

REPORT TO THE TRUSTEE ON THE ACTUARIAL INVESTIGATION AS AT 30 JUNE 2021

CONTINGENT LIABILITY RESERVE ACCOUNT (QUEENSLAND MEMBERS)

A SUB-PLAN IN THE MINE SUPERANNUATION FUND

02 November 2021

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1

Key Results and Recommendations

This report on the actuarial investigation of the Contingent Liability Reserve Account (the “Account”) of the Mine Superannuation Fund (“the Fund”) as at 30 June 2021 has been prepared to meet the requirements of the Fund’s governing rules and the SIS legislation. Note that the Account was previously known as Part 4 of the AUSCOAL Superannuation Fund.

This report should not be relied upon for any other purpose or by any party other than AUSCOAL Superannuation Pty Ltd, the Trustee of the Fund. Mercer is not responsible for the consequences of any other use. This report should be considered in its entirety and not distributed in parts. A copy should be made available to the Employer(s) who contribute to the Fund for information. Any reference to the Employer may include all employers who participate in the Account and the Fund as appropriate to the context. The Employer(s) may consider obtaining separate actuarial advice on the recommendations contained in the report.

Change in Financial Position

Account only	Position at 30 June 2021		
	\$000	Asset Coverage	Coverage at 30 June 2018
Assets	1,414		
Actuarial Value of Accrued Benefits (best estimate)	17	8,318%	4,522%
Actuarial Value of Accrued Benefits (positive opinion)	22	6,428%	3,505%

There are no pensioners in the Account, therefore, the Account’s assets were significantly greater than Vested Benefits which were nil. Accordingly the Account was considered to be in a “satisfactory financial position” under SIS legislation.

The value of the liabilities of the Account in respect of the minimum benefits of the members of the Fund as at 30 June 2021 was nil. Hence the Account was not technically insolvent at 30 June 2021.

There are only possible contingent members which have been valued in the Actuarial Value of Accrued Benefits.

Please refer to section 10 for the actuarial assumptions used to calculate these results. Note that "Best Estimate" assumes that the rate at which Members with entitlements in the Account will return to the industry and qualify for Transfers from the Account will be 1.0% per annum for all ages up to age 65. "Positive Opinion" assumes that this rate increases to 1.3% per annum.

The coverage levels of the Actuarial Value of Accrued Benefits at 30 June 2021 have increased since the previous actuarial valuation and the dollar value of the surplus (best estimate approach) has increased from \$1.371m in 2018 to \$1.397m at 30 June 2021.

The main reasons for this change are the following items of experience which will have served to increase the surplus:

- Reduction in the number of eligible contingent liability members, which meant the surplus is spread over a smaller base; and
- Investment returns on the surplus.

These factors were offset to some extent by the transfer paid for one employee which was higher than the average balance for employees with a contingent liability.

Recommended Contribution Rates and Projections

In accordance with Clause A5.5.2 of the Fund's Consolidated Trust Deed dated 23 April 2018, I advise that the value of the assets held in the Account as at 30 June 2021 exceeded the sum of the values placed on:

- (a) the liabilities for future payments to Existing Pensioners (nil); and
- (b) possible contingent benefits to members which arise under Rule A5.5.1.

As far as I am aware, there are no other current or future liabilities or claims to which the Trustee or the Fund may become liable pursuant to the former Section 7(b) of the Queensland Act and for which moneys are not held in another account prescribed in the Trust Deed.

I therefore consider that the provision made in the Account is more than adequate to meet the liabilities of the Account under the Trust Deed. Therefore, no contributions are required to the Account.

The margin is however sensitive to the assumptions adopted. In particular, the rate of transfer of the contingent benefits is the most important in determining the liabilities of the Account.

The past rates of transfer from the contingent group have been 0.91% per annum over the last 29 years and 0.55% per annum over the last 10 years. Therefore, the results shown using the rates of 1.0% per annum (Best estimate) and 1.3% per annum (Positive opinion) are expected to be conservative.

The total amount of the contingent accounts at 30 June 2021 is \$1.154m, therefore the assets would cover 123% of these liabilities if every single member were to return to the Industry but as we have explained in the previous paragraph, this is extremely unlikely based on past experience. The contingent accounts for the members under age 65 at 30 June 2021 are \$0.239m which is significantly lower than the assets held of \$1.414m.

There are no longer any Vested Benefits in the Account as there are no pensioners, only contingent members.

Other Findings and Recommendations for the Trustee:

Suitability of Policies

- The investment policy for the defined benefit section of the Account is suitable.
- The crediting policy for the defined benefit section of the Account is suitable.
- The Trustee's process for monitoring the Account's financial position is suitable.

Recommendations

- Allowing for the Positive Opinion, the liability coverage including contingent benefits is 6,428% at the valuation date. There are only 43 Members with a Contingent benefit left in the Account of which 35% are over age 65 and 44% are within ten years of age 65. There is a significant surplus in the Account and the potential membership has reduced significantly since the Trustee last obtained legal advice regarding options for the surplus, therefore the Trustee may wish to revisit this.

Action Required

The Trustee should consider this report and confirm its agreement (or otherwise) to the recommendations.

2

Liability Measures as at 30 June 2021

Vested Benefits

There are no longer any pensioner members in the Account. There are only members with contingent benefits and if they all ceased service at the valuation date then they would not be entitled to any benefits and therefore the Account has no Vested Benefits.

At 30 June 2021, therefore, the Account's assets were significantly greater than Vested Benefits which were nil. Accordingly the Account was considered to be in a "satisfactory financial position" under SIS legislation.

Actuarial Value of Accrued Benefits

The Actuarial Value of Accrued Benefits is the expected value (as at the investigation date) of all future expected benefit payments, based on membership to date, discounted to the investigation date, taking into account the probability of members with entitlements to the Account returning to the Industry. This value is calculated using actuarial methods and assumptions (set out in Section 10).

The coverage of the Actuarial Value of Accrued Benefits at 30 June 2021 was above the financing objective of 200% coverage adopted for this investigation; refer to Section 4.

The calculation of the Actuarial Value of Accrued Benefits has been carried out using a method of apportionment of benefits between past and future membership that satisfies the requirements of Professional Standard No. 402 of the Actuaries Institute and is acceptable for Australian Accounting Standard AASB 1056 purposes; refer to Section C.1.1.

3

Experience

Change in Financial Position since Previous Investigation

The table below shows the coverage of assets over the Actuarial Value of Accrued Benefits (both best estimate and positive opinion) as at 30 June 2021, and the corresponding values at the previous investigation date.

Account only	Position at 30 June 2021		
	\$000	Asset Coverage	Coverage at 30 June 2018
Assets	1,414		
Actuarial Value of Accrued Benefits (best estimate)	17	8,318%	4,522%
Actuarial Value of Accrued Benefits (positive opinion)	22	6,428%	3,505%

There are no pensioners in the Account, therefore, the Account's assets were significantly greater than Vested Benefits which were nil. Accordingly the Account was considered to be in a "satisfactory financial position" under SIS legislation.

The value of the liabilities of the Account in respect of the minimum benefits of the members of the Fund as at 30 June 2021 was nil. Hence the Account was not technically insolvent at 30 June 2021.

There are only possible contingent members which have been valued in the Actuarial Value of Accrued Benefits.

The coverage levels of the Actuarial Value of Accrued Benefits at 30 June 2021 have increased since the previous actuarial valuation and the dollar value of the surplus (best estimate approach) has increased from \$1.371m in 2018 to \$1.397m at 30 June 2021.

The main reasons for this change are the following items of experience which will have served to increase the surplus:

- Reduction in the number of eligible contingent liability members, which meant the surplus is spread over a smaller base; and
- Investment returns on the surplus.

These factors were offset to some extent by the transfer paid for one employee which was higher than the average balance for employees with a contingent liability.

The reasons for the changes in the financial position due to experience since the previous investigation are detailed below.

Investment Returns

One of the factors affecting the financial position of the Account is the investment return over the period. At the previous investigation date, the assumed investment return was 1.6% per annum.

The Account was invested in 100% cash and cash equivalents as at 30 June 2021 and over the period since the last investigation.

The table below sets out the actual investment returns over the 3 years to 30 June 2021:

Year to	Actual Investment return (p.a.)	Expected Investment return (p.a.)
30 June 2019	1.2%	1.6%
30 June 2020	0.8%	1.6%
30 June 2021	0.4%	1.6%
Average return (p.a.)	0.8%	1.6%

Thus, for the 3 years ended 30 June 2021, the investment returns achieved in the Account averaged 0.8% per annum, which was 0.8% p.a. less than assumed. This had a neutral impact on the Account's financial position. The contingent liability is not sensitive to the specific investment return or crediting rate assumptions as they effectively cancel each other out. This will remain the case whilst actual return on assets is credited to the member's accounts.

Members with a contingent benefit

The assumption about the rate of transfer of the contingent benefits is the most important in determining the liabilities of the Account.

The past rates of transfer from the contingent group have been as follows:

Period	Rate of Transfer (per annum)
1992-1995	1.50%
1995-1998	3.50%
1998-2001	0.50%
2001-2004	0.35%
2004-2007	0.50%
2007-2010	0.43%
2010-2013	0.47%
2013-2015	0.57%
2015-2018	0.19%
2018-2021	0.95%
Average over last 10 years	0.55%
Average over last 29 years	0.91%

The following table summarises the data provided in respect of Members with a contingent benefit:

	Number
Members with contingent benefits as at 30 June 2018 under age 65	41
Members with contingent benefits as at 30 June 2018 over age 65	16
Total	57
Less Member's no longer eligible (e.g. death etc.)	(13)
Less Transfers to main account during period*	(1)
Members with contingent benefit as at 30 June 2021	43**

*The single member was over age 65 at date of transfer, however, the member satisfied the criteria prior to turning 65.

**Includes 15 members over age 65. The liability for these members is nil as it is assumed members over age 65 will not return to the industry.

The rate of transfer (based on the average number of members under age 65 over the valuation period of 35) was approximately 1/35 for the 3 year period, or 0.95% per annum. This rate was lower than anticipated at the last actuarial investigation. This has had a positive impact on the Account's financial position.

Contributions

As noted in the 2018 actuarial valuation report the Account's assets were more than sufficient to cover the value of benefits. Consequently no additional contributions (over and above those payable to other accounts under the Fund's Trust Deed) were required to be paid during the inter-valuation period.

Recommendations in Previous Actuarial Investigation

The previous actuarial investigation made the following recommendations and the status of these is shown in the table below:

Recommendation	Status
A Shortfall Limit is no longer required for the Account as there are no Vested Benefits	Adopted
There is significant surplus in the Account and we would therefore recommend that the Trustee start to consider how a proportion of this surplus can be utilised.	Legal advice was obtained previously. It was decided no further action should be taken at the moment but this will be kept under review.

4

Contribution Requirements

Financing Objective

The financing objective I have adopted for this investigation is to maintain the value of the Account's assets at least equal to 200% of the actuarial value of accrued benefits, where the rate of transfer for the contingent benefits is 1.3% per annum.

I consider that the target margin of 200% strikes a suitable balance between the Trustee's desire to ensure there are sufficient assets to provide for the payment of contingent liabilities should members return to employment in the coal industry and the Employer's desire to avoid an unnecessary build-up of surplus.

I have taken into consideration the provisions of the Trust Deed and any professional requirements as set out below.

Professional Requirements

Under Professional Standard 400 issued by the Actuaries Institute, the funding method selected by the actuary *"must aim to provide that:*

- (a) members' benefit entitlements (including any pension increases provided by the Trust Deed or in accordance with either precedent or the intentions of the Trustee and/or Fund Sponsor) are fully funded before the members retire; and*
- (b) the Net Assets of the Fund from time to time, after making full provision for the entitlements of any beneficiaries or members who have ceased to be employed, exceed the aggregate of benefits which employed members would reasonably expect to be payable to them on termination of membership, including the expenses of paying those benefits, and having regard to the provisions of the Trust Deed and the likely exercise of any Options or Discretions." (Paragraph 5.5.4 of PS400).*

Accordingly the actuary needs to be satisfied that any funding program is expected to provide a level of assets which meets or exceeds immediate benefit entitlements based on members' reasonable expectations. Should assets fall below that level, the funding program needs to aim to lift assets to at

least the required level over a reasonable time period and to maintain assets at or above the required level thereafter.

Provisions of the Trust Deed

The rules of the Fund require that:

- the Trustee ensures an actuarial investigation of the Account is conducted when required by legislation. Accordingly actuarial investigations are carried out triennially as there are no longer any pensioners; and
- the Employer must contribute at the rate determined by the Trustee, after consulting the Employer, on the advice of the Actuary to the Fund.

APRA have determined that actuarial investigations of the Account are only required every three years.

Financing Method

This actuarial valuation values the contingent liabilities of the Account. It compares the current discounted value of the Account's income (investment income only) and outgo expected to arise in the future (transfers to other accounts in respect of members who return to the industry). The results of the valuation are used to test the adequacy of the current assets in the Account to meet the future contingent benefit transfers. The assets held for the contingent liabilities of the Account are taken to be sufficient to meet the liabilities for this group of members based on both the rate of return to the Industry of 1.0% and 1.3% per annum.

In order to estimate income and outgo, assumptions are made concerning those factors (e.g. investment earnings) which will influence the size and timing of future payments. Payments from the Account could occur over several decades, but for the purposes of this valuation it is assumed only members up to age 65 are expected to return to the industry and the assumptions chosen have regard largely to the liability profile of the Account.

The cost of the contingent benefits will ultimately depend upon the actual experience of the members with a contingent benefit, not on actuarial assumptions about that experience. It is not essential, nor is it expected, that the actual experience will be identical to the valuation assumptions. However, the valuation will produce realistic results provided the relationships between the various assumptions are similar to the overall actual experience.

Recommended Contributions

In accordance with Clause A5.5.2 of the Fund's Consolidated Trust Deed dated 23rd April 2018, I advise that the value of the assets held in the Account as at 30 June 2021 exceeded the sum of the values placed on:

- (a) the liabilities for future payments to Existing Pensioners (now nil); and
- (b) possible contingent benefits to members which arise under Rule A5.5.1.

As far as I am aware, there are no other current or future liabilities or claims to which the Trustee or the Fund may become liable pursuant to the former Section 7(b) of the Queensland Act and for which moneys are not held in another account prescribed in the Trust Deed.

I therefore consider that the provision made in the Account is more than adequate to meet the liabilities of the Account under the Trust Deed. The margin is however sensitive to the assumptions adopted. In particular, if the transfer rate for contingent benefits is more than assumed then it is possible, although unlikely given the strong financial position of the Account, that extra contributions will be needed.

At 30 June 2021, no employer contributions are needed to the Account.

5

Projections

At 30 June 2021 there are no pensioner members left in the Account and no Vested Benefits, therefore we have not projected the Account's assets and liabilities for future years. Based on the assumptions adopted for this investigation and allowing for any material experience after the investigation date as detailed in this report, it is expected the Actuarial Value of Accrued Benefits index will continue to be well in excess of 200% over the next three years.

The Trustee should note that this investigation is based on the assumptions adopted, which represent a single scenario from the range of possibilities. The future is uncertain and the Account's actual experience will differ from those assumptions; these differences may be minor in their overall effect, or they may be significant and material.

The most important assumption is the rate of transfer from the contingent group as described in Section 8.

Meeting the Financing Objective

Based on the current financial position and estimated future position it is anticipated that Account assets will be at least 200% of Actuarial Value of Accrued Benefits by 30 June 2024 (the financing objective adopted in this investigation).

The Account is projected to continue to be in a satisfactory financial position over the period to 30 June 2024.

6

Investment Policy and Related Risks

Investment Policy

The investment strategy has a benchmark of 100% exposure to cash type assets.

I consider the investments underlying the Account to be adequate to support the liabilities of the Account. The investments are conservative, given the nature of the liabilities, but provide a high level of capital security.

The Account is expected to benefit from a lower degree of volatility of asset value from year to year returns expected from the 'cash' assets over the long term. However, this will mean that the Account's investment returns will not benefit from the higher returns expected from 'growth' assets over the long term, which may impact on the financial position of the Account. Given the large surplus, this is unlikely to be a problem.

The Account's investments are expected to provide a high level of liquidity during this period. Hence I do not envisage any problem in being able to redeem assets to meet benefit payments as they arise.

Crediting Policy

The main features of the crediting policy in relation to defined benefits are summarised briefly below:

Members' contingent benefits are increased with the accumulation of investment earnings at the Crediting Rate.

The Crediting Rate is determined based on the actual earning rate of the relevant defined benefit assets, after allowance for tax and investment costs, asset-based administration fees and any applicable rebates. The crediting rate is declared monthly after the actual earning rate for the month becomes available. For transfers, interim crediting rates apply for the period up to the date of leaving

service for which a declared rate is not yet available. The Interim Crediting Rate is determined based on the Mine Super Cash Rate.

Whilst the monthly update of the interim rate theoretically allows some scope for anti-selection, taking into account the nature of the benefits and that the member's choice to return to the Industry would generally be required to trigger a payment, I consider that the current frequency of review of interim rates is appropriate.

Investment Risk – Impact on Cost to the Employer

The liabilities are not sensitive to a change in the investment return. For the contingent liabilities, because the investment return has been set equal to the crediting rate then if the investment return assumption were to increase (or decrease) then the crediting rate would increase (or decrease) by the same amount and therefore the net impact would be nil on the contingent liability.

7

Insurance Policy and Related Risks

There are no insurance arrangements in place for the Account since there are no current members, therefore this is reasonable.

8

Transfer / re-employment and other Risks

There are a number of risks relating to the operation of the Account. The more significant financial risks other than investment risk are:

Transfer / re-employment risk – rate of transfer

This is the most significant risk to the Account. The risk is that the rate at which contingent members return to employment in the industry is higher than assumed and the Employer will need to commence contributions to the Account. This is borne by the Employer.

As an example, if the assumed transfer rate was increased by 2% p.a. (to 3% p.a.) with no change in other assumptions, the value of benefits under the Valuation Basis (also referred to as the “Best Estimate” throughout this report) would increase by \$94,000 with a resulting reduction in the coverage of benefits from 8,318% (under the Best Estimate Basis as per the table in Section 1.1) to 1,274%.

The actual transfer rate in the Account in future may vary (positively or negatively) from the rate assumed at this investigation by much more than the (positive) 2% pa illustrated in the example above. Historic transfer rates have averaged around 0.55% per annum over the last 10 years and 0.91% per annum over the last 29 years. Whilst the variation in this rate will impact the funding of the Account there is no reason to expect that the rates will increase to such levels that would require further funding.

The total amount of the contingent accounts at 30 June 2021 is \$1.154m, therefore the assets would cover 123% of these liabilities if every single member were to return to the Industry but as we have explained above, this is extremely unlikely based on past experience. The contingent accounts for the members under age 65 at 30 June 2021 are \$0.239m which are significantly lower than the assets held of \$1.414m.

Transfer / re-employment risk – age of transfer

We understand that there is no restriction to the age at which members can return to the industry and be entitled to their account. For the valuation, we have assumed that the maximum age at which members will return to the industry is 65 and this assumption was also used in previous valuations. Since the last valuation, no members over age 65 returned to the industry and had their account transferred. After consultation with the Trustee, we believe that an assumption of age 65 remains appropriate, however, in the table below we have shown the impact on the funding level if the assumption was increased from age 65 to age 70 (on the best estimate basis).

Basis	Transfer Rate	Value of Assets	Actuarial Value of Benefits (Best Estimate)	Index
		\$'000	\$'000	
Age 65	1%	\$1,414	\$17	8,318%
Age 70	1%	\$1,414	\$37	3,822%

The value of the contingent accounts at 30 June 2021 for all members were \$1.154m of which the accounts for those over age 65 were \$0.915m. In the unlikely event that all members return to the industry, the assets would cover 123% of the \$1.154m.

Legislative risk

The risk is that legislative changes could be made which increase the cost of providing the defined benefits – for example an increase in the rate of tax on superannuation funds. This risk is borne by the Employer.

9

Assets

Assets

At 30 June 2021, the asset value used in the assessment of the financial position of the Account was \$1,414,122, as provided by the administrator.

No adjustment has been made to the value of assets to allow for the possibility of fluctuations in the market values of the underlying assets. Hence, the value placed on the assets for purpose of this review is \$1,414,122.

As at the date of the actuarial investigation, all of the Account's assets were invested in cash and cash equivalents.

The progress of the Account over the three years from 30 June 2018 to 30 June 2021 is shown below (figures in \$'000's):

	\$'000s
Opening Balance at 30 June 2018	1,402
Interest Added	45
Pension Payments	-
Transfer Payments	(11)
Expenses	(18)
Taxes	(4)
Closing Balance at 30 June 2021	1,414

Operational risk reserves

The assets to meet the Operational Risk Financial Requirement (ORFR) are held separately to the assets of the Account and therefore they have been excluded from the assets in this investigation.

The scope of this Investigation does not include a review of the adequacy of assets held to meet the ORFR or the ORFR strategy.

10

Actuarial Assumptions

The ultimate cost to the Employer of providing benefits from the Account is based on:

- the number of members with contingent benefits who return to the industry and qualify for a transfer from the Account

less

- the return on investments.

The ultimate cost to the Employer will not depend on the actuarial investigation assumptions but on the actual experience of the Account. The financing method and actuarial assumptions adopted will however affect the timing of the contribution requirements from the Employer.

The actuarial process includes projections of possible future Account assets and benefit liabilities on the basis of actuarial assumptions about future experience.

These assumptions include investment returns, crediting rates, rate of return by Members to the Industry and various other factors affecting the financial position of the Account.

It is not expected that these assumptions will be precisely borne out in practice, but rather that in combination they will produce a model of possible future experience that is considered a suitable basis for setting contribution rates.

Economic assumptions

Investment Returns

For this investigation, I have adopted a long-term investment return assumption of 0.5% per annum (net of investment tax, investment charges and administration expenses).

The investment return assumption is based on Mercer's economic forecast for cash equivalent assets.

At the 2018 investigation, the assumed rate of return on investments was 1.6% p.a.

Crediting rates

For this investigation, I have adopted a crediting rate assumption of 0.5% per annum as the rates credited to member's accounts are based directly on the return earned by the assets which are invested in 100% cash or cash equivalents.

This means that the contingent liability is not sensitive to the specific investment return or crediting rate assumptions as they effectively cancel each other out. This will remain the case whilst the actual return on assets is credited to the member's accounts.

Rate of Return by Members to the Industry

The major risk in relation to the Account's ability is the rates at which Members with entitlements in the Account will return to the industry and qualify for transfers from the Account under Rule 4.6 of the Fund's Trust Deed. I have adopted the same assumptions as used in the previous actuarial valuation and these are as follows:

"Best Estimate" assumption: 1.0% per annum for all ages up to age 65

"Positive Opinion" assumption: 1.3% per annum for all ages up to age 65

No allowance for mortality has been made in deriving the value to be placed on the contingent benefits. This is a somewhat conservative approach which is considered appropriate for assessing the ability of the Account to provide these benefits. The effect on the results if allowance for mortality was made for purposes of the "Valuation Basis" (or "Best Estimate" basis) would not be material.

Other assumptions

New members

The Account's contingent and pension sections are closed to new entrants. No allowance has been made for new members.

Expenses

We have assumed that the investment return assumption is net of expenses.

Tax

It is assumed that the current tax rate of 15% continues to apply to the Account's assessable income, along with current tax credits and other concessions (in particular the exemption from tax for investment income on assets supporting current pension benefits).

All future Employer contributions (if any) are assumed to be subject to 15% contribution tax, after deduction of any insurance premiums and administration and management costs. All contribution recommendations quoted in this report (if any) are gross of contribution tax.

Changes in Assumptions since the Previous investigation

The following table sets out changes in assumptions from those used in the previous investigation and the reasons for the changes:

Assumption	30 June 2021 investigation	30 June 2018 investigation	Reason for change
Investment return	0.5%	1.6%	Economic outlook
Crediting rate	0.5%	1.6%	Economic outlook

Overall this had no impact on the Actuarial Value of Accrued Benefits.

The Regulator and Prudential Standards

The regulator (APRA) has issued a number of Prudential Standards for the superannuation industry including Prudential Standard (SPS 160) relating to the financial management and funding of defined benefit plans. We have commented below on a number of the requirements arising from SPS 160.

Shortfall Limit

The Trustee must determine a "Shortfall Limit" for each fund, being "the extent to which the fund can be in an unsatisfactory financial position with the Trustee still being able to reasonably expect that, because of corrections to temporary negative market fluctuations in the value of the fund assets, the fund can be restored to a satisfactory financial position within a year".

As there are now no Vested Benefits in the Account, we do not believe that a Shortfall Limit is required any longer and we understand that the Trustee has removed this.

Monitoring Process

SPS 160 also requires the Trustee to determine and implement a process for monitoring the defined benefit Vested Benefits coverage against the Shortfall Limit for each plan.

As there are no pensioners in the Account, as required under the Trust Deed and Rules, we recommend the next actuarial valuation is completed at 30 June 2024.

Requirements due to Unsatisfactory Financial Position

Restoration Plan

Under SPS 160, a Restoration Plan is also required to be put in place if the actuary finds in a regular Actuarial Investigation that a plan:

- Is in an unsatisfactory financial position (whether or not the Shortfall Limit has been breached); or
- Is likely to fall into an unsatisfactory financial position.

The Restoration Plan must be designed to return the plan to a “satisfactory financial position”, so that Vested Benefits are fully covered, within a reasonable period that must not exceed 3 years from the investigation date.

An SPS 160 Restoration Plan is not required if the plan is technically insolvent (in which case the insolvency rules must be followed). If an SPS 160 Restoration Plan is already in place then any changes to the contribution program (including its period) must be made within the framework of that Restoration Plan.

As the Account is technically solvent, we do not believe that a Restoration Plan is required.

Actuary’s Reporting Requirements

Section 130 of the SIS Act requires that if an actuary forms the opinion that a plan’s financial position may be unsatisfactory, or may be about to become unsatisfactory, and that opinion was formed in performing an actuarial function, the actuary must advise both the Trustee and the prudential regulator (APRA) in writing immediately. Note: an unsatisfactory financial position applies where assets are less than Vested Benefits.

These requirements do not currently apply as I am of the opinion that the Account’s financial position is not unsatisfactory (or about to become unsatisfactory).

The value of the liabilities of the Account in respect of the minimum benefits of the members of the Fund as at 30 June 2021 was nil. Therefore the Account is not considered to be technically insolvent.

Statements Required by SPS 160

This section provides statements required to be made under APRA Prudential Standard SPS 160. Values cited relate to the Account of the Mine Superannuation Fund (The Account) as a whole (inclusive of all accumulation members and accounts).

- (a) The value of the Account's assets as at 30 June 2021, based on unaudited information provided by the Trustee, was \$1,414,000. This value excludes assets held to meet the Operational Risk Financial Requirement.
- (b) In my opinion, the value of the liabilities of the Account in respect of accrued benefits as at 30 June 2021 was \$17,000. Hence, I consider that the value of the assets at 30 June 2021 is adequate to meet the actuarial value of the accrued benefit liabilities of the Fund as at 30 June 2021. Taking into account the circumstances of the Fund, the details of the membership and the assets, the benefit structure of the Fund and the industry within which the Employer operates, I consider that the assumptions and valuation methodology used are appropriate in relation to the determination of the accrued benefit liabilities for the purposes of this report. Further comments on the assumptions and valuation methodology are set out in Section 10 of this report. Assuming that the Employer contributes in accordance with my recommendations, then, based on the assumptions made for this actuarial investigation which I consider to be reasonable expectations for the Account, I expect that assets will remain sufficient to cover the actuarial value of accrued benefit liabilities over the period to 30 June 2024.
- (c) In my opinion, the value of the liabilities of the Account in respect of vested benefits as at 30 June 2021 was nil and therefore the financial position of the Fund should not be treated as unsatisfactory as defined in SPS 160.
- (d) In my opinion, the value of the liabilities of the Account in respect of the minimum benefits of the members of the Fund as at 30 June 2021 was nil. Hence the Fund was not technically insolvent at 30 June 2021.
- (e) Based on the results of this investigation, I consider that a Shortfall Limit is no longer required. Comments are set out in Section 11 of this report.
- (f) The actuary recommended that as the Account's assets were more than sufficient to cover the value of benefits, no additional contributions are required to be paid to the Account.
- (g) The Account is not used for Superannuation Guarantee purposes.

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Actuarial Certification

Purpose

I have prepared this report exclusively for the Trustee of the Mine Superannuation Fund for the following purposes:

- to present the results of an actuarial investigation of the Account as of 30 June 2021;
- to review Account experience for the period since the previous actuarial investigation (effective at 30 June 2018);
- the SIS Regulations also require the actuary to make a statement about the level of employer contributions required to support the benefits of the Account. It is intended to operate the Account such that no contributions or transfers from other sources will be required to supplement the existing assets;
- to satisfy the requirements of the Fund's Trust Deed for actuarial investigations of the Fund's financial position; and
- to meet legislative requirements under relevant Commonwealth superannuation legislation.

It has been prepared in accordance with the requirements of the Trust Deed, the Superannuation Industry (Supervision) Act 1993 and associated regulations (SIS legislation), Prudential Standard SPS 160 issued by APRA and Professional Standard 400 issued by the Actuaries Institute setting out requirements for actuarial investigations of defined benefit superannuation funds under SIS legislation.

The previous actuarial investigation was conducted as at 30 June 2018 by Angela Hartl, on behalf of Mercer, and the results are contained in a report dated 2 November 2018.

Background information of the Fund

Mine Superannuation Fund (formerly known as the AUSCOAL Superannuation Fund, and the Mine Wealth + Wellbeing Superannuation Fund) (the Fund) commenced on 1 July 2005 as a result of the merger of the Coalsuper Retirement Income Fund ("Coalsuper") and the Queensland Coal Superannuation Fund ("QCOS").

This report contains the results of an Actuarial Investigation requested by the Trustee of Mine Superannuation Fund ('the Fund') as at 30 June 2021 in respect of the Contingent Liability Reserve Account ("**the Account**") and my recommendations arising from the investigation.

This report has been prepared in accordance with the Actuaries Institute Professional Standard 400.

The Fund is administered as a 'complying fund' in accordance with the requirements of the Superannuation Industry (Supervision) Act (SIS). In future, it will continue to be regulated under SIS.

The advice contained in this report is given in the context of Australian law and practice. No allowance has been made for taxation, accountancy or other requirements in any other country.

Governing Documents

The Fund is governed by a Trust Deed dated 31 January 1995 and subsequent amendments. A summary of the main benefit provision in respect of the Account is set out in Appendix B.

Additional information

Significant events since the investigation date - I am not aware of any significant events that have occurred since 30 June 2021 which would have a material impact on the recommendations in this report.

Next actuarial investigation – As there are no pensioners in the Account, as required under the Trust Deed and Rules, we recommend the next actuarial valuation is completed at 30 June 2024.

Next Funding and Solvency Certificate – not applicable for the Account.

Next Benefit Certificate – not applicable for the Account.

Actuary's certifications

Professional standards and scope

This report has been prepared in accordance with generally accepted actuarial principles, Mercer internal standards, and the relevant Professional Standards of the Actuaries Institute, in particular PS400 which applies to *"...actuarial investigations of the financial condition of wholly or partially funded defined benefit superannuation funds."*

Use of report

This investigation report should not be relied upon for any other purpose or by any party other than the Trustee of the Fund. A copy should be made available to the Employer(s) who contribute to the Fund for information. Mercer is not responsible for the consequences of any other use. This report should be considered in its entirety and not distributed in parts.

The advice contained in this report is given in the context of Australian law and practice. No allowance has been made for taxation, accountancy or other requirements in any other country.

Actuarial Uncertainty and Assumptions

An actuarial investigation report contains a snapshot of a fund's financial condition at a particular point in time, and projections of the fund's estimated future financial position based on certain assumptions. It does not provide certainty in relation to a fund's future financial condition or its ability to pay benefits in the future.

Future funding and **actual** costs relating to the Account are primarily driven by the Account's benefit design, the **actual** investment returns and the **actual** rate of transfer to the main fund increases and any discretions exercised by the Trustee or the Employer. The actuary to the Account does not directly control or influence any of these factors in the context of an actuarial investigation.

The future financial position of the Account depends on a number of factors, including the amount of benefits paid out of the Account, rates of contingent members returning to the industry, mortality rates, fund expense, the level of taxation and the amount earned on any assets invested to pay the benefits. These amounts and others are uncertain and unknowable at the valuation date, but are predicted to fall within a reasonable range of possibilities.

To prepare this report, assumptions, as described in Section 10, are used to select a single scenario from the range of possibilities. The results of that single scenario are included in this report.

However, the future is uncertain and the actual experience in the Account will differ from those assumptions; these differences may be significant or material. In addition, different assumptions or scenarios may also be within the reasonable range and results based on those assumptions would be different.

Actuarial assumptions may also be changed from one valuation to the next because of mandated requirements, experience in the Account, changes in expectations about the future and other factors. We did not perform, and thus do not present, an analysis of the potential range of future possibilities and scenarios.

Because actual experience will differ from the assumptions, decisions about benefit changes, investment policy, funding amounts, benefit security and/or benefit related issues should be made only after careful consideration of alternative future financial conditions and scenarios, and not solely on the basis of a set of valuation results.

Data and Account Provisions

To prepare this report, we have relied on financial and participant data provided by the Fund's administrator. The data used is summarised in this report. We have reviewed the financial and participant data for internal consistency and general reasonableness and believe it is suitable for the purpose of this report. We have not verified or audited any of the data or information provided. We have also relied upon the documents, including amendments, governing the Fund and the Account. The Trustee is ultimately responsible for the validity, accuracy and comprehensiveness of this information. If the data or Account provisions are not accurate and complete, the valuation results may differ significantly from the results that would be obtained with accurate and complete information; this may require a revision of this report.

Further Information

Please contact me to provide any supplementary information or explanations about this actuarial investigation as may be required.

Prepared by:



Angela Hartl

Fellow of the Institute of Actuaries of Australia



James Ma

Fellow of the Institute of Actuaries of Australia

2 November 2021

I have reviewed this report under Mercer's professional Peer Review Policy. I am satisfied that it complies with applicable professional standards and uses assumptions and methods which are suitable for the purpose.



Clement Cheung

Fellow of the Institute of Actuaries of Australia

APPENDIX A

Membership Information

Membership and Benefit summary

There are no longer any pensioners in the Account as at 30 June 2021.

Contingent benefit members' details as at 30 June 2021 are detailed in the table below:

Age Group	Number of Members	Contingent Transfer Amount
50 to 55	9	\$28,962
55 to 60	16	\$155,178
60 to 65	3	\$54,816
>65	15	\$914,654
Grand Total	43	\$1,153,610

The membership data used for this investigation was taken from the database used to administer the Account. The number of contingent benefit members has reduced compared to as at 30 June 2018. We have assumed that this data is correct and have not analysed it in detail.

APPENDIX B

Fund Design

B.1. Summary of benefits

A summary of the main benefit provisions in respect of the Account is set out below. A full description of the benefits provided by the Fund is set out in the Fund's Trust Deed, as amended from time to time. Reference should be made to the formal governing documents for definitive statements.

The Account has several classes of members, including:

- Accumulation members;
- Account based pensioner members;
- Defined benefit Pensioner members; and
- Members with Contingent Benefits under Rule 4.6.

Only the benefits or contingent benefits of the Defined Benefit pensioner members and the contingent benefit members are supported by the Account which is addressed by this report. Benefits for the Accumulation members and the Allocated pensioner members are covered by the general pools of Fund assets. There are no longer any Defined benefit Pensioner members.

Accumulation Members

A number of accounts are kept on behalf of the accumulation members. These accounts are credited with contributions made by or on behalf of these members, debited with tax, fees and group life premiums and updated with investment earnings according to the investment option applicable to the member.

Participating Employers make Occupational and/or Statutory contributions on behalf of their employees in accordance with the Fund Rules. Members for whom the Employer makes Statutory contributions are generally required to make their own Statutory contributions. Members and employers may also make voluntary contributions.

Upon exit for any reason the member receives the sum of his/her accounts. If the member exits the Fund due to the Death or Total and Permanent Disablement, an additional insured benefit may be payable.

Allocated Pensioners

Allocated pensioners' accounts are invested according to the investment option applicable to the member. Payments from the accounts in any financial year are subject to the limits set out in the SIS Regulations.

Current Pensioners

There are no longer any pensioners in the Account.

Contingent Benefits

In summary, Rule 4.6 provides contingent benefit entitlements for Members:

- who were not employed by a Participating Employer at the date of commencement of the Mine Workers' Superannuation Act;
- for whom an amount was transferred from The Coal Mine Workers' Pension Fund (but not to an Employer's Statutory Account for the Member); and
- who resume employment in the coal mining industry for a period of 12 months.

Members may qualify for an entitlement under Rule 4.6 with less than 12 month's service after resumption of employment where:

- such shorter service would have been required in order for the Member to qualify for a lump sum benefit from the Pension Fund; or
- the Member's period of employment *ceases as a result of a genuine reduction in hands* and the Trustee determines a shorter period shall apply.

On a Member meeting the above conditions, the Trustee is required to transfer the Member's credit in the Account, together with interest thereon, to the Member's Statutory Contribution Accounts.

Neither the Trustee nor the Employer has a right within the Trust Deed to review benefits or member contribution rates.

APPENDIX C

C.1. Note 1: Summary of Method of Attributing Benefits to Past Membership

C.1.1. Defined Benefits

The past membership components of the contingent members benefits are projected forward allowing for assumed credited interest rates and the rate at which they are assumed to return to the industry and are then discounted back to the investigation date at the investment return rate assumed for the investigation.

C.1.2. Changes in Methodology of Calculating the Actuarial Value of Accrued Benefits

The method used for the determination of Accrued Benefits is the same as that used at the previous investigation.

C.2. Note 2: Summary of Assumptions

C.2.1. Financial Assumptions

	Assumption
Investment returns (after tax and investment fees)	0.5% p.a.
Crediting rate	0.5% p.a.

For the purposes of determining the present value of accrued benefits in accordance with Australian Accounting Standard AASB1056, a market-determined, risk adjusted discount rate of 0.5% per annum was used.

C.2.2. Other Assumptions

Assumptions regarding rates at which members with entitlements in the Account will return to the industry and qualify for Transfers from the account, have been based on the experience of this and other similar funds. Further details can be found in this report of the actuarial investigation as at 30 June 2021.

C.2.3. Changes in Key Assumptions

Assumption	30 June 2021 investigation	30 June 2018 investigation	Reason for change
Investment return	0.5%	1.6%	Economic outlook
Crediting rate	0.5%	1.6%	Economic outlook

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