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 6.2: Summary nil settlement rate assumptions

	Current Valuation	Previous Valuation
Mesothelioma	10.0%	12.0%
Asbestosis	9.0%	11.0%
Lung Cancer	25.0%	30.0%
ARPD & Other	18.0%	20.0%
Wharf	18.0%	20.0%
Workers Compensation	87.0%	87.0%



# 7 ECONOMIC AND OTHER ASSUMPTIONS

## 7.1 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 in Sections 7.2 to 7.5.

We also discuss the basis of derivation of other assumptions, being:

- The cross-claim recovery rate; and
- The pattern of settlement of future reported claims and pending claims.

#### 7.2 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.

#### 7.2.1 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 /  ${\sf AWOTE}^6$  relativities.

<sup>&</sup>lt;sup>6</sup> AWOTE = Average Weekly Ordinary Time Earnings



# 7.2.2 CPI assumption

We have considered two indicators for our CPI assumption:

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

We have measured the financial market implied expectations of the longerterm rate of CPI by reference to the gap between the yield on Commonwealth government bonds and the real yield on Commonwealth 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.

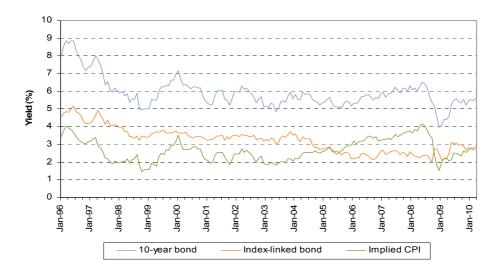
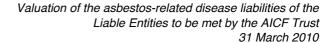


Figure 7.1: Trends in Bond Yields

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 11 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 5.6% p.a. and the equivalent effective real yields on long-term index-linked bonds is approximately 2.7% per annum. This would imply current market expectations for the long-term rate of CPI were of the order of 2.9% per annum.





In considering this result we note that:

- The implied CPI rate stayed consistently above 3.2% per annum from March 2006 until October 2008.
- The yields on both nominal and CPI-linked government bonds are driven by supply and demand. The yields on both, and their relativities, are subject to some volatility.
- The RBA's long term target is for CPI to be maintained between 2% and 3% per annum.
- The implied rate of CPI showed a prolonged trend upwards from the early part of 2003, which coincides when it last was towards the bottom end of the RBA's target range, and May 2008 when it peaked at almost 4.2%.
- Since May 2008, the implied rate of CPI has shown a significant reduction from 4.2% to 1.5% at 31 December 2008 and has consistently increased since that time, increasing to 2.9% at 31 March 2010.
- Recent actual CPI figures show reductions to 2.1% per annum at December 2009, and an increase to 2.9% per annum at March 2010.

Weighing this evidence together, this suggests a long term CPI inflation benchmark of 2.50% to 3.00% per annum.

## 7.2.3 Wages (AWOTE) / CPI relativity

The following chart summarises the annualised rates of AWOTE and CPI inflation, and their relativities, for the 1970 to 2009 period.



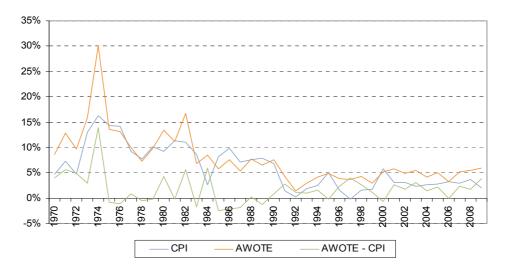


Figure 7.2: Trends in CPI and AWOTE

In considering the above, we note:

- The 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 approximately 1.75% to 2.00% per annum.

On this basis, given a longer term CPI benchmark of 2.50% to 3.00%, it would suggest a longer-term wage inflation (AWOTE) assumption of 4.25% to 5.00% p.a.

# 7.2.4 Impact of claimant ageing and non-AWOTE inflation effects

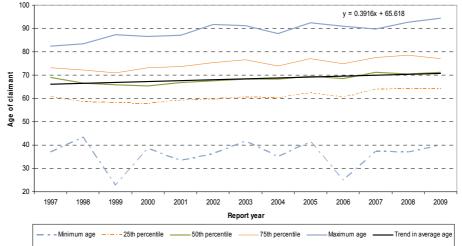
The overall age profile of claimants is expected to rise over future years with the consequent impact that, other factors held constant, claims amounts should tend to increase more slowly than average wage inflation (excluding any societal changes, e.g. changes in retirement age). This is due to both 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, such as general damages and compensation for loss of expectation of life, would typically be expected to rise at CPI or lower:
- other heads of damage, including loss of earnings, would be expected to rise at AWOTE (ignoring the ageing effect); and
- medical expenses and care costs would be expected to rise in line with medical cost inflation which in recent years has been considerably in excess of AWOTE.

Figure 7.3: Age profile of mesothelioma claimants by report year



The chart indicates that mesothelioma 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 23-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 0.40 years each year, with the average age now in excess of 70 years.

We have reviewed how average claim sizes vary by decade of age.



1,200,000 1,000,000 800,000 Average award 600,000 400,000 200,000 n 30 - 40 40 - 50 50 - 60 60 - 70 70 - 80 80 - 90 90 - 100 Age band of claimant

Figure 7.4: Average mesothelioma awards by decade of age

The analysis suggests that average mesothelioma awards reduce by around 20% to 30% for each increasing decade of age when considering the typical age range of the claimants (i.e. over 60 years of age).

Analysis also suggests that mesothelioma claimants are typically ageing by around 0.40 years every year.

Weighing these various factors together, and allowing for the relative mix of claims between mesothelioma and non-mesothelioma, we consider that a reasonable assumption for the deflationary allowance for the impact of ageing on average sizes is around 0.75% to 1.00% per annum.

Taking all of these factors into account, we have adopted a base inflation assumption of 4.25% per annum. This assumption is therefore set after having taken into account the negative effect of ageing upon claims awards.

This is unchanged from our previous long-term assumption for base inflation.



# 7.3 Superimposed inflation

#### 7.3.1 Overview

Superimposed inflation is a term used by actuaries to measure the rate at which claims escalate over and above a base (usually wage) inflation measure.

As a result, superimposed inflation is a "catch-all" for a range of potential factors affecting claims costs, including (but not limited to):

- Courts making compensation payments in relation to new heads of damage;
- Courts changing the levels of compensation paid for existing heads of damage;
- Advancements in medical treatments for example, this could lead to higher medical treatment costs (e.g. the cost of the use of new drug treatments);
- Allowance for medical costs to rise faster than wages because of the use of enhanced medical technologies;
- Changes in life expectancy;
- Changes in retirement age this would have the potential to increase future economic loss awards;
- Changes in the relative share of the liability to be borne by the Liable Entities' (which we refer to as "the contribution rate"); and
- Changes in 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.
   We have already made some allowance for this by way of an adjustment to the base inflation assumption



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 progresses in "steps", depending on the outcome of legislative and other developments.

# 7.3.2 Analysis of past rates of superimposed inflation

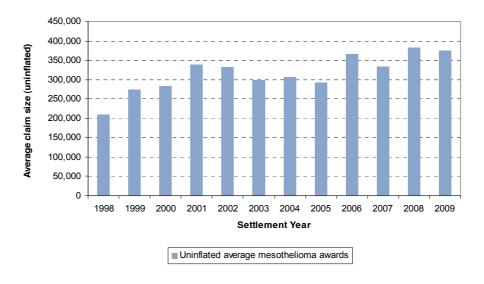
We have reviewed the rate of inflation of claims costs by settlement year for the last 12 years for mesothelioma claims. We have assessed this by analysing uninflated claim costs and therefore the chart measures the trends in the total rate of claims inflation.

The chart can then be used to imply the rate of inflation of claim awards over and above base inflation (i.e. measuring the rate of superimposed inflation) in any one year or an annualised rate of superimposed inflation over a longer term. The rate of inflation of claims costs measured by these charts therefore includes the negative effect of ageing upon claim awards.

We have reviewed the average settlement sizes for:

- The total settlement amounts received by claimants; and
- The settlement amounts borne by the Liable Entities.

Figure 7.5: Average mesothelioma total settlement awards (uninflated)



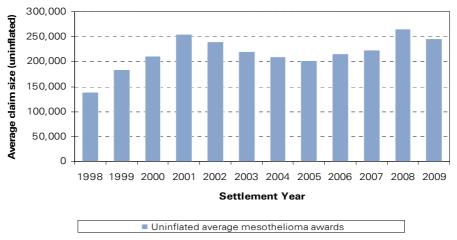
Note: The amounts in the above chart relate to the average for "total settlements", i.e. the amount paid to claimants, not just the Liable Entities' share of those amounts.



- Between 1998 and 2001, claims inflation averaged approximately 17% per annum, as a result of changes in the levels of awards in Australia. This was mainly due to increasing utilisation of *Griffith vs. Kerkemeyer* and *Sullivan vs. Gordon* benefits. This implies very high levels of superimposed inflation during this period.
- Between 2001 and 2009, claims inflation averaged around 1.3% per annum, reflecting a more benign claims environment with no new heads of damage introduced. This overall result implies that superimposed inflation has been negative during this period.
- The average rate of claims inflation of the claims awards from 1998 to 2008 was around 6.1% per annum, which would imply a superimposed inflation rate of around 1.8% per annum (using a base inflation assumption of 4.25% per annum).
- The average rate of claims inflation of the claims awards from 1998 to 2009 was around 5.4% per annum, which would imply a superimposed inflation rate of around 1.1% per annum (using a base inflation assumption of 4.25% per annum).

The following chart shows the trends in the Liable Entities' share of the awards.

Figure 7.6: Average mesothelioma awards of the Liable Entities (uninflated)



Note: This table excludes large claims against the Liable Entities and therefore Figure 7.5 and Figure 7.7 in combination cannot be directly compared with Figure 7.6 or Table 5.1.

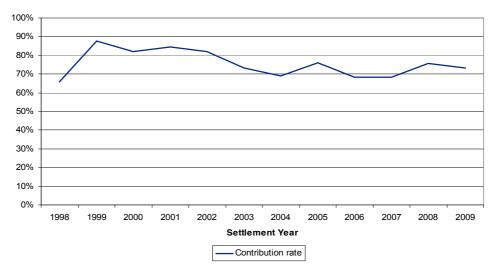


Using the chart, we have the following observations in relation to the rate of claim inflation of the Liable Entities' share of claims awards<sup>7</sup>:

- Between 1998 and 2001, claims inflation for the Liable Entities averaged approximately 23% per annum.
- Between 2001 and 2009, claims inflation averaged around -0.5% per annum, reflecting a more benign claims environment with no new heads of damage introduced.
- The average rate of claims inflation of the Liable Entities' share of claims awards from 1998 to 2008 was around 6.7% per annum, which would imply a superimposed inflation rate of around 2.4% per annum (using a base inflation assumption of 4.25% per annum).
- The average rate of claims inflation of the Liable Entities' share of claims awards from 1998 to 2009 was around 5.4% per annum, which would imply a superimposed inflation rate of around 1.1% per annum (using a base inflation assumption of 4.25% per annum).

The following chart shows the trends in the contribution rate of the Liable Entities over time.

Figure 7.7: Average contribution rate of the Liable Entities' mesothelioma claims



Note: This table includes large claims against the Liable Entities and therefore Figure 7.5 and Figure 7.7 in combination cannot be directly compared with Figure 7.6 or Table 5.1.

<sup>&</sup>lt;sup>7</sup> Claim inflation comprises both base (or wage) inflation and superimposed inflation.



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

Weighing all of the evidence together, and in particular recognising that the period since 2001 has been benign and may not therefore be reflective of a longer-term assumption, we have adopted an assumed long-term rate of future superimposed inflation of 2.25% per annum.

# 7.4 Summary of claims inflation assumptions

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

**Table 7.1: Claims inflation assumptions** 

	Current	Previous
	Valuation	Valuation
Base inflation	4.25%	4.25%
Superimposed inflation	2.25%	2.25%
Total 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.

Base inflation is net of the negative effect of ageing upon claims awards.

At our previous valuation, we made some short-term downward adjustments to base inflation as a result of the Global Financial Crisis.

At this valuation, we have removed those adjustments.

# 7.5 Discount rates: Commonwealth bond zero coupon yields

We have calculated the zero coupon yield curve at 31 March 2010, 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 the Institute of Actuaries of Australia's Professional Standard PS300 and is also consistent with our understanding of the Australian accounting standards.



Table 7.2: Zero coupon yield curve by duration

Year	Current Valuation	Previous Valuation
1	4.58%	2.69%
2	5.49%	3.35%
3	6.03%	4.06%
4	6.07%	4.53%
5	6.11%	4.76%
6	6.15%	4.87%
7	6.18%	4.99%
8	6.21%	5.11%
9	6.23%	5.24%
long-term	6.00%	6.00%

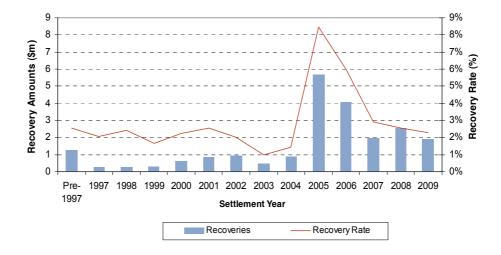
# 7.6 Cross-claim recovery rates

Cross-claim recoveries have totalled \$22m to date. This represents 3.1% of gross claims costs and 2.7% of gross expenditure.

The majority of cross-claim recoveries have been in relation to the Hardie-BI Joint Venture with CSR, including more than \$4m paid in 2005/06 and more than \$2m paid in 2006/07 in relation to cross-claims against CSR and Bradford Insulation in relation to the Hardie-BI Joint Venture.

The following chart shows how the experience of cross-claim recoveries has varied over time, both in monetary terms and expressed as a percentage of gross payments.

Figure 7.8: Cross-claim recovery experience





Cross-claim recoveries in 2005/06 (\$5.7m) and 2006/07 (\$4.1m) were significantly impacted by recoveries from CSR and also due to the impact of the Hardie-BI Joint Venture.

Our analysis indicates that such recoveries in part relate to recoveries that ought to have been made earlier (i.e. they reflected an element of catch-up). Therefore, the rate of recovery exhibited in those two years is currently not believed to be a good guide to the likely future level of recovery.

Taking this and the recent levels of cross-claims recoveries (which have averaged 2.55% over the last three years) into account we have assumed that future levels of cross-claim recoveries will be 2.5% of the average award. This is unchanged from the previous valuation assumption at 31 March 2009.

## 7.7 Settlement Patterns

Triangulation methods are used to derive the past pattern of settlement of claims and are used in forming a view on future settlement patterns.

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

Figure 7.9: Settlement pattern derivation for mesothelioma claims: paid as % of ultimate cost

Yr of Notification	0	1	2	3	4	5	6	7	8	9	10	11	12
1996	47.5%	96.1%	96.6%	99.2%	99.2%	99.2%	99.2%	99.2%	99.2%	100.0%	100.0%	100.0%	100.0%
1997	33.2%	70.7%	70.7%	71.3%	71.3%	77.9%	80.7%	89.7%	96.6%	99.5%	99.5%	99.5%	99.5%
1998	50.5%	82.3%	87.2%	87.4%	90.9%	90.9%	96.1%	97.4%	100.0%	100.0%	100.0%	100.0%	
1999	60.9%	92.2%	92.3%	92.5%	95.3%	96.3%	99.3%	100.0%	100.0%	100.0%	100.0%		
2000	60.3%	90.0%	95.7%	97.4%	99.4%	100.0%	100.0%	100.0%	100.0%	100.0%			
2001	52.0%	88.2%	91.3%	94.4%	95.5%	98.5%	98.5%	98.5%	99.6%				
2002	54.8%	90.2%	95.7%	98.7%	99.6%	99.9%	100.0%	100.0%					
2003	55.2%	90.5%	95.6%	99.3%	99.3%	100.0%	100.0%						
2004	51.8%	93.8%	97.5%	98.6%	99.7%	100.0%							
2005	57.9%	92.4%	97.6%	97.7%	98.1%								
2006	58.0%	88.0%	91.6%	94.1%									
2007	49.6%	90.5%	92.5%										
2008	63.6%	90.7%											
2009	52.5%												

Figure 7.10: Settlement pattern derivation for non-mesothelioma claims: paid as % of ultimate cost

Yr of Notification													12
1996	6.6%	23.2%	37.1%	54.7%	58.2%	58.2%	69.5%	85.4%	90.9%	93.1%	99.7%	99.7%	100.0%
1997	4.4%	36.4%	67.4%	72.7%	82.4%	85.6%	92.2%	97.8%	100.0%	100.0%	100.0%	100.0%	100.0%
1998	4.9%	43.2%	72.2%	76.8%	83.4%	90.4%	92.5%	98.0%	98.4%	98.4%	98.4%	98.4%	
1999	9.0%	54.3%	78.3%	86.8%	88.3%	93.2%	95.9%	96.5%	96.5%	96.5%	96.5%		
2000	15.6%	45.4%	64.2%	79.6%	83.1%	85.9%	88.9%	88.9%	92.8%	92.8%			
2001	21.3%	53.4%	77.6%	80.7%	85.0%	87.4%	89.0%	92.0%	92.0%				
2002	12.8%	61.8%	83.3%	91.0%	95.2%	97.6%	98.8%	99.5%					
2003	17.4%	68.5%	86.3%	92.1%	95.4%	98.9%	99.2%						
2004	17.2%	57.8%	81.9%	91.0%	93.6%	94.8%							
2005	18.4%	80.3%	93.4%	96.8%	98.7%								
2006	21.5%	69.1%	87.7%	90.7%									
2007	26.1%	75.2%	83.6%										
2008	23.9%	76.1%											
2009	23.0%												

We have therefore estimated the settlement pattern from future claim reporting as follows:



Table 7.3: Settlement pattern of claims awards by delay from claim reporting

		Non-
Delay (years)	Mesothelioma	Mesothelioma
0	59%	23%
1	31%	49%
2	3%	13%
3	3%	6%
4	2%	3%
5	1%	1%
6	1%	1%
7	1%	1%
8	1%	1%
9	0%	1%
10	0%	1%
11	0%	1%
12	0%	0%

Note: The above table shows figures that are rounded and therefore the figures appear to add to 102% and 101% for mesothelioma and non-mesothelioma respectively. However, the actual (unrounded) figures sum to 100% and are used in the valuation model.

These assumed settlements patterns have been modified slightly since our previous valuation.



# **8 VALUATION RESULTS**

# 8.1 Central estimate liability

At 31 March 2010, our projected central estimate of the liabilities of the Liable Entities (the Discounted Central Estimate) to be met by the AICF Trust is \$1,536.7m (March 2009: \$1,781.6m).

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

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

Table 8.1: Comparison of central estimate of liabilities

		Mar-09		
		\$m		
	Gross of insurance recoveries	Insurance recoveries	Net of insurance recoveries	Net of insurance recoveries
Total projected cashflows (uninflated)	1,660.8	218.2	1,442.6	1,524.3
Future inflation allowance	1,680.5	216.7	1,463.8	1,599.2
Total projected cash-flows with inflation	3,341.2	434.9	2,906.4	3,123.5
Discounting allowance	(1,584.1)	(214.5)	(1,369.6)	(1,341.8)
Net present value liabilities	1,757.1	220.4	1,536.7	1,781.6



# 8.2 Comparison with previous valuation

In the absence of any change to the claim projection assumptions from our 31 March 2009 valuation, other than allowing for the changes in the discount rate, we would have projected a Discounted Central Estimate liability of \$1,609.2m as at 31 March 2010, i.e. a reduction of \$172.4m from our 31 March 2009 valuation result.

This reduction of \$172.4m is due to:

- A reduction of \$49.8m, being the net impact of expected claims payments (which reduce the liability) and the "unwind of discount" (which increases the liability and reflects the fact that cashflows are now one year nearer and therefore are discounted by one year less). The lower discount rates assumed at 31 March 2009 resulted in a low "unwind of discount" charged between 31 March 2009 and 31 March 2010.
- A reduction of \$122.6m resulting from the higher discount rates prevailing at 31 March 2010 compared with those at 31 March 2009.

Our liability assessment at 31 March 2010 of \$1,536.7m represents a further decrease of \$72.5m, which arises from changes to the claim projection assumptions.

The decrease of \$72.5m is principally a consequence of:

- A reduction in the projected future number of mesothelioma and asbestosis claims; and
- A reduction in average claim awards and legal costs for most disease types

#### offset by

- Lower assumed future nil settlement rates; and
- The rate of wage inflation being assumed for the three years to 31 March 2013 has increased (this had previously been lowered as a result of the Global Financial Crisis).

The following chart shows an analysis of the change in our liability assessments from March 2009 to March 2010.



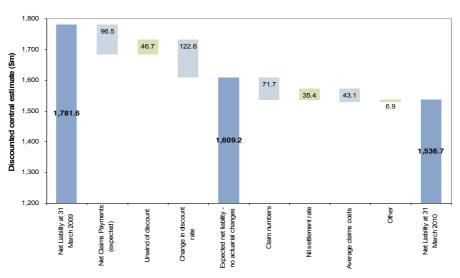


Figure 8.1: Analysis of change in central estimate liability

Note: Green bars signal that this factor has given rise to an increase in the liability whilst light blue bars signal that this factor has given rise to a reduction in the liability

On an undiscounted basis, the liability has reduced from \$3,027m to \$2,906m, a reduction of \$121m (4% of the undiscounted liability).

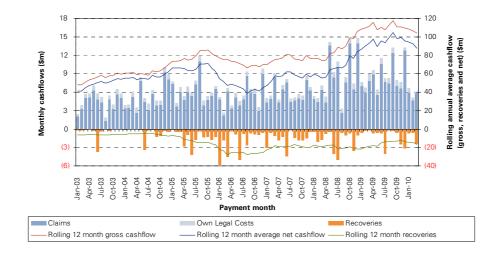


#### 8.3 Cashflow projections

#### 8.3.1 Historical cashflow expenditure

The following chart shows the monthly rate of expenditure relating to asbestos-related claim settlements over the last seven years.

Figure 8.2: Historical claim-related expenditure of the Liable Entities



Cashflow payments in the 12 months to 31 March 2010 were approximately \$103m gross of insurance and other recoveries (2008/09: \$112m) and \$86m net of insurance and other recoveries (2008/09: \$91m).

Actual net cashflow in 2009/10 (\$86.3m) was \$10m lower than expectations (\$96.5m), with the variation being almost entirely attributable to the fourth quarter of the financial year. At the end of the third quarter, actual net cashflow (\$72.0m) was almost exactly in line with expectations (\$72.4m). However, net cashflow in the fourth quarter was only \$14m (compared with an expectation of \$24m).

We have investigated this and have identified that the number of claim settlements (110) in the fourth quarter was approximately 25% below expectations and 25% below the level of settlement activity experienced in the first three quarters. Furthermore, 20% of these claims settled for nil amounts, i.e. only 88 claims were settled for a non-nil amount.

These trends can be further explained by the lower claims reporting activity observed for mesothelioma in the first three quarters of this year, as it is these claims that typically give rise to the settlement activity in the fourth quarter.



#### 8.3.2 Future cashflow projections

Figure 8.3 shows a comparison of the actual annual net cashflows for all financial years since 2000/01, the projected net cashflows underlying our current valuation and the projected net cashflow projection underlying our previous valuation.

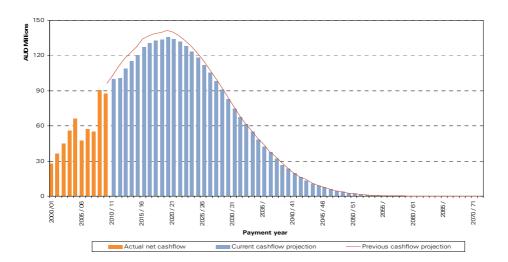


Figure 8.3: Annual cashflow projections (\$m)

The underlying projected cashflows for this chart are detailed in Appendix B.

The decrease in projected future cashflow between the previous valuation and our current valuation is predominantly a result of the slightly lower number of future mesothelioma and asbestosis claims which we are now assuming.

The projected cashflow reaches a peak in 2019/20. This is somewhat later than the peak in claims reporting which is assumed to occur in 2010/11. The reason for cashflow continuing to increase after the assumed peak in claims reporting is because the rate of inflation of claims awards (6.6% per annum) is higher than the rate of reduction in claims reporting for a number of years after the assumed peak. Therefore, the cashflow (which is, in simple terms, the numbers of claims multiplied by the average sizes) continues to increase for a number of years after the peak in claims reporting.

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.



#### 8.4 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>8</sup>:

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

**Table 8.2: Amended Final Funding Agreement calculations** 

	\$m
Discounted Central Estimate (net of cross-claim recoveries, Insurance and Other Recoveries)	1,536.7
Period Actuarial Estimate (net of cross-claim recoveries, gross of Insurance and Other Recoveries) comprising:	328.8
Discounted value of cashflow in 2010/11	111.8
Discounted value of cashflow in 2011/12	107.3
Discounted value of cashflow in 2012/13	109.7
Term Central Estimate (net of cross-claim recoveries, Insurance and Other Recoveries)	1,534.1

The actual funding amount due 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 James Hardie Group in the preceding financial year; and
- the Period Actuarial Estimate in the latest Annual Actuarial Report.

<sup>&</sup>lt;sup>8</sup> See Glossary of Terms in Appendix H for description of these items



#### 8.5 Insurance Recoveries

Our liability valuation has made allowance for a discounted central estimate of Insurance Recoveries of \$220m.

This estimate is comprised as follows:

Table 8.3: Insurance recoveries at 31 March 2010

	Undiscounted central	Discounted central
\$m	estimate	estimate
Gross liability	3,341.2	1,757.1
Product liability recoveries	430.4	217.2
Public liability recoveries	50.5	23.4
QBE commutation	15.5	13.6
Bad debt charge	(61.5)	(33.9)
Insurance asset	434.9	220.4
Net liability	2,906.4	1,536.7
Insurance recovery rate		14.5%
Bad debt rate		14.1%

The bad debt rate is around 14% and more than half of this amount relates to bad debt charges in relation to the HIH Group of Companies.

#### 8.6 Accounting liability calculations: James Hardie

The accounting liability for James Hardie is 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 James Hardie is ultimately a decision for the Board of James Hardie.

However, the Board of James Hardie has indicated that the calculation of the accounting liability will, in part, be based upon the liabilities we have estimated within this report.

The basis upon which the US GAAP accounting liability is calculated is set out in Appendix D.



#### 9 UNCERTAINTY

#### 9.1 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 to become notified and then settled, compared with an average delay from exposure to settlement of 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 timing of the peak level of claims reporting for mesothelioma, particularly in light of the high level of claims reporting activity in 2008/09 and the reduction in claims reporting activity in 2009/10;
- 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.

#### 9.2 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 choose [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:



- number of claims notified: 5% above and below our best estimate assumption.
- 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.
- claims inflation (being the aggregate impact of base inflation and superimposed inflation): 2 percentage points above and below our best estimate assumption in each future year. Much of this uncertainty predominantly relates to the possibility of higher or lower superimposed inflation than our best estimate assumption.
- peak year of claims: increase/decrease by 1, 3 and 5 years.
- **discount rates**: 1 percentage point above and below our best estimate assumption. This produces a financially similar outcome to a 1 percentage point difference in claims inflation.

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, viewing them as being of less financial significance individually, although in aggregate they could be of more significance.

We have not sensitivity tested the value of Insurance Recoveries as their uncertainties relate to legal risks and disputation risks, and it is not possible to parameterise a sensitivity test in an informed manner.

#### 9.3 Results of sensitivity testing

Figure 9.1 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.

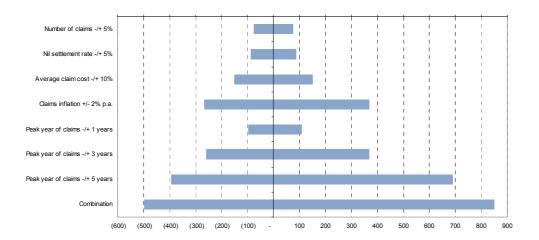
It should be noted that although we have tested multiple scenarios of each assumption, one cannot gauge an overall potential range by simply adding these tests together.



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 may be 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.

Figure 9.1: Sensitivity testing results – Impact around the Discounted

Central Estimate (in \$m)



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 +\$900m (i.e. \$1.0bn to \$2.4bn), the actual cost of liabilities could fall outside that range depending on the out-turn of the actual experience.

We further note that these sensitivity test ranges are not intended to correspond to a specified probability of sufficiency nor are they intended to indicate an upper bound or a lower bound of all possible outcomes.



The single most sensitive assumption shown in the above chart 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 could imply an increase in the future number of mesothelioma claims reported of around 50%. This would lead to a corresponding increase in the Discounted Central Estimate.

However, we note that the impact upon near-term cashflows (and the Period Actuarial Estimate) from an assumption of a peak in mesothelioma claims 5 years later than our central estimate scenario, would be much less significant.

For example, the Period Actuarial Estimate would increase by \$7m (or 2%).

Table 9.1: Summary results of sensitivity analysis

	Undiscounted	Discounted
Central estimate	\$2.91bn	\$1.54bn
Range around the central estimate	-\$1.1bn to \$2.2bn	-\$0.5bn to \$0.9bn
Range of liability estimates	\$1.8bn to \$5.1bn	\$1.0bn to \$2.4bn



## **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%	0.03%	0.14%	0.26%	0.39%	0.51%	0.58%	0.68%	0.74%	0.82%	0.86%	0.90%	0.94%	1.04%	1.14%
AA+	0.00%	0.06%	0.06%	0.13%	0.19%	0.26%	0.33%	0.33%	0.33%	0.33%	0.33%	0.33%	0.33%	0.33%	0.33%
AA	0.02%	0.04%	0.06%	0.16%	0.25%	0.31%	0.41%	0.50%	0.58%	0.66%	0.71%	0.74%	0.84%	0.87%	0.91%
AA-	0.04%	0.12%	0.24%	0.35%	0.46%	0.61%	0.71%	0.79%	0.88%	0.98%	1.08%	1.20%	1.24%	1.34%	1.39%
A+	0.07%	0.13%	0.29%	0.48%	0.64%	0.78%	0.96%	1.13%	1.33%	1.55%	1.76%	1.97%	2.23%	2.56%	2.84%
Α	0.09%	0.22%	0.36%	0.51%	0.68%	0.91%	1.14%	1.38%	1.65%	1.98%	2.25%	2.42%	2.56%	2.66%	2.95%
A-	0.09%	0.25%	0.41%	0.60%	0.87%	1.17%	1.59%	1.90%	2.15%	2.37%	2.55%	2.75%	2.94%	3.07%	3.16%
BBB+	0.17%	0.48%	0.84%	1.20%	1.63%	2.13%	2.50%	2.89%	3.35%	3.75%	4.13%	4.37%	4.72%	5.28%	5.92%
BBB	0.24%	0.59%	0.91%	1.42%	1.98%	2.52%	3.04%	3.58%	4.18%	4.76%	5.41%	5.98%	6.51%	6.70%	7.06%
BBB-	0.41%	1.21%	2.14%	3.26%	4.38%	5.43%	6.38%	7.33%	8.10%	8.96%	9.79%	10.54%	11.25%	12.39%	13.18%
BB+	0.53%	1.49%	2.81%	4.21%	5.51%	6.88%	8.09%	8.86%	9.97%	11.10%	11.90%	12.74%	13.43%	13.91%	14.79%
BB	0.82%	2.55%	4.91%	7.09%	9.22%	11.11%	12.71%	14.15%	15.40%	16.43%	17.48%	18.44%	19.00%	19.34%	19.73%
BB-	1.34%	4.12%	7.02%	9.76%	12.14%	14.51%	16.60%	18.72%	20.55%	22.03%	23.19%	24.07%	25.11%	26.12%	27.05%
B+	2.70%	7.22%	11.54%	15.35%	18.29%	20.55%	22.66%	24.53%	26.22%	27.93%	29.36%	30.50%	31.62%	32.63%	33.59%
В	6.26%	13.32%	18.75%	22.51%	25.09%	27.61%	29.12%	30.32%	31.26%	32.26%	33.26%	34.12%	34.98%	35.77%	36.64%
B-	9.86%	17.94%	23.95%	28.04%	31.05%	32.96%	34.84%	35.93%	36.83%	37.45%	38.15%	38.78%	39.12%	39.49%	40.09%
CCC/C	27.98%	36.95%	42.40%	45.57%	48.05%	49.19%	50.26%	51.09%	52.44%	53.41%	54.32%	55.33%	56.38%	57.28%	57.28%
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	4.44%	8.68%	12.42%	15.46%	17.90%	19.96%	21.72%	23.25%	24.67%	25.96%	27.08%	28.02%	28.91%	29.68%	30.45%
CEHUA	80.00%	80.00%	80.00%	80.00%	80.00%	80.00%	80.00%	80.00%	80.00%	80.00%	80.00%	80.00%	80.00%	80.00%	80.00%
CEHU&I	92.50%	92.50%	92.50%	92.50%	92.50%	92.50%	92.50%	92.50%	92.50%	92.50%	92.50%	92.50%	92.50%	92.50%	92.50%
CIC	55.00%	55.00%	55.00%	55.00%	55.00%	55.00%	55.00%	55.00%	55.00%	55.00%	55.00%	55.00%	55.00%	55.00%	55.00%
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 2009 Annual Global Corporate Default Study and Rating Transitions, January 2010.

CEHUA, CEHU&I and CIC default rates have been estimated based on HIH Scheme Information, available at www.hih.com.au

#### Notes:

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.



## B. Projected cashflows (\$m)

						Workers	Workers							
	Mesotheliom			ARPD &	Defendant	Compensati	Compensati on Legal	Wharf	Wharf Legal					
Payment Year					Legal Costs	on Claims				Baryulgil				
2010 / 2011	85.2	12.3	5.5	5.0	5.7	1.8	0.4	0.4	0.1	0.6	2.7	114.3	14.6	99.8
2011 / 2012	85.7	13.8	4.2	4.2	7.3	1.4	0.3	0.5	0.1	0.6	2.7	115.2	14.1	101.1
2012 / 2013 2013 / 2014	92.4 97.9	15.2 16.1	4.0 4.0	4.3 4.4	8.8 10.1	1.3 1.3	0.3 0.3	0.5 0.5	0.1 0.1	0.5 0.5	2.9 3.0	124.6 132.1	15.4 16.5	109.2 115.6
2013 / 2014	102.4	16.1	4.0	4.4	10.1	1.3	0.3	0.5	0.1	0.5	3.0	132.1	17.3	120.4
2014 / 2016	102.4	16.9	4.3	4.5	11.3	1.3	0.3	0.5	0.1	0.5	3.3	142.9	15.3	127.6
2016 / 2017	109.7	17.3	4.5	4.6	11.6	1.3	0.3	0.5	0.1	0.4	3.4	147.0	16.2	130.8
2017 / 2018	112.3	17.6	4.6	4.6	11.7	1.4	0.3	0.5	0.1	0.4	3.5	149.9	17.2	132.7
2018 / 2019	113.9	17.8	4.7	4.6	11.7	1.4	0.3	0.4	0.1	0.4	3.5	151.7	17.6	134.1
2019 / 2020	114.4	17.8	4.8	4.6	11.6	1.3	0.2	0.4	0.1	0.3	3.5	152.1	16.2	135.8
2020 / 2021	114.1	17.7	4.8	4.5	11.5	1.3	0.2	0.4	0.1	0.3	3.5	151.4	17.0	134.3
2021 / 2022	112.7 110.5	17.5 17.0	4.8 4.7	4.4 4.2	11.2 10.8	1.3 1.2	0.2 0.2	0.4 0.3	0.1 0.1	0.3 0.2	3.5 3.4	149.3 145.9	17.4 17.8	131.9 128.1
2022 / 2023 2023 / 2024	10.5	16.4	4.6	4.1	10.8	1.2	0.2	0.3	0.1	0.2	3.3	141.4	17.8	123.7
2024 / 2025	107.3	15.7	4.5	3.8	9.7	1.1	0.2	0.3	0.1	0.2	3.2	136.0	17.8	118.2
2025 / 2026	99.2	14.9	4.3	3.6	9.1	1.1	0.2	0.2	0.0	0.2	3.0	129.7	17.6	112.1
2026 / 2027	94.0	14.0	4.1	3.4	8.5	1.0	0.2	0.2	0.0	0.1	2.9	122.7	17.3	105.4
2027 / 2028	88.5	13.1	3.9	3.1	7.8	0.9	0.1	0.2	0.0	0.1	2.7	115.1	16.8	98.3
2028 / 2029	82.5	12.1	3.7	2.9	7.2	0.8	0.1	0.2	0.0	0.1	2.5	107.1	16.2	90.9
2029 / 2030	76.2	11.1	3.4	2.6	6.5	0.8	0.1	0.1	0.0	0.1	2.3	98.7	15.7	83.0
2030 / 2031	69.8	10.1	3.2	2.4	5.9	0.7	0.1	0.1	0.0	0.1	2.1	90.2	15.0	75.2
2031 / 2032 2032 / 2033	63.3 57.0	9.1 8.2	2.9 2.7	2.1 1.9	5.3 4.7	0.6 0.5	0.1 0.1	0.1 0.1	0.0	0.1 0.1	1.9 1.7	81.7 73.4	14.3 11.6	67.4 61.8
2032 / 2033	57.0	7.2	2.7	1.6	4.7	0.5	0.1	0.1	0.0	0.1	1.7	73.4 65.3	10.2	55.1
2034 / 2035	44.9	6.4	2.1	1.4	3.6	0.4	0.1	0.1	0.0	0.0	1.4	57.7	9.5	48.1
2035 / 2036	39.4	5.6	1.9	1.2	3.1	0.4	0.0	0.0	0.0	0.0	1.2	50.5	8.0	42.4
2036 / 2037	34.2	4.8	1.7	1.1	2.7	0.3	0.0	0.0	0.0	0.0	1.0	43.8	6.2	37.6
2037 / 2038	29.5	4.1	1.5	0.9	2.3	0.3	0.0	0.0	0.0	0.0	0.9	37.7	5.7	32.0
2038 / 2039	25.1	3.5	1.3	8.0	1.9	0.2	0.0	0.0	0.0	0.0	0.8	32.1	5.2	27.0
2039 / 2040	21.3	3.0	1.1	0.6	1.6	0.2	0.0	0.0	0.0	0.0	0.6	27.2	3.4	23.8
2040 / 2041	17.8	2.5	0.9	0.5	1.3	0.2	0.0	0.0	0.0	0.0	0.5	22.8	2.9	19.8
2041 / 2042 2042 / 2043	14.8 12.2	2.1 1.7	0.8 0.6	0.4 0.4	1.1 0.9	0.1 0.1	0.0 0.0	0.0	0.0 0.0	0.0	0.4 0.4	18.9 15.6	2.6 2.3	16.3 13.3
2042 / 2043	10.0	1.7	0.5	0.4	0.9	0.1	0.0	0.0	0.0	0.0	0.4	12.7	2.0	10.8
2044 / 2045	8.1	1.1	0.4	0.2	0.6	0.1	0.0	0.0	0.0	0.0	0.2	10.3	1.2	9.1
2045 / 2046	6.5	0.9	0.4	0.2	0.5	0.1	0.0	0.0	0.0	0.0	0.2	8.3	0.7	7.5
2046 / 2047	5.1	0.7	0.3	0.1	0.4	0.0	0.0	0.0	0.0	0.0	0.2	6.6	0.6	6.0
2047 / 2048	4.1	0.6	0.2	0.1	0.3	0.0	0.0	0.0	0.0	0.0	0.1	5.2	0.5	4.7
2048 / 2049	3.2	0.4	0.2	0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.1	4.1	0.4	3.7
2049 / 2050	2.5	0.3	0.1	0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.1	3.1	0.3	2.9
2050 / 2051 2051 / 2052	1.9 1.4	0.3 0.2	0.1 0.1	0.1 0.0	0.1 0.1	0.0	0.0 0.0	0.0	0.0	0.0	0.1 0.0	2.4 1.8	0.2 0.2	2.2 1.7
2051 / 2052	1.4	0.2	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	1.8	0.2	1.7
2052 / 2053	0.8	0.2	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	1.4	0.1	1.0
2054 / 2055	0.6	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.1	0.7
2055 / 2056	0.5	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.1	0.5
2056 / 2057	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.4
2057 / 2058	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.3
2058 / 2059	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	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	0.0	0.2
2060 / 2061 2061 / 2062	0.1 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	0.0	0.1 0.1	0.0 0.0	0.1 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 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	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
TOTAL	2,536.3	385.4	113.1	98.6	234.9	29.3	5.3	7.8	1.5	6.8	77.7	3,341.2	434.9	2,906.4



## C. Projected discounted cashflows (\$m)

							Workers							
							Compensati							
	Mesotheliom			ARPD &	Defendant	Compensati		Wharf	Wharf Legal		Cross Claim			Net
Payment Year 2010 / 2011	83.3	12.0	Lung Cancer 5.4	Other 4.9	Legal Costs 5.6	on Claims 1.8	Costs 0.4	Claims 0.4	Costs 0.1	Baryulgil 0.6	Recoveries 2.6	Gross 111.8	Insurance 14.2	97.6
2011 / 2012	79.7	12.9	3.9	3.9	6.8	1.3	0.3	0.4	0.1	0.5	2.5	107.3	13.1	94.1
2012 / 2013	81.4	13.4	3.5	3.8	7.8	1.1	0.3	0.4	0.1	0.5	2.5	109.7	13.5	96.2
2013 / 2014	81.3	13.3	3.3	3.6	8.3	1.1	0.2	0.4	0.1	0.4	2.5	109.6	13.7	95.9
2014 / 2015	80.2	12.8	3.2	3.4	8.4	1.0	0.2	0.4	0.1	0.4	2.5	107.7	13.5	94.2
2015 / 2016 2016 / 2017	78.5 76.2	12.4 12.0	3.2 3.1	3.3 3.2	8.3 8.1	1.0 0.9	0.2 0.2	0.4	0.1 0.1	0.3 0.3	2.4 2.4	105.4 102.1	11.3 11.3	94.1 90.8
2017 / 2018	73.5	11.5	3.0	3.0	7.7	0.9	0.2	0.3	0.1	0.3	2.3	98.1	11.3	86.8
2018 / 2019	70.1	11.0	2.9	2.8	7.2	0.8	0.2	0.3	0.1	0.2	2.2	93.4	10.9	82.5
2019 / 2020	66.4	10.3	2.8	2.7	6.7	8.0	0.1	0.2	0.0	0.2	2.0	88.2	9.4	78.8
2020 / 2021	62.4	9.7	2.6	2.5	6.3	0.7	0.1	0.2	0.0	0.2	1.9	82.8	9.3	73.5
2021 / 2022	58.2 53.8	9.0 8.3	2.5 2.3	2.3 2.1	5.8 5.2	0.7	0.1 0.1	0.2	0.0	0.1 0.1	1.8	77.1 71.1	9.0 8.7	68.1 62.4
2022 / 2023 2023 / 2024	53.8 49.4	8.3 7.5	2.3	1.9	5.2 4.7	0.6	0.1	0.2	0.0	0.1	1.7 1.5	65.0	8.7	56.8
2024 / 2025	44.9	6.8	1.9	1.7	4.2	0.5	0.1	0.1	0.0	0.1	1.4	59.0	7.7	51.2
2025 / 2026	40.6	6.1	1.8	1.5	3.7	0.4	0.1	0.1	0.0	0.1	1.2	53.0	7.2	45.9
2026 / 2027	36.3	5.4	1.6	1.3	3.3	0.4	0.1	0.1	0.0	0.1	1.1	47.3	6.7	40.7
2027 / 2028	32.2	4.8	1.4	1.1	2.9	0.3	0.1	0.1	0.0	0.0	1.0	41.9	6.1	35.8
2028 / 2029	28.3	4.2	1.3	1.0	2.5	0.3	0.0	0.1	0.0	0.0	0.9	36.8	5.6	31.2
2029 / 2030 2030 / 2031	24.7 21.3	3.6 3.1	1.1 1.0	0.8 0.7	2.1 1.8	0.2 0.2	0.0	0.0	0.0 0.0	0.0	0.8	32.0 27.6	5.1 4.6	26.9 23.0
2030 / 2031	18.3	2.6	0.8	0.7	1.8	0.2	0.0	0.0	0.0	0.0	0.6	23.6	4.6	19.4
2032 / 2033	15.5	2.2	0.7	0.5	1.3	0.1	0.0	0.0	0.0	0.0	0.5	20.0	3.1	16.8
2033 / 2034	13.0	1.9	0.6	0.4	1.1	0.1	0.0	0.0	0.0	0.0	0.4	16.8	2.6	14.2
2034 / 2035	10.9	1.5	0.5	0.3	0.9	0.1	0.0	0.0	0.0	0.0	0.3	14.0	2.3	11.7
2035 / 2036	9.0	1.3	0.4	0.3	0.7	0.1	0.0	0.0	0.0	0.0	0.3	11.5	1.8	9.7
2036 / 2037	7.4	1.0	0.4	0.2	0.6	0.1	0.0	0.0	0.0	0.0	0.2	9.4	1.3	8.1
2037 / 2038 2038 / 2039	6.0 4.8	0.8 0.7	0.3 0.2	0.2 0.1	0.5 0.4	0.1 0.0	0.0	0.0	0.0	0.0	0.2 0.1	7.7 6.2	1.2 1.0	6.5 5.2
2039 / 2040	3.8	0.7	0.2	0.1	0.4	0.0	0.0	0.0	0.0	0.0	0.1	4.9	0.6	4.3
2040 / 2041	3.0	0.4	0.2	0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.1	3.9	0.5	3.4
2041 / 2042	2.4	0.3	0.1	0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.1	3.0	0.4	2.6
2042 / 2043	1.9	0.3	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1	2.4	0.3	2.0
2043 / 2044	1.4	0.2	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	1.8	0.3	1.5
2044 / 2045 2045 / 2046	1.1 0.8	0.2 0.1	0.1 0.0	0.0	0.1 0.1	0.0	0.0	0.0	0.0	0.0	0.0	1.4 1.1	0.2 0.1	1.2 1.0
2046 / 2047	0.6	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.1	0.7
2047 / 2048	0.5	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.1	0.5
2048 / 2049	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.4
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	0.0	0.3
2050 / 2051	0.2 0.1	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	0.2 0.2	0.0 0.0	0.2
2051 / 2052 2052 / 2053	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.2
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
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	0.1
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	0.0	0.0	0.0 0.0	0.0
2058 / 2059 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 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	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
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
	1.324.4	204.6	58.7	54.8	125.5	16.5	3.2	4.8		4.5	40.7	1.757.1		



#### D. Derivation of US GAAP net accounting liability of James Hardie

The following tables show how the net US GAAP accounting liability established by James Hardie is derived from the valuation estimates contained within this report. For comparison, we have shown the derivation of the net liability figures for 31 March 2009.

Note that the tables do not show the split between current and non-current liabilities and nor do they show the breakdown of the exact composition of the accounting liability between the gross liability and any corresponding insurance assets. Readers are referred to the financial statements of James Hardie for specific details of the required US GAAP disclosures.

#### Step 1 - KPMGA estimate of uninflated and undiscounted liabilities (AUD)

		31 March 2010			
	Gross	Insurance	Net	Net	Change
Discounted Central Estimate	1,757.1	220.4	1,536.7	1,781.6	(244.9)
Discounting allowance	1,584.1	214.5	1,369.6	1,341.8	27.8
Inflated, Undiscounted Central Estimate	3,341.2	434.9	2,906.4	3,123.5	(217.1)
Inflation allowance	(1,680.5)	(216.7)	(1,463.8)	(1,599.2)	135.4
Uninflated and Undiscounted liability	1,660.8	218.2	1,442.6	1,524.3	(81.7)

#### Step 2 – US GAAP adjustments (AUD)

These include adjustments for:

- > Adjustment to value QBE receivable on a discounted basis as the timing and monetary amounts of the receivable is known;
- > 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.



		31 March 2010		31 March 2009	
	Gross	Insurance	Net	Net	Change
Uninflated and Undiscounted liability	1,660.8	218.2	1,442.6	1,524.3	(81.7)
Adjustment for QBE insurance receivable (as timing of receipts is	0.0	(4.0)	1.9	1.8	0.1
fixed)	0.0	(1.9)	1.9	1.0	0.1
Other insurance receivables adjustment	0.0	4.0	(4.0)	(3.5)	(0.5)
Cross-claim recoveries (on UIUD basis)	37.3	0.0	37.3	39.4	(2.1)
Claims Handling Costs	69.9	0.0	69.9	72.0	(2.1)
Asbestos Liability	1,768.0	220.3	1,547.7	1,634.0	(86.3)
Workers Compensation Additional Liability	108.0	108.0	0.0	0.0	0.0
Net Accounting Liability (pre-tax)	1,876.0	328.3	1,547.7	1,634.0	(86.3)

#### Step 3 - Conversion to US Dollars

	31 March 2010			31 March 2009	
	Gross	Insurance	Net	Net	Change
Net accounting liability (pre-tax) - AUD	1,876.0	328.3	1,547.7	1,634.0	(86.3)
Exchange rate	1.0919	1.0919	1.0919	1.4552	
Net accounting liability (pre-tax) - USD	1,718.0	300.7	1,417.4	1,122.9	294.5

Further adjustments are then required to establish the liability, allowing for:

- > Deferred Income Tax Assets (USD452.9m); and
- > Other net liabilities (primarily reflecting commitments in the Amended Final Funding Agreement to provide certain educational and medical research funding) (USD1.7m).

This results in a net liability of USD966.2m (2009: USD756.6m). In arriving at the unfunded liability, allowance is then made for the existing net assets of the AICF (USD57.8m) at 31 March 2010 (2009: USD98.3m) to leave an unfunded net liability of USD908.4m (2009: USD658.3m).



#### E. Allocation of central estimate liabilities to AICFL entities

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).

We have also been asked to split this between current and non-current liabilities and to separately identify the gross liabilities and the associated recoveries.

Table 1: Allocation of central estimate liabilities by Liable Entity (A\$m)

Central Estim	ate Basis (\$ million)	Amaca	Amaba	ABN 60	Total
	Gross	111.6	2.8	0.0	114.4
Current	QBE receivable	2.9	0.1	0.0	3.0
liabilities	Insurance receivable	10.9	0.3	0.0	11.2
nabilities	Other receivable	2.5	0.1	0.0	2.6
	Net	95.3	2.3	0.0	97.6
	Gross	1,639.7	42.0	1.7	1,683.4
Non-current	QBE receivable	10.2	0.4	0.0	10.6
liabilities	Insurance receivable	190.5	4.9	0.2	195.6
liabilities	Other receivable	37.1	1.0	0.0	38.1
	Net	1,401.9	35.7	1.5	1,439.1
	Gross	1,751.3	44.8	1.7	1,797.8
Total	QBE receivable	13.1	0.5	0.0	13.6
liabilities	Insurance receivable	201.4	5.2	0.2	206.8
nabilities	Other receivable		1.1	0.0	40.7
	Net	1,497.2	38.0	1.5	1,536.7

Note: These figures make no allowance for claims handling expenses.



# F. 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 29,536	346 385	16,066
1950 1951	1,617 2,558	29,536 25,289	588	30,768 27,259
1952 1953	4,059 4,970	24,686 28,784	868 1,631	27,877 32,123
1954	4,713	26,406		28,821
1955	5,352	42,677	2,298 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 19.597	20,960	38,576	27,878
1982	18,587	20,853	15,578	23,862
1983	3,909	10,113	4,460	9,562 14,410
1984 1985	0	14,432	22 0	14,410 12 104
1985	0 0	12,194 10,597	0	12,194 10,597
1987 1988	0 0	6,294 2,072	0 0	6,294 2,072
1989	0	2,128	0	2,072
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	Ö	2,198
1994	ő	1,843	ő	1,843
1995	0	1,488	0	1,488
1996	0	1,366	Ö	1,366
1997	ő	1,556	ő	1,556
1998	ő	1,471	Ö	1,471
1999	Ö	1,316	Ö	1,316
2000	ő	1,246	ŏ	1,246
2001	0	945	Ō	945
2002	0	515	0	515



### G. Data provided by AICFL

#### **Claims Dataset**

Claim Details	
State	State of jurisdiction of the claim
Old Claim ID	Claim number under the old IT system
New claim ID	Claim number under the new IT system
Include?	This defines wherther we count the claim record - we exclude insurance recovery records and cross-claim in
Date of Birth	Date of Birth
Date of Death	Date of Death
Start 1st Exp	Start Date of the first Exposure
End 1st Exp	End Date of the first Exposure
Days 1st Exp	Number of days exposed during the first exposure
Start 2nd Exp	Start Date of the second exposure
End 2nd Exp	End Date of the second exposure
Days 2nd Exp	Number of days exposed during the second exposure
Start 3rd Exp	Start Date of the third exposure
End 3rd Exp	End Date of the third exposure
Days 3rd Exp	Number of days exposed during the third exposure
Start 4th Exp	Start Date of the fourth exposure
End 4th Exp	End Date of the fourth exposure
Days 4th Exp	Number of days exposed during the fourth exposure
Start 5th Exp	Start Date of the fifth exposure
End 5th Exp	End Date of the fifth exposure
Days 5th Exp	Number of days exposed during the fifth exposure
Start 6th Exp	Start Date of the sixth exposure
End 6th Exp	End Date of the sixth exposure
Days 6th Exp	Number of days exposed during the sixth exposure
Start 7th Exp	Start Date of the seventh exposure
End 7th Exp	End Date of the seventh exposure
Days 7th Exp	Number of days exposed during the seventh exposure
Start 8th Exp	Start Date of the eighth exposure
End 8th Exp	End Date of the eighth exposure
Days 8th Exp	Number of days exposed during the eighth exposure
Start 9th Exp	Start Date of the ninth exposure
End 9th Exp	End Date of the ninth exposure
Days 9th Exp	Number of days exposed during the ninth exposure
Start 10th Exp	Start Date of the tenth exposure
End 10th Exp	End Date of the tenth exposure
Days 10th Exp	Number of days exposed during the tenth exposure
Start 11th Exp	Start Date of the eleventh exposure
End 11th Exp	End Date of the eleventh exposure
Days 11th Exp	Number of days exposed during the eleventh exposure
Start 12th Exp	Start Date of the twelfth exposure
End 12th Exp	End Date of the twelfth exposure
Days 12th Exp	Number of days exposed during the twelfth exposure
ClaimsPOE::OccupationType_c	Occupations of claimant
ClaimsPOE::ExposureNature_c	Nature of Exposures of claimant
Pure Home Renovator	Home renovator indicator field
MedicalAsbestosDiseases_c	A list of all the diseases specified by the claimant
Disease	Disease grouping based on hierarchy (mesothelioma, cancer, asbestosis, ARPD&Other)
DefendantAICF_c	Name of Liable Entity liable for claim
Notification Date	Date claim was received by Liable Entity
Client Sett Date	Date claim was settled by the Liable Entity with the claimant
Closure Date	Date claim record was closed (settled all legal costs, no more activity)
Date of Diag	Date of diagnosis of asbestos disease
Claim Type	Standard claim, Cross-claim, Recovery claim, Insurance claim
ransaction Fields	
Settled Damages	Total Damages awarded to claimant (by all defendants)
AICF Damages	Total Damages awarded to claimant (by AICF/JH Liable Entities)
Amount Actual Paid Damages	Total Damages paid to claimant (by AICF/JH Liable Entities)
Settled Costs	Total Costs (by all defendants)
AICF Costs	Total Costs to be borne by AICF/JH Liable Entities
Amount Actual Paid Costs	Total Costs paid by AICF/JH Liable Entities
Settled DDB	Total DDB Reimbursement Costs (by all defendants)
AICF DDB	Total DDB Reimbursement Costs (by all defendants)  Total DDB Reimbursement Costs to be borne by AICF/JH Liable Entities
Amount Actual Paid DDB	Total DDB Reimbursement Costs to be borne by AICF/JH Liable Entities  Total DDB Reimbursement Costs paid by AICF/JH Liable Entities
Settled Other	Total Other Costs (by all defendants)
AICF Other	Total Other Costs to be borne by AICF/JH Liable Entities
Amount Actual Paid Other	Total Other Costs paid by AICF/JH Liable Entities
AICF Legal Costs Total	Total Defence Legal Costs to be borne by AICF/JH Liable Entities
Amount Actual Paid Legal Costs Total	Total Defence Legal Costs paid by AICF/JH Liable Entities
ase Estimate Fields	
Reserve Damages	Case estimate of damages
Reserve Costs	Case estimate of costs
Reserve Legal Fees	Case estimate of defence legal costs
Reserve Disbursements Reserve DDB	Case estimate of other disbursements
	Case estimate of payments to DDB



#### **Accounting Transactions Datasets**

#### **Accruals File**

Date Date of transaction entry Claim ID Claim number under new IT system Transaction reference number Transaction Ref Expense or Income Type This contains the values as follows: Bank Fees, Consulting Costs, Costs, Damages, Description DDB, Interest, Legal Fees, Medicare, Other Bank Charges, Recoveries (or Recovery) Amount Amount of transaction GST component of transaction **GST** Amount - GST Amount of transaction, net of GST Which AICF (or MRCF) account the money is credit to or drawn from Account The name of the party who has drawn the cheque or from whom a cheque has been Drawer of cheque received

#### **Transactions File**

Date	Date of transaction entry into system
Claim ID	Claim number under new IT system
Transaction Ref	Transaction reference number
Туре	Payment of Receipt
Date Cheque Drawn	Date Cheque Drawn
Date Cheque Banked	Date Cheque Banked
Description	Description of transaction
Amount	Amount of transaction
GST	GST component of transaction
Amt - GST	Amount of transaction, net of GST
	The name of the party who has drawn the cheque or from whom a cheque has been
Drawer of cheque	received



#### H. Glossary of terms used in the AFFA

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.



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 crossclaim 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



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.

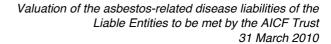
Liable Entities see Former James Hardie Companies

*Marlew* means Marlew Mining Pty Ltd (in liquidation), ACN 000 049 650, previously known as Asbestos Mines Pty Ltd.



**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).





*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.

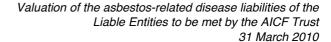


**Period Actuarial Estimate** means, in respect of a period, the central estimate of the present value (determined using the discount rate used in the relevant actuarial report) of the liabilities of the Former James Hardie Companies and Marlew in respect of expected Proven Claims and Claims Legal Costs (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.





**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.