

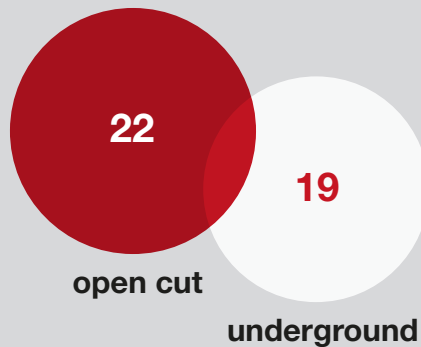
# One Industry One Team





## Performance highlights

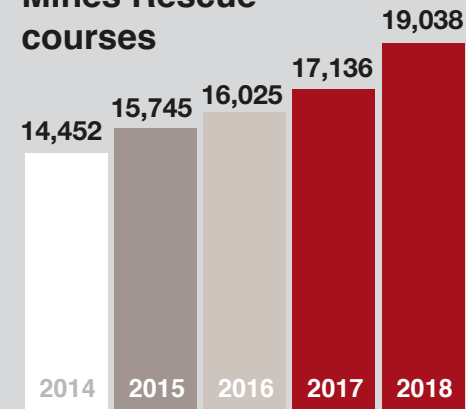
Operating coal mines  
in NSW



24,650

Protected an average of  
24,650 exposed to risk  
workers throughout  
the year

Attendance at  
Mines Rescue  
courses

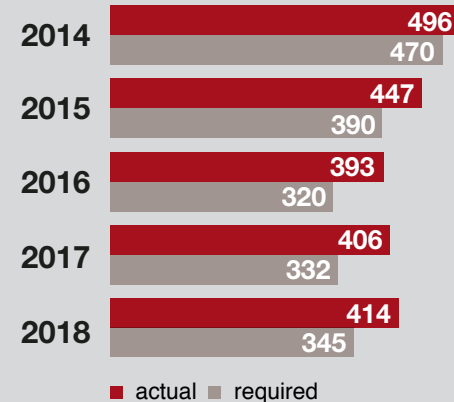


4,047

Statutory respirable and  
inhalable dust samples  
were taken from the  
breathing zones of  
4,047 workers

88.7%

of workers returned to  
work within 0–13 weeks  
of injury

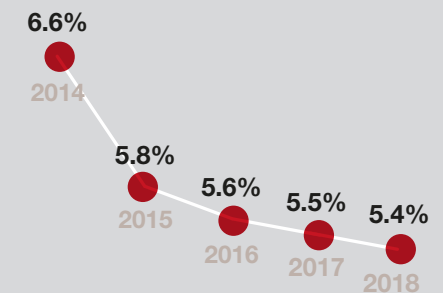


Trained volunteer mines  
rescue brigadesmen

6,093

periodic health  
surveillance medicals  
to monitor and  
protect against  
occupational disease

Claims Frequency Rate



5.4%

# To protect workers and mining

Coal Services is an industry-owned organisation committed to providing critical services and expertise to the NSW coal mining industry. We are a Specialised Health and Safety Scheme that provides an integrated suite of services aimed at preventing injury and illness in the workplace. These include occupational health and safety, workers compensation insurance and injury management, mines rescue and training.

We work in collaboration with employers, workers, Government departments and other industry partners to help identify, assess, monitor and control many risks inherent in the NSW coal mining industry. Together, we work to protect the health and safety of those working in the industry through prevention, detection, enforcement and education.

We are jointly owned by two shareholders, the NSW Minerals Council and the Construction, Forestry, Maritime, Mining and Energy Union (CFMMEU). Our purpose, vision and values are aligned to focus on the safety and health of our industry and its workers.

## Our purpose

## To protect

## Our vision

## To partner with industry for a safe workplace and a healthy workforce





# Message from the Chairman and Managing Director/CEO

Peter Jordan and Lucy Flemming



**We all must continue to invest in workplace health and safety initiatives and work together to further safeguard against existing and emerging issues.**

When Coal Services embarked on the 2020 Strategy four years ago, it was a long-term approach to building a sustainable and more customer-focused organisation. All the while, continuing to deliver our statutory obligations and assist in protecting the health, safety and wellbeing of our industry's workforce.

Coal Services has undertaken a comprehensive program of works that has included several major transformation projects designed to facilitate this vision; among them the completion of Coal Mines Insurance's trial of a new operating model and significant investment in information architecture and data analytics capability to support our evolution into being a more data-driven organisation. Significant progress was also made in CS Health's 'Better Health Project' to improve efficiencies and reporting to identify, analyse and mitigate health hazard exposure trends. Achieving our strategy also requires a shift in our approach to working, and our focus areas this year have been defining our culture and developing the capabilities required of our team.

The Coal Mines Insurance scheme showed improvement during the year. Workers compensation premium exceeded our budget as a result of employment growth in the industry while the implementation of new strategies for managing claims, early intervention and return to work all had a positive impact on claims costs. The claims frequency rate has been maintained at less than six per cent for four years and is reflective of the robust health and safety standards that are our industry's strength. However, we all need to do more. We all must

continue to invest in workplace health and safety initiatives and work together to further safeguard against existing and emerging issues.

Attendances at the Generic Underground Induction for Coal Mines, a foundation safety course for new entrants to the industry, increased by 28 percent. While this is far from the numbers seen at the peak of the industry boom in 2011-12, the increasing number is a slow but encouraging indicator of industry growth.

The importance of what we do in the health space in particular was reinforced during the year with the introduction of two significant components under the *Coal Industry Act 2001* (NSW) (the Act). Coal Mine Workers Order No. 43 was approved by the Minister to deliver changes to health monitoring requirements for workers in the NSW coal industry. The Act was also amended to include a definition of an employer in the coal industry to ensure that all industry workers who work in or about a coal mine are covered and are protected under our specialised health and safety scheme.

# Message from the Chairman and Managing Director/CEO *continued*

Peter Jordan and Lucy Flemming

## One Industry. One Team.

Maintaining relevance in an ever-changing industry is perhaps the biggest challenge of any business. For us, staying on top of technological change and emerging health and safety risks faced by those working in our industry necessitates engagement, collaboration and trust with all our stakeholders.

Our Stakeholder Engagement Framework was developed during the year and we have worked hard to create a more customer-centric approach across the business, starting with an 'outside-in' approach to understanding our customers, their challenges and opportunities to work together to mitigate their risks. We look forward to continuing to work with our stakeholders in this regard. There was also a significant increase in stakeholder engagement regarding legislative changes and operational changes.

Thank you to the Hon. Don Harwin, Minister for Resources, Minister for Energy and Utilities, and Minister for the Arts, his office and Ministerial staff; Stephen Galilee, CEO of the NSW Minerals Council and Tony Maher, National President of the Construction, Forestry, Maritime, Mining and Energy Union for their support throughout the year.

Our journey of transformation is ongoing and at times challenging. We would like to thank our employees, management teams and the Board of Directors for your continuing hard work and commitment to our vision, values and purpose.

The indicators of positive change throughout our industry reinforce the need for a robust regime that protects the health and safety of our industry's workers, now and into the future. We look forward to building on our achievements in the coming year and continuing to work with our industry partners to do so. Together we are One Industry. One team.

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**Staying on top of technological change and emerging health and safety risks faced by those working in our industry necessitates engagement, collaboration and trust with all our stakeholders.**

# Our People

The shared knowledge, expertise and experience of our people enables us to deliver on our purpose, to protect.

## Engaging our people

The Coal Services Employee Engagement Survey was conducted in March 2018. Employee participation in the bi-annual survey was 80 per cent and returned an overall employee engagement capital score of 58 per cent (compared to an Australian benchmark of 60 per cent).

Feedback from this survey has led to the development of both immediate and long-term action plans to address identified areas of improvement and focus.

### 2018 SURVEY

Survey completion rate	80%
Overall engagement capital	58%

N=302

## Developing a high performance culture

### Shared Culture Framework

Steady progress was made on enhancing our culture with the introduction of the Coal Services Shared Culture Framework (the framework).

The framework sets out the overarching approach to managing organisational culture within Coal Services and outlines the interaction between our strategy, vision, mission and values. It also introduces the concept of our shared DNA: Integrity, Accountability, Collaboration, Customer Centric, Innovation and Excellence. These will drive our behaviours and enable us to navigate future challenges.



### One Industry. One Team

'One Industry. One Team' was launched in October 2017 as an internal campaign to promote better collaboration and partnerships amongst our people to improve outcomes for our customers.

While One Industry. One Team is ongoing, achievements to date have included:

- connecting subject matter experts from various business units to share ideas, drive innovation and improve outcomes for our customers
- the introduction of annual Team Forums to enable employees from across different business units to get to know each other better and improve the way we work together
- the reintroduction of the annual Managers' Forum for Coal Services leaders to receive updates and exchange information regarding the company's strategic direction, change management and business planning.

## Organisational learning and development

We support our employees by providing a suite of blended learning programs through custom eLearning modules, LinkedIn Learning and classroom training to help develop the skills, capabilities and knowledge to perform their duties.

### Key programs include:

#### New Starter Program

Upon joining the Coal Services team, new employees attend the welcome day as part of the New Starter Program designed to articulate company culture and introduce company information, policies and procedures.

# Our People *continued*

## Compliance training

Modules in this suite include zero tolerance, drug and alcohol awareness, health safety and environment (HSE), cyber security and privacy.

## Leadership Essentials

Coal Services' Leadership Essentials program commenced in January 2018 and is aimed at enhancing leadership skills across all levels of the organisation.

## Training excellence

Our workplace learning initiatives were acknowledged at the 2018 LearnX Impact Awards:

- Best Compliance Training Project (Privacy) Finalist
- Best Compliance Training Project (Health, Safety & Environment Refresher) GOLD
- Best Blended Learning Model (Health, Safety & Environment Refresher) Finalist

The annual national event is run by the LearnX Foundation; a not-for-profit organisation promoting innovative workforce learning and supporting technologies.

## Employee safety and wellbeing

We care about the safety, health and wellbeing of our people and strive to improve our health, safety and environment (HSE) performance.

### HSE Indicators

Our positive HSE indicators are the preventative measures that help to minimise the risk of injury or incidents in the workplace. These include risk assessments and the use of the 'Stop, Look, Assess, Manage' (SLAM) app to assess risk, workplace inspections, HSE committee meetings and regular HSE communications.

HSE training forms part of Coal Services' induction program for all employees. A refresher course is required every two years thereafter. Employees also have the opportunity to complete accredited First Aid, CPR refresher and Fire Warden training through Mines Rescue.

A total of 267 employees completed the HSE, First Aid and Fire Warden training during the year.

### Lag Indicators

Our work disruption (lost time injury frequency rate\*) for 2017-18 was 1.4 due to one lost time injury. The injured employee successfully returned to regular workplace duties in a short timeframe.

## Strengthening our processes

We continued to review our safety management system to ensure we maintain compliance with relevant standards. During the year Coal Services' safety management system was certified against the NSW Government Work Health and Safety Management Systems and Auditing Guidelines 5th edition.

## Diversity and inclusion

Our commitment to diversity and inclusion is aligned to our company values. We aim to attract and retain the right person for the right role regardless of gender, race, age, religion, political beliefs, sexual preference or any other factor that does not impact on their ability to perform the role.

Our recruitment processes, workplace culture, organisational learning and development and other policies and procedures help to ensure all employees have the opportunity to contribute their skills, experience and perspectives to deliver the best solutions for Coal Services and its stakeholders.

Gender diversity is a key part of our overall diversity policy, ensuring that women are represented in senior roles and on the Board. In accordance with Workplace Gender Equality Agency (WGEA) legislative reporting and compliance obligations, we lodged our 2017-18 Public Report on 25 May 2018.

\* Lost time injury frequency rates refer to the number of lost time injuries per one million hours worked.



# Our People *continued*

## Workplace profile 2017-18 (as submitted to the Workplace Gender Equality Agency for the period 1 April 2017 to 31 March 2018)

	WOMEN					MEN					TOTAL		
	Full time	Full time contract	Part time permanent	Part time contract	Casual	Full time	Full time contract	Part time permanent	Part time contract	Casual	Total	Women %	Men %
Managing Director/CEO	1										1	100	0
Key management personnel	1					5					6	16.67	83.33
Senior managers	11	1	1			12			1		26	50.00	50.00
Other managers	1	2				5	2				10	30.00	70.00
Professionals	65	13	40	1	14	67	15	2	1	5	223	59.64	40.36
Technicians and trade	1					25	2				28	3.57	96.43
Clerical and administrative	40	16	24	4	3					1	88	98.86	1.14
Other										1	1	0.00	100.00
<b>Total</b>	<b>120</b>	<b>32</b>	<b>65</b>	<b>5</b>	<b>17</b>	<b>114</b>	<b>19</b>	<b>2</b>	<b>2</b>	<b>7</b>	<b>383</b>	<b>62.40</b>	<b>37.60</b>
Female Representation						Male Representation					Total	Women %	Men %
Board					1					6	7	14.29	85.71

Coal Services is required to report its workplace profile annually under the *Workplace Gender Equality Act 2012*. Figures correct as at 31 March 2018. Total employment at 30 June is 387 (Full time equivalent is 326).

The *Workplace Gender Equality Act 2012* focuses on promoting and improving gender equality and outcomes for both women and men in the workplace.

The Act requires all non-public sector employers with 100 or more employees to report annually to the WGEA on their outcomes against six gender equality indicators, including submission of a workplace profile.

# Our Customers

## Working with our industry stakeholders

Partnering with our customers and other industry stakeholders to mitigate their risks is key to delivering on our responsibilities in ensuring a strong, efficient and successful NSW coal industry.

During the year we explored how to develop and embed a more customer-centric approach with a view to increased engagement, collaboration and improved stakeholder satisfaction. This included looking to build the right culture and capabilities to aid in realising one of our key 2020 strategies, Focus on Customer. We also endeavoured to better understand our stakeholders' needs and views, and demonstrate more proactive face to face consultation from across all levels of the business.

The latter half of 2017-18 saw a significant increase in targeted engagement with key stakeholders regarding legislative changes and impacts and operational changes. Consultation meetings also took place with key customers to understand first hand their issues and challenges, and to look at ways to partner together to deliver meaningful solutions.

## Formalising our approach to Stakeholder Engagement

It is important that we understand our various stakeholders' diverse operational needs and expectations to ensure our approach to engagement delivers better outcomes.

The Stakeholder Engagement Framework was completed and approved by the General Management Team during the year.

The framework will support:

- Positioning stakeholder engagement as a core business activity for Coal Services
- Embedding stakeholder engagement at all levels of strategic and operational planning
- Ensuring a tailored and coherent approach to stakeholder engagement across Coal Services
- Enabling better planned and more informed policies, projects, programs and services
- Facilitating effective collaboration and knowledge sharing
- Demonstrating our commitment to working with our stakeholders.

## Stakeholder feedback

During the year we focused on implementing ways to gain valuable insights into our stakeholder relationships, our service provisions and performance to direct future efforts in respect to our areas of focus, both strategically and operationally.

Throughout March and April we conducted 15 interviews with existing customers. The insights we gained through these sessions were invaluable. We learnt what we are doing well and should keep doing; as well as areas that we can improve on.

Following on from the customer interviews, we introduced a dedicated feedback and complaints handling line to ensure that all feedback is captured and can be acted upon. **1800 LISTEN** is a toll-free number for this purpose and complements our other feedback mechanisms.

## Customer Feedback Management System

The Qualtrics Enterprise Feedback System was rolled out across most business units during the year. The system includes surveys via SMS, kiosk-based point-of-service, email and paper-based forms.

- B2C (workers – injured and non-injured) surveys are now in place across most operational business units.
- The B2B (policyholders and other companies) survey implementation will be rolled out in 2018-19 as various formal and informal qualitative feedback initiatives were undertaken during 2017-18.

# Our Customers *continued*

## Customer satisfaction

The recordable customer satisfaction levels of workers (injured and non-injured) remained steady and positive during the year, while our self-rated view of the level of satisfaction from our policyholders experienced a decline. This may be attributed to a period of disruption particularly in the latter part of 2017-18 that included legislative changes and substantial operational transformation in some parts of the business.

Significant efforts have been made and we will continue to increase our consultation and engagement with these customers to work through these challenges and to partner with them to look at service provision improvements to better meet their needs.

B2C satisfaction score*	
Coal Mines Insurance	65.91%
CS Health	96.71%
Mines Rescue	89.50%

\*B2C satisfaction scores from those who completed satisfaction surveys at each Business Unit level. A qualitative feedback process is also in place to complement the formal survey mechanism.

## Industry leadership and support

As health and safety leaders we are often invited to provide insights and perspectives on current and emerging issues affecting our industry and the regions in which we operate.

Some of the forums we participated in during the year include the annual NSW Mining Health, Safety, Environment & Community (HSEC) Conference; the CFMMEU Northern Districts AGM; the bi-annual Asia-Pacific International Mining Exhibition (AIMEX) and the Committee for Economic Development of Australia's (CEDA) annual Newcastle and Hunter Region Economic Development Forum.

We facilitate the Standing Committee on Airborne Contaminants (Standing Dust Committee) which is a sub-committee of our Board; and the Mines Rescue Working Group. We are represented on the NSW Mine Safety Advisory Council (MSAC) and the Health Management Advisory Committee (HMAC), a working party under MSAC; and the International Mines Rescue Body.

## Community Events and Sponsorships

Coal Services establishes strong ties with NSW coal mining communities through support of not-for-profit organisations and industry and community events.

These sponsorships and community partnerships aim to:

- Communicate and support programs to change or influence behaviours that lead to better health, safety and wellbeing outcomes
- increase awareness of Coal Services and our range of services.

Our purpose, vision and values have the central theme of protecting the health and wellbeing of the NSW coal mining industry and its workers. This includes giving back to mining communities and extending support to local initiatives and events.



### Westpac Rescue Helicopter Service

Coal Services is proud to be a sponsor of the Westpac Rescue Helicopter Service (the Service) as it embodies our commitment to giving back to industry, families and the communities in which we operate. This invaluable community service performs almost 2,000 life-saving missions annually and relies on corporate sponsorships and community fundraising to do so.

In addition to our corporate agreement, each year we participate in various fundraising events in support of the Service including the Hunter Valley Mining Charity Rugby League Knockout Competition, the Hunter Golf Day and the Wests Cycle Classic.



**Our purpose, vision and values have the central theme of protecting the health and wellbeing of the NSW coal mining industry and its workers.**



## Community Events and Sponsorships *continued*



### Newcastle Knights 'Voice for Mining Family Day'

Coal Services participated in the sixth annual Voice for Mining Family Day held on Saturday, 9 June at the Newcastle Knights home game.

The event is a joint initiative between the NSW Minerals Council and the Knights to recognise the contribution that coal mining makes to the Hunter region. It also provides a chance for workers, their families and the local community to show their support for the women and men that make up our local mining industry.

Coal Services was among a number of industry supporters to hold a pre-game stall to give away goodies to fans, while representatives from Coal Mines Insurance's Singleton and Argenton offices took part in the Guard of Honour as the Knights and Roosters ran onto the field.



### Hunter Coal Festival 2018

The Hunter Coal Festival was staged in the Upper Hunter region in April 2018. The week-long event aims to promote co-existence between the mining industry and local community.

Coal Services is proud to sponsor and contribute to many Hunter Coal Festival events to reinforce the role of health and safety in the industry; including participation at the Mining Leaders Lunch and the community day.

An emergency simulation showcased how Mines Rescue, brigadesmen and local emergency response functions coordinate their efforts to provide assistance in the event of a serious incident.



### Roof bolting and coal shovelling titles

The roof bolting and coal shovelling challenge has been a major attraction to the Blackheath Rhododendron Festival for many years. Coal Services has long supported this annual event in support of showcasing mining-related tasks to the community. Teams from across NSW, Queensland and Tasmania competed at the 2017 Australian Roof Bolting and Coal Shovelling Titles in November.



## Community Events and Sponsorships *continued*



### Sparke Helmore Newcastle City Triathlon 2017

The community-focused event is a great opportunity to work together, raise brand awareness and promote an active and healthy lifestyle for all ages. The triathlon is one of the largest held in NSW and raises funds for local and NSW charities.

Coal Services was once again a bronze sponsor of the 25th annual Sparke Helmore Newcastle City Triathlon on Sunday, 25 February. The event was well-represented with 11 Coal Services employees competing on the day. The Coal Services Cup went to NewPort Technical Services (Team NewPort 2) for being the fastest coal team in the Sprint Distance event.

### Other community engagement

Community open days provide the opportunity for us to work together with our customers to demonstrate a range of mining-related activities for the community and other local businesses. These events provide a platform to showcase the health and rescue services we deliver to protect the NSW coal industry and its workers.

Some of the many events we have taken part in during the year include open days at Bengalla, Mt Owen and Bulga mines and the Singleton Emergency Services Expo. Mines Rescue have also hosted Rotary and other community service groups to provide an insight into the work we do.



### Coal Services welfare grants

Welfare funds are granted for the benefit of workers and former workers of the NSW coal mining industry, their dependants and communities. Grants were approved to thank retired mine worker communities for their contribution to our industry; and other beneficiaries included special needs children in communities aligned to our regional coal mining communities.

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**Community open days provide the opportunity for us to work together with our customers.**

# Caring for the Environment

We continue to review and implement policies and programs that help us meet community standards. We have implemented practices that help us to conduct our business in an environmentally friendly manner across our eleven sites.

## Employee Education

Environmental management awareness is included in the HSE refresher program for all employees and an 'environmental clip' is distributed quarterly to inform employees of our environmental initiatives.

## Energy consumption

We have introduced energy efficient lighting such as Light Emitting Diodes (LED) and smart sensors when upgrading across Coal Services premises and are planning to reduce and replace printers across all business units to be eco-friendly and more energy efficient. The practice of switching off electrical equipment and appliances such as a computers and air conditioners at the end of each day and having air conditioners fitted to timers when possible is also encouraged.

## Recycling

We have provided recycling bins for plastics, paper and cardboard when possible and recycle printer cartridges, obsolete IT equipment and other consumables to save these components from entering landfill.

## Mindful paper usage

Electronic scanning of hard copy records continued as part of the electronic documents and records management system (eDRMS) to reduce paper and storage costs. Reduced paper usage is also encouraged by increased use of online tools, paperless work processes and reporting functionality; design of forms to include e-friendly documents; and increasing use of electronic methods to conduct business with our customers to not only reduce our environmental footprint but to improve the customer experience.

## Motor vehicle emissions

We aim to minimise emissions by purchasing new fleet vehicles based on their performance, safety, cost and environmental impacts and perform regular vehicle maintenance to ensure optimal running efficiency and environmental performance. Car-pooling and use of public transport is encouraged where possible as well as use of our video or conferencing facilities as alternatives to meetings that involve travel.

## NSW Environment Protection Authority PFAS investigation program

NSW Mines Rescue (Mines Rescue) voluntarily entered the NSW Environment Protection Authority's (EPA's) PFAS (Per- and Poly-Fluoroalkyl Substances) investigation program in April 2017, beginning with a preliminary soil and sediment sampling plan around the Hunter Valley and Newcastle facilities. Trace levels of PFAS were found and triggered further investigation in a phase two study. It is important to note that this is a legacy issue due to the use of fire fighting foams containing PFAS which were used in small quantities at these sites prior to 2002.

Further phase two investigations were carried out at the Hunter Valley, Newcastle and Lithgow Mines Rescue facilities with the final report made publicly available in October 2017. For detail on these investigations please refer to [our website](#).

The Woonona station did not undergo testing. Mines Rescue has operated from this site since 2008; after PFAS was phased out at Mines Rescue.

Further investigations are complete and are in the process of being reported by GHD for discussion with the EPA as part of our phase three study with findings expected to be released by early 2019. The EPA approved the phase three Sampling Analysis and Quality Plan (SAQP) on 26 June 2018.

# Specialised Health and Safety Scheme





# Workers Compensation



Coal Mines Insurance (CMI) is responsible for providing workers compensation insurance to the NSW coal industry and administers the Coal Mines Insurance Workers Compensation Scheme (the Scheme).

Workers exposed to risk vs. claims frequency rate



# Workers Compensation



Coal Mines Insurance (CMI) is responsible for managing and administering a workers compensation scheme for the NSW coal mining industry.

CMI must ensure there is a strong and sustainable workers compensation scheme for the workers of today but also the workers of the future.

CMI has two customers: workers and employers.

Employers pay a premium in exchange for workers compensation coverage – this funds the cost of claims that provide medical and financial support to injured workers to return them to work. Premiums also support Coal Services' provision of statutory services that protect workers' health and safety including health surveillance and dust monitoring.

Workers are the primary beneficiary of our Scheme.

## Scheme profile

Throughout 2017-18, CMI provided workers compensation insurance for 693 policyholders.

At 30 June 2018, the Scheme protected 25,161 exposed to risk (actual) workers, reflecting an 8 per cent increase from 23,233 exposed to risk (actual) workers in 2016-17. The year to date average at 30 June 2018 was 24,650 workers compared to 22,591 workers in 2016-17.

Assessable wages were higher than expected in 2017-18 as the industry's workforce continued to grow. Assessable wages were \$3.3 billion compared to a budget of \$2.79 billion. This resulted in a premium pool for the year of \$111 million which was up from \$99 million in 2016-17 and \$101 million in 2015-16.



# Workers Compensation *continued*



## Target premium performance

CMI obtains independent actuarial advice each year on outstanding claims liabilities and the premium pool required for the coming financial year. It is based on collecting the necessary funds to pay for policy and claims services for employers and workers as well as statutory services provided by the Coal Services Group.

The Scheme Target Premium Collection Rate (TPCR) for a policy year represents the proposed premium to be collected over all insured employers, expressed as a percentage of covered wages.

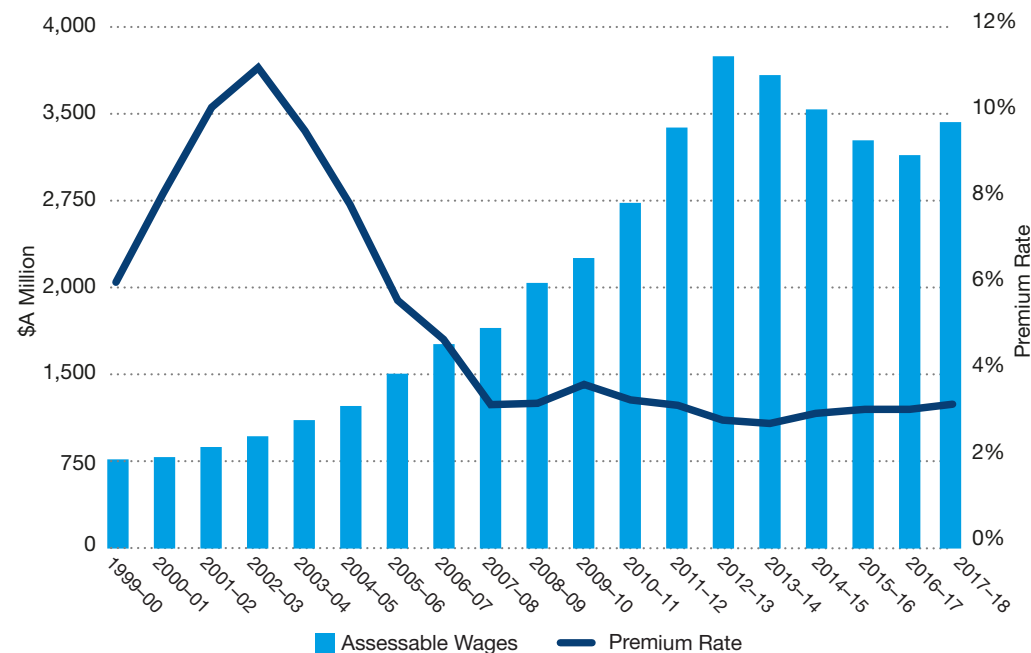
At 30 June 2018 the actual Scheme premium collection rate was 3.38 per cent against the TPCR of 3.25 per cent. The actual collection rate vs. TPCR varies according to

fluctuations in the number of exposed to risk workers, wages, and the types of work being undertaken as well as the impact of bad or doubtful debts.

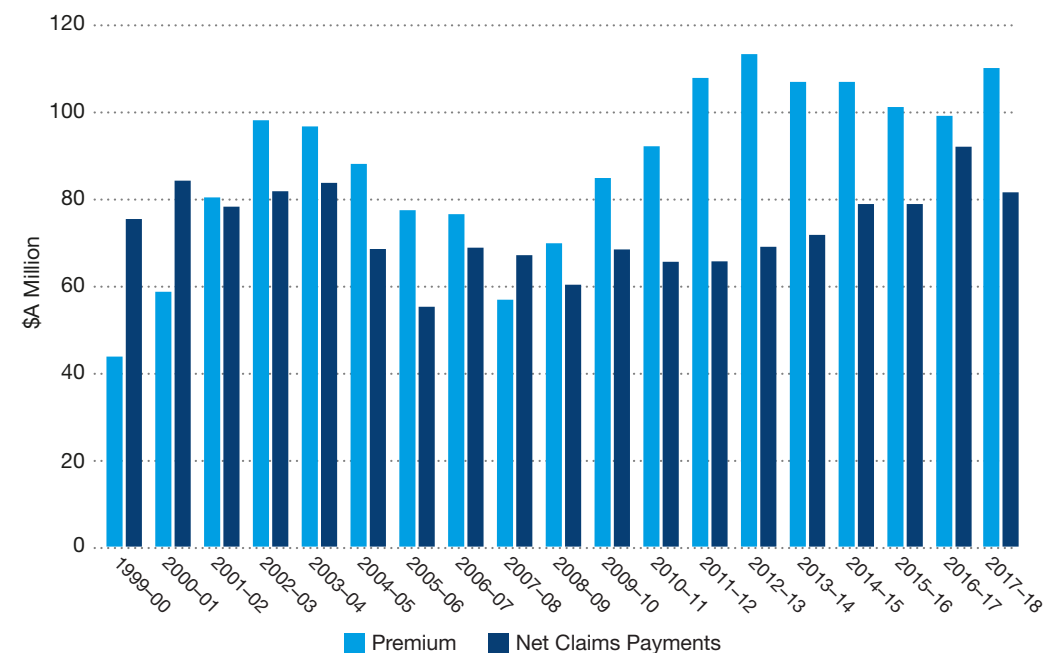
The TPCR had been held at 3.2 per cent since the 2012-13 policy year, however; to cover increased claim costs while continuing to support the industry by maintaining premium rate stability, the TPCR was set at 3.25 per cent for the 2017-18 policy year. The TPCR has been set at 3.35 per cent for the 2018-19 policy year.

The graphs below demonstrate the impact of a changing industry on Scheme performance. Graph 1 represents assessable wages versus the TPCR and Graph 2 shows premium collected against claims payments over a period of 19 years.

**Graph 1 Assessable wages vs. Target Premium Collection Rate**



**Graph 2 Premium vs net claims payments**



# Workers Compensation *continued*



In the early 2000's assessable wages were much lower than today, however; the Scheme premium rate was 11 percent. As assessable wages grew, the TPCR reduced which is reflective of both the industry's expansion and a concerted effort by industry to work together to improve safety and reduce injuries. It is imperative to note that assessable wages have contracted since 2013-14 and have only begun to turn during 2017-18 with workforce numbers gradually increasing.

Claims payments have steadily increased since 2011-12, with the most significant increases year on year in 2014-15 and 2016-17. The graphs also indicate a similar trend in the early 2000's when claims payments continued to increase year on year from 2000 to 2004, which also followed a sustained period of industry expansion then contraction. Commencing in 2016-17 CMI started to implement several initiatives to mitigate the Scheme's deterioration, including trialling a new operating model for a 12 month period, which will be rolled out across the business in 2018-19 and new strategies for the management of legal claims. This has resulted in a reduction in net claims payments in 2017-18.

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**CMI has started to implement several initiatives to mitigate the Scheme's deterioration which has already seen reductions in net claims payments in 2017-18.**

## Our new operating model

The Injury Prevention and Injury Management (IPIM) program has the overarching objective to implement a best practice business model that delivers quality injury prevention and injury management services to employers and workers in the coal mining industry. The program was designed to be implemented in four stages over six years as one of the key elements of Coal Services' 2020 Strategy to 'Strengthen the Specialised Health and Safety Scheme'.

Stage 1 of the program delivered a new operating model that changes the way claims are managed and how services are provided to employers. The model segments claims by complexity and separates the functions of 'care' and 'liability'. The concept enables the specialist skill sets of Injury Management Specialists (focused on care) and of Case Managers (focused on determination of liability and claim strategy) to better service the needs of injured workers and employers. Both are supported by an in-house legal specialist.

Stage 2 of the program commenced in March 2017 with the launch of a twelve-month trial of the new operating model. This stage involved the creation of a separate working environment to the current CMI business line where best practice case management and account management could be trialled on a voluntary basis by employers. The trial concluded in March 2018 whereby the model continued on a business as usual basis for those participating employers.

During the trial period a total of 277 new claims were received with an actual return to work rate of 93 per cent. In addition to these positive outcomes, the trial demonstrated performance improvements in payment of benefits within seven days, customer experience, speed in determining liability and a reduction in legal costs.

# Workers Compensation *continued*



Due to the success of the trial the new operating model was approved by the Coal Services Board to be rolled out across CMI starting in 2018-19.

<b>Purpose:</b> To Protect	<b>Vision:</b> To partner with industry for a safe workplace and a healthy workforce	<b>Our purpose &amp; vision</b>
<b>To be best in class</b> Integrated workers compensation solutions; seamless outward facing customer service		<b>Our aim</b>
<b>CMI Prevention:</b> In partnership with customers and Coal Services' business units use our information and insight to create integrated insurance risk management strategies	<b>Performance Assessment:</b> optimising scheme and business performance to maximise value for customers and shareholders	<b>Operations Management:</b> delivering best practice claims and policy management services
<b>Analysis</b> – data and business <b>Advisory</b> – insurance prevention and loss <b>Education</b> – knowledge sharing	<b>Scheme</b> – governance and results <b>Advisory</b> – knowledge, interpretation and application <b>Education</b> – financial/non-financial	<b>Customer service</b> <b>Worker-centred care</b> <b>RTW &amp; injury management</b> <b>Policy management</b>
<b>Sharing our expertise, insights and knowledge in prevention, recovery &amp; RTW</b>		

## Account management

As part of the IPIM program, a new account management model was introduced to build on the existing portfolio management approach, which had been applied to only a few of the Scheme's larger employers. Employers participating in the new case management model trial were each assigned an Account Manager with positive feedback from both employers and CMI. It is intended to significantly increase the number of policyholders assigned an account manager, as well as offering a range of supporting service options across the Scheme.

The account management function acts as a conduit between employers and our claims and policy operations to help employers manage their workers compensation liability and focus on improving injury management and return to work practices and outcomes.

## Stakeholder engagement

Work to build and maintain relationships with employers, workers and industry representatives continued during the year by way of regular meetings with the NSW Minerals Council Workers Compensation Working Group and the CFMMEU. There was also the opportunity during the year to attend the CFMMEU Northern District Annual General Meeting and speak to union delegates directly.

These meetings aimed to improve communications and promote a more collaborative approach between CMI and these stakeholders in relation to workers compensation matters, key CMI initiatives and to support injured workers.

## Skills Incentive Scheme

The Skills Incentive Scheme (SIS) was introduced during the 2015-16 policy year to support the hiring and training of apprentices and reinforce safe work practices as they enter the NSW coal mining industry. The SIS is designed to encourage employers in the industry to take on apprentices by providing an incentive payment of \$2,000 per eligible apprentice at the end of a policy period (subject to capping and conditions).

SIS payments were made to 35 policyholders who employed 360 apprentices during the 2016-17 policy period.

# Workers Compensation *continued*



## Claims costs and payments

During the year CMI continued to implement new strategies for managing legal claims, early intervention treatment plans and focus on return to work which had a positive impact on claims costs. In 2017-18 the net total payment for all CMI claims was \$81.8 million, which represents an 11 per cent reduction from the \$92 million paid in 2016-17.

In light of this result and the strategies in place to manage claims costs, the Scheme Actuary has advised a net outstanding claims provision of \$398.1 million as at 30 June 2018. This is down from \$405.5 million as at 30 June 2017.

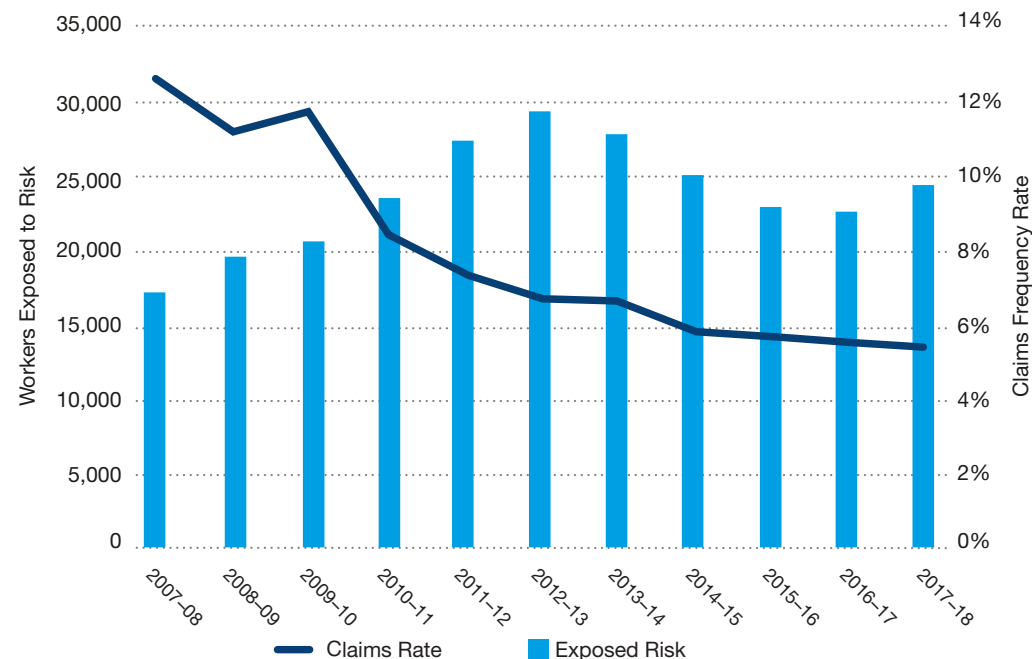
## Claims and injury trends

CMI aims to ensure all notifications and claims are managed to an optimal outcome through a focus on early intervention and person-centred case management and return to work initiatives, as well as meeting legislative obligations.

The rise in employment numbers was sufficient to offset the increase in the number of new claims received during the year to return a claims frequency rate of 5.4 per cent for 2017-18. When Coal Services was established in 2001-02, 1 in 4 workers sustained a workplace injury. The claims frequency rate has consistently declined since that time to less than 1 in 18 workers – a reduction of more than 78 per cent.

Of the 1,323 new claims received, 59 per cent (743) were significant injury claims where the worker is likely to be incapacitated (partial or total) for a continuous period of more than seven days.

Exposed to Risk vs Claims Rate By Financial Year



	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
New claims reported during the year	1,922	1,823	1,441	1,271	1,238	1,323
Significant injury claims reported	1,104	1,022	714	748	733	743
Current, open claims at start of each year	1,758	2,133	2,207	1,682	1,651	1,874

# Workers Compensation *continued*



## Return to work

Research has consistently shown that returning injured workers to full employment is better for their recovery, health and wellbeing than being away from work. For employers, a worker's return to suitable duties while recovering from an injury can also impact on premium, as well as improving outcomes for injured workers.

Early reporting and treatment intervention is crucial to achieving sustainable return to work. CMI continued to focus on improving return to work rates by working with employers to provide suitable duties for workers and report injuries within the legislated timeframe. This, combined with the results from the trial of a new operating model, resulted in a significant improvement in the 0-13 week cohort. A return to work rate of 88.7 per cent was achieved in this cohort against a target of 95 per cent. While the target is yet to be achieved, the result is an improvement on the rate of 87 per cent achieved in 2016-17.

Delays in reporting of claims, lack of available suitable duties for some operators and legal intervention early in the life of a claim are areas that require further attention.

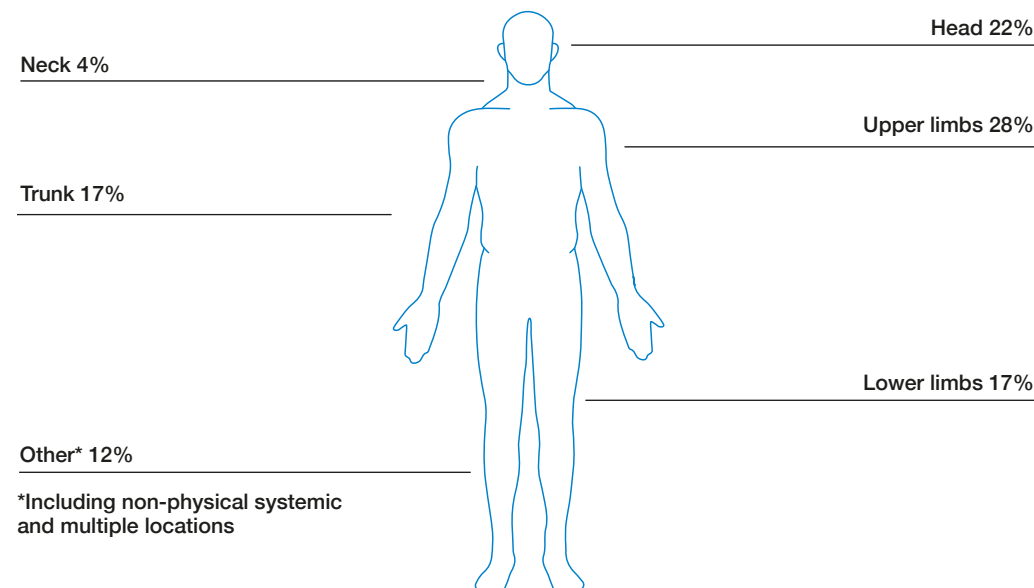
	Target	2017-18
0-13 weeks	95%	88.7%
13-26 weeks	90%	89.6%
26-52 weeks	85%	89.2%
52-78 weeks	85%	88.4%

## Nature of injury

**Sprains and strains** accounted for 514 of all new claims received in 2017-18 and remain the most common type of injury. Of these, 412 (80 per cent) were significant injury claims; an increase of 6 per cent compared to the previous year.

## Location of injury

The body map shows the parts of the body affected for all claims received during 2017-18.





# Workers Compensation *continued*

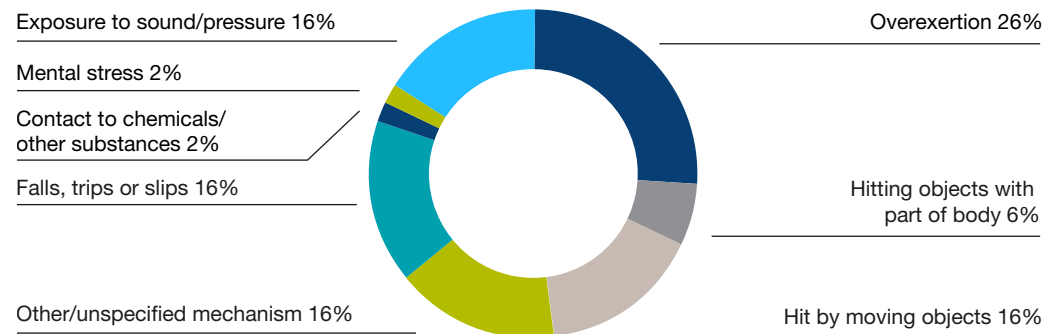


## Mechanism of injury

The mechanism of injury is best described as the circumstance in which an injury occurs, for example, sudden deceleration, wounding by a projectile, or crushing by a heavy object. The mechanism of injury helps the doctor and/or the allied health professional to understand what mechanical forces may have been in play to cause the injury and therefore assist in the diagnosis of the injury. This information gives an indication as to the potential injury recovery timeframes and guides the most appropriate treatment. This information also assists the employer to better understand risks within their workplace that need to be addressed or mitigated.

Claims data for the year showed that overexertion, slips/trips/falls, being hit by moving objects and exposure to sound were the largest risks in the workplace to cause injury. These factors can all be managed through safe, effective work practices.

**Mechanism of injury (all claims received in 2017-18)**



## Industrial deafness claims

Industrial deafness claims represented 16 per cent of all claims received (up 2.2 per cent on 2016-17) and accounted for 4.3 per cent of total claims payments. Claims payments of \$3.5 million were less than previous year due to lower lump sum settlements.

Changes made to the NSW Workers Compensation legislation in 2012 and 2015 for industrial deafness in the NSW General Scheme have, through a combination of threshold changes, legal cost capping and their application to the CMI Scheme, had the unintended consequence of increased activity and claims cost for the CMI Scheme. Key changes include:

- Removal of 6 per cent hearing loss threshold for claiming hearing aids and removal of timeframe to claim replacement hearing aids
- The threshold for claiming binaural hearing loss remains at 6 per cent for coal miners but is 20.5 per cent (11 per cent whole person impairment) for workers covered in the NSW General Scheme.

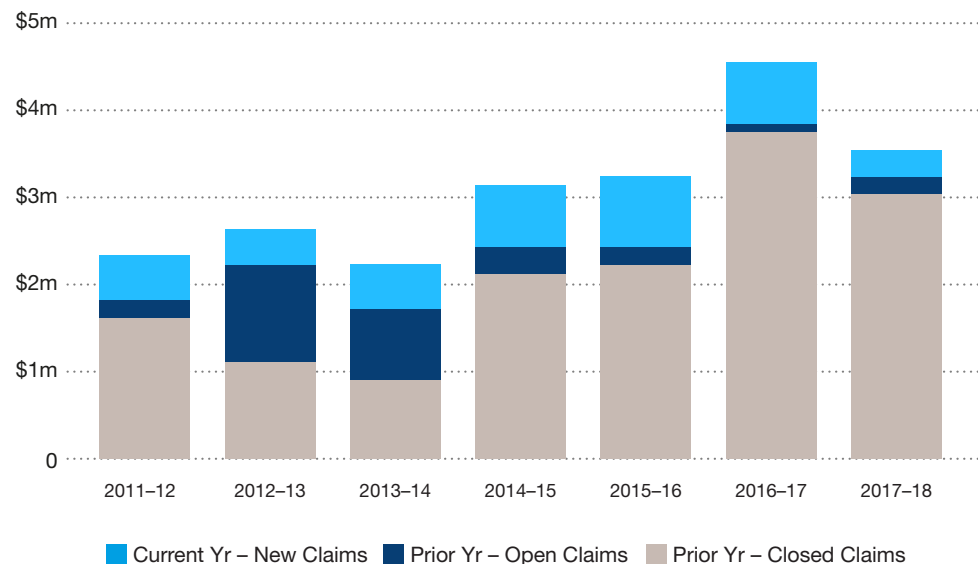
**16%** of claims reported were for industrial deafness, up 2.2% from 2016-17.

# Workers Compensation *continued*



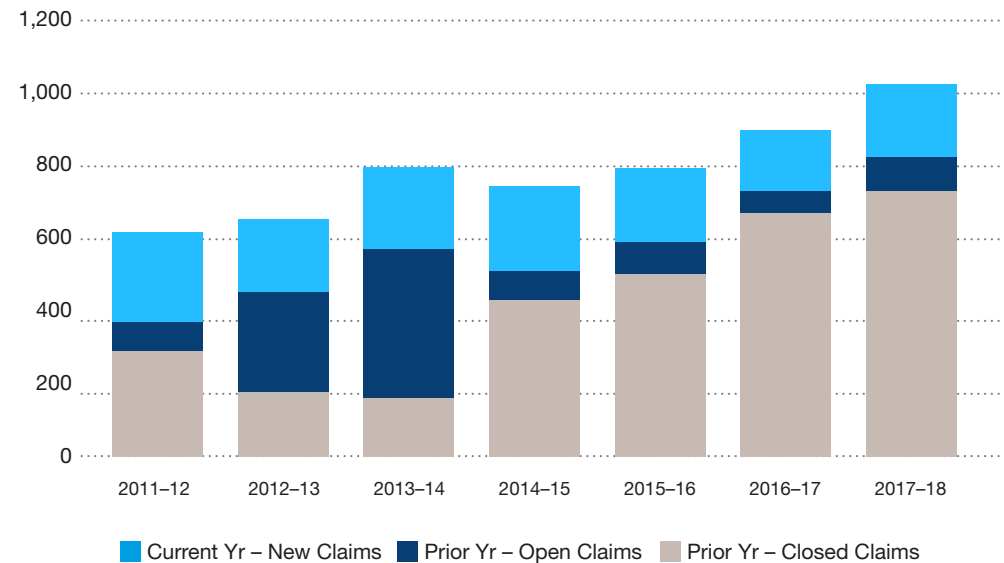
These amendments contributed to an increase in industrial deafness claims reported and cost in the CMI Scheme on two counts: hearing aids and replacements became available without a threshold and a replacement timeframe. Claims costs incurred during 2017-18 remain lower than that for 2016-17, however; remain above the pre-2015 legislation change level of \$2.5 million [ID Graph 1].

**ID Graph 1: Industrial Deafness Claims Costs Incurred**



Current Year = same period as Financial Year (x-axis)  
 Prior Year = 1 year prior to Financial Year (x-axis)  
 Prior Years = 2 or greater years prior to Financial Year (x-axis)

**ID Graph 2: Industrial Deafness Claims Count (where payments have been made)**



Current Year = same period as Financial Year (x-axis)  
 Prior Year = 1 year prior to Financial Year (x-axis)  
 Prior Years = 2 or greater years prior to Financial Year (x-axis)

## Psychological injury claims

Claims for psychological injury accounted for approximately 1.9 per cent of all new claims received in 2017-18, a slight increase to the number received in 2016-17.

Work-related harassment and/or workplace bullying accounted for 48 per cent of claims received for psychological injury, while work pressure and other mental stress factors accounted for 30 per cent. Psychological injury relating to a traumatic event accounted for 22 per cent of claims received, an increase from 13 per cent of claims received in 2016-17.

# Workers Compensation *continued*



While this cohort of claims is a small proportion of overall claims, periods of incapacity for work tend to be longer and they generally incur a considerably higher claims cost.

Year that the claim was reported	Average incurred cost per psychological injury claim	Average incurred cost per all other significant injury claims
2017-18	\$68,440	\$20,870
2016-17	\$128,540	\$36,304
2015-16	\$218,797	\$64,094
2014-15	\$148,570	\$77,042
2013-14	\$151,638	\$66,198

This table presents a comparison of the cost to manage a psychological injury claim compared to the average cost of all other significant injury claim types. These costs are developed (in terms of their total cost since their date of injury) and are measured as at 30 June 2018.

## Other initiatives

### Dedicated information for workers

Worker information cards were distributed in March 2018 to help educate workers and employers about the workers compensation process and their obligations under the relevant legislation. The campaign primarily targeted workers to ensure they have the right information when they need it most – following a work-related injury.

A centralised phone number, '1800-WORKER', was established as part of the campaign for workers and employers to call if they need help in making a claim or if they have questions about claiming.

A poster was developed and distributed for display at work sites to complement the worker information cards.

### Partnering with SIRA and SafeWork NSW to improve return to work

In 2017, the State Insurance Regulatory Authority (SIRA) worked with SafeWork NSW on a special initiative to improve return to work outcomes and help employers manage their obligations under the *Workplace Injury Management and Workers Compensation Act 1998*.

Following success in the general NSW workers compensation scheme, the project commenced in 2018 for NSW specialised insurers, including CMI.

The project uses claims data and data mining models to identify where return to work may be at risk of delay. Proactive strategies are then implemented, such as working with employers to identify and mitigate any barriers or risks to a safe, durable return to work.

No CMI claims were assessed during the reporting period.

### Legislation amendment

The Coal Industry Amendment Bill 2018 was assented to on 23 May 2018 and amended the *Coal Industry Act 2001* (NSW) (the Act) to include a definition of an employer in the coal industry as: "an employer in the coal industry means any employer whose employees work in or about a coal mine".

The change to the Act is intended to restore the original intention of the Act to ensure that all coal industry workers are covered by CMI and can benefit from the wider services of the specialised health and safety scheme managed by Coal Services.

It will also improve equity of workers by mandating coverage for all workers who engage in mining activities in the coal industry, whether they are employed directly by the mine operator or by a contractor or labour hire firm.

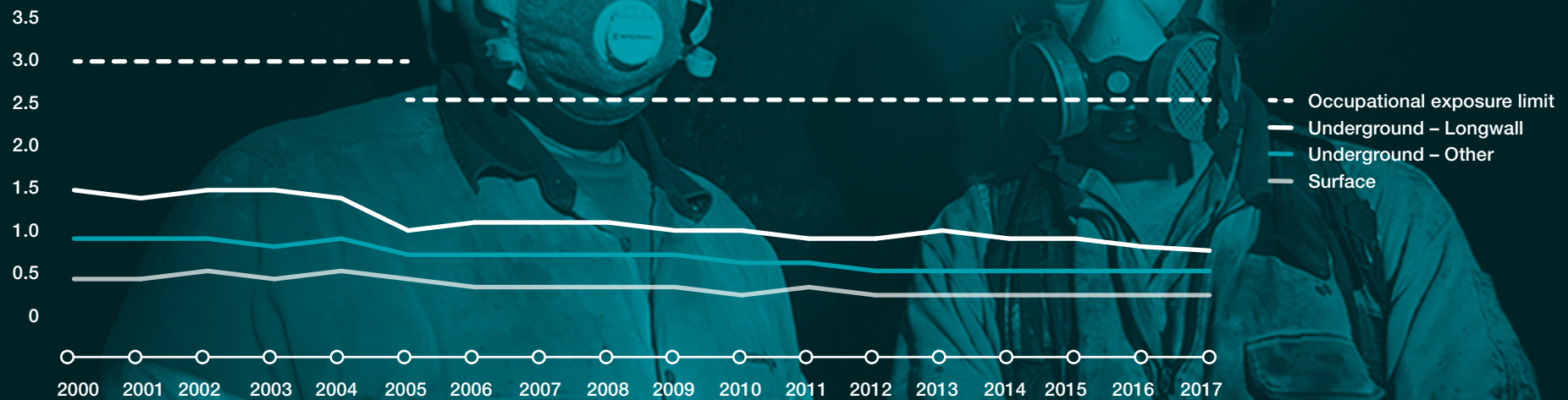
The change to the Act commenced on 1 July 2018, with a transition period to 30 September 2018.

# Health and Hygiene



Coal Services collect, analyse and report on workplace health risk data across the NSW coal industry. This information is reviewed on a regular basis to monitor and identify emerging trends and areas requiring focus, enabling Coal Services to partner with industry to help minimise health and safety risks.

Respirable dust exposure profile (mean) trends NSW coal



# CS Health



CS Health delivers a range of services to help workers, mine operators and people in the wider community to manage health risks, optimise workforce performance and care for their health and wellbeing.

## Monitoring workers' health

Under the NSW Coal Order 41 (Order 41) all employers of coal mine workers and mine operators of coal operations in NSW must ensure that their workforce, both employed workers and contractors, undergo pre-placement medical assessments and periodic health surveillance medicals.

Order 41 provided a clear set of guidelines for industry in regard to the completion of health assessments since its introduction in February 2011 and has been widely recognised as a key part of the NSW coal mining health and safety scheme. However, the re-identification of coal workers' pneumoconiosis (CWP) in the Australian coal industry in 2016 led to an extensive review of the Order. The review verified the quality and rigour of our systems, yet we felt it prudent to strengthen the Order to ensure that it was consistent with other work, health and safety legislation and that it continued to provide ongoing protection for the health of NSW coal workers.

As a result, the Coal Services Board agreed on changes to health monitoring requirements for NSW coal mine workers. Coal Order 43 was approved by the Minister under the *Coal Industry Act 2001* (NSW) and came into effect on 1 July 2018.

## Pre-placement Medical Assessments

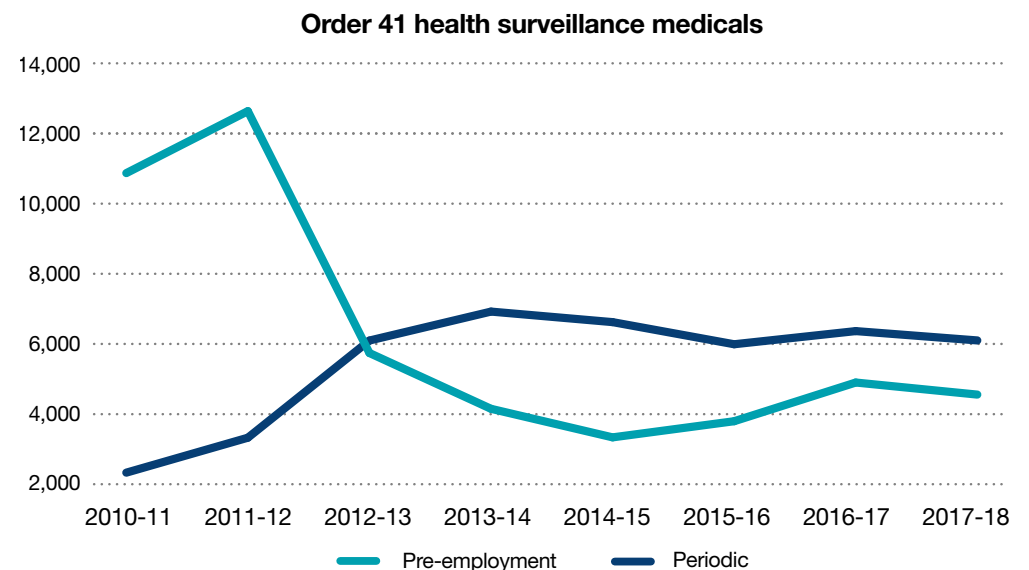
A pre-placement medical assessment is required before an individual commences work or changes roles in the NSW coal industry. This includes a chest x-ray for new entrants to the industry. The medical and chest x-ray serve as a baseline for future health surveillance.

4,549 pre-placement health surveillance medicals were conducted in 2017-18.

## Periodic Health Surveillance

As most occupational illnesses take many years to develop, regular health surveillance allows for early detection and intervention with the goal of ensuring that workers can continue to work safely. In NSW, every coal worker must undergo periodic health surveillance (known as a periodic medical assessment) every three years. The periodic medical assessment focuses on a range of occupational health issues including dust, noise, fatigue and vibration. It also includes an assessment for general health issues that may arise from workplace exposure including an assessment of the cardiovascular system, mental health, musculoskeletal issues and alcohol use. The periodic medical assessment ensures that workers' ongoing health is protected and monitored for any adverse health risks as a result of their employment.

6,093 periodic health surveillance medicals were completed by CS Health in 2017-18.



Above: Attendances for periodic health surveillance medicals grew significantly after Order 41 was introduced in 2011; fluctuating with numbers employed in the industry as well as the cyclic nature of the medicals. Pre-placement medicals experienced a rapid decline in 2012-2013 as a result of the downturn and remain an indicator of industry growth.



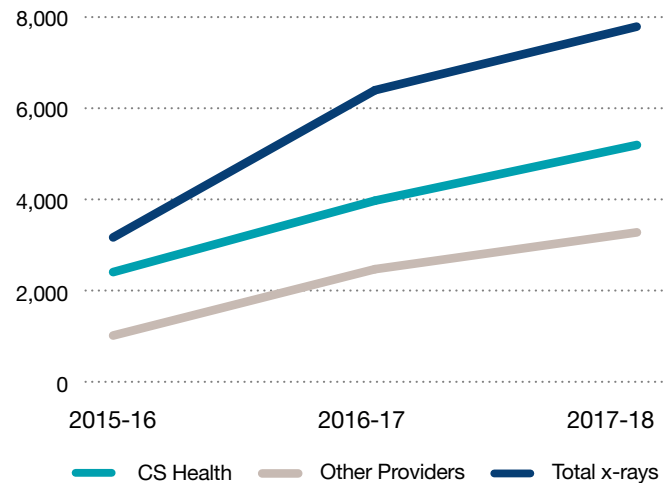
# CS Health *continued*



## Periodic chest x-rays

Order 41 also stipulates that coal workers must attend a periodic chest x-ray to assist in detecting any abnormalities of the lungs or heart that may require further assessment. We have x-ray facilities located at our Singleton and Lithgow premises with external providers being utilised in Mudgee, Speers Point and Woonona.

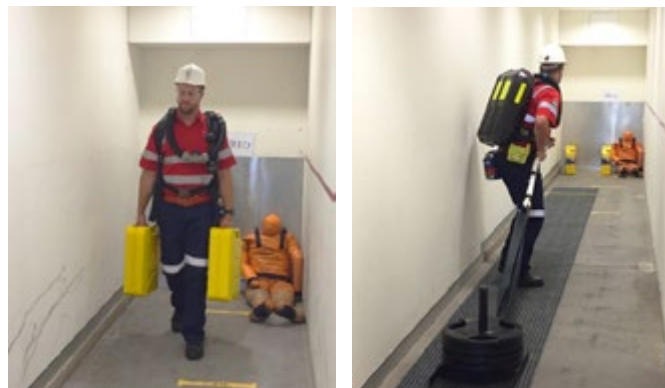
Periodic chest x-rays



## Working together to improve industry health and wellbeing

### Improved functional assessments for brigadesmen

Supported by the Coal Services Health & Safety Trust, medical research staff from the University of Wollongong worked with CS Health and Mines Rescue to identify the minimum standard of occupational fitness required to perform critical emergency response activities and develop bona fide physical aptitude tests to these needs. CS Health applied the research to develop a new functional capacity evaluation for mines rescue brigadesmen. A trial of the new assessment will be conducted from August 2018 with roll out across all mines rescue districts expected later in 2018.



## Task rotation in an underground mine

In 2016, CS Health and Centennial Coal partnered in a study that aimed to investigate the physical and psychological effects and challenges to implementing a task rotation schedule at a whole of site level in an underground coal mine. Task rotation was implemented across the whole of the Mandalong underground coal mine near Newcastle and was evaluated at three intervals.

The findings of the 12-month study were documented by the University of Newcastle and were presented to the Coal Services Health & Safety Trust in January 2018.

While the actual number of injuries during the task rotation period remained steady (an immediate improvement in injury statistics in the study period was not expected), reported musculoskeletal discomfort reduced in all body regions except the neck. Improvements were also identified in the Quality of Life (QOL) scores obtained from workforce surveys conducted during the task rotation study period.

Production at Mandalong mine was not impacted by the study or task rotation schedule. While the project is complete, task rotation is still in place at Mandalong. This is testimony to the application of task rotation in this environment.

The CS Health and Centennial Coal project was a finalist at the 2018 NSW Mining Health, Safety, Environment and Community Awards.

# CS Health *continued*



## Battling obesity

According to data derived from CS Health periodic health assessments, approximately 85 per cent of the NSW coal mining workforce is overweight or obese. There are numerous health risks associated with being overweight or obese such as high blood pressure, heart disease and diabetes. However; overweight and obesity are also linked to sleep apnoea (and therefore a heightened fatigue issue) and increased risk of musculoskeletal disorders. If injured, being overweight or obese may extend the recovery time, claim duration and cost.

Coal Services is represented on NSW Mining's Obesity Sub-committee to provide insights into the challenges faced by workers in balancing work and lifestyle issues, assist with the provision of de-identified industry health data that can be used to design workplace health initiatives and to provide advice on how healthy lifestyle programs can be incorporated into existing workplace health management programs.

## Other workplace health services

### Other medicals

In addition to statutory health surveillance required by Order 41, CS Health performs a number of workplace medicals to support the health and safety of workers in coal mining and other industries including:

- Site access medicals – typically requested for contractors to meet specific site requirements
- Pre-placement medicals – medical assessments completed for workers not directly employed within the coal industry
- Mines Rescue and emergency response team medicals – specifically designed assessments used to determine whether rescue personnel have the required fitness levels to perform these specialist activities.

	2016-17	2017-18	% Change
Site access medicals	2,547	2,425	4.78% ↓
Pre-placement medicals (workers not directly employed in the coal industry)	1,044	1,285	23.08% ↑
Mines Rescue and emergency response teams	495	371	25.05% ↓
Other medicals	526	529	0.57% ↑



**23%** increase in  
pre-placement  
medicals for  
workers not directly employed in  
the industry

# CS Health *continued*



## Personal Protective Equipment FIT-testing

Testing of personal protective equipment (PPE) is essential to effectively protect against exposure to workplace hazards such as noise, dust, gas and fumes.

E-A-R-Fit validation is conducted to help ensure that PPE is correctly fitted to protect against excessive noise exposure while respiratory fit tests are conducted to safeguard against exposure to airborne dust, gas and fumes.

Respiratory fit testing was included as part of the Order 41 pre-placement and periodic medical assessments effective from 1 March 2018. This component was added as a proactive step in protecting workers' health and providing ongoing education in the use of personal protective equipment.

	2016-17	2017-18	% change
E-A-R-fit validation	792	1,255	58.45% ↑
Respiratory fit tests	888	1,829	105.96% ↑

## Functional capacity evaluations

Functional capacity evaluations are generally conducted as part of the recruitment process or as part of a structured return to work program following injury to assess a worker's physical ability to perform tasks typical to their role. They may also help to identify focus areas for preventative strategies and education to reduce workplace injuries.

	2016-17	2017-18	% Change
Functional Capacity Evaluation	2,251	1,875	16.70% ↓

## Drug and alcohol screening

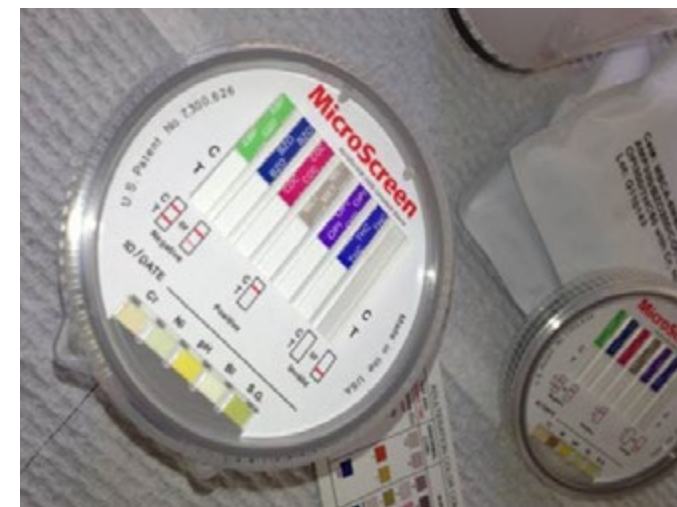
Strict drug and alcohol policies and procedures are in place across all mines sites in NSW and certain requirements must be met by the mine operations under the Coal Mines Health and Safety Regulation.

CS Health provides screening services which assist employers in meeting their regulatory obligations which require the implementation of measures to eliminate or control risks from the consumption of alcohol or drugs in the workplace and ensure workers are fit for duty.

	2016-17	2017-18	% Change
Drug and alcohol screening samples collected	14,604	16,842	15.32% ↑

From the initial drug and alcohol screening samples collected, 2.33 per cent returned a non-negative result. Opiates/morphine were detected in 45 per cent of the non-negative results, followed by cannabis (27 per cent), amphetamines (21 per cent) and methamphetamines (14 per cent). Alcohol was detected in 4 per cent of the non-negative results. Note that one sample may return traces of multiple drugs.

Education is still needed to make workers aware of the danger that drugs pose to them and their workmates, not just at work but when travelling to work and at home.



**15%** increase in drug & alcohol samples collected

# CS Health *continued*



## Immunisations

Workplace immunisation programs are an important aid to help protect workers against illness and diseases such as hepatitis A and B and tetanus. CS Health also conducts flu immunisation clinics between March and June each year for the customers across all industries and as part of our own employee wellbeing program.

	2016-17	2017-18	% Change
Immunisations administered	4,644	5,940	27.90% ↑

## Occupational rehabilitation and treatment services

	2016-17	2017-18	% Change
Rehabilitation and treatment	374	275	26.47% ↓

While there was no formal external audit required for 2017-18, CS Health completed a self-evaluation audit of rehabilitation services in November 2017. The audit was performed in accordance with SIRA guidelines and returned a 96 per cent Level 1 conformity rating.

## Business improvement

### Better Health Project

The Better Health (Process and System) Project is part of CS Health's ongoing strategy to deliver improved service to customers. The project deliverables, including re-engineered processes and a new software solution, aim to enable greater operational efficiency and better reporting to assist employers to identify, analyse and mitigate health hazard exposure trends.

2017-18 saw the completion of the planning stages of the project. These included the discovery, prioritisation and procurement phases and led to the creation of the Better Health Force to help drive change and support teams through system development and training.

The first phase of the Better Health Project is scheduled for completion in early 2019 with the implementation of the new health database system. The second phase of the project is due to commence in 2019 and will focus on delivery of Occupational Rehabilitation and Treatment services.

## Doctor accreditation

Recommendations arising from the Senate Select Committee Inquiry and the Queensland Parliamentary Inquiry were that medical practitioners performing health surveillance medicals be formally trained in the nature and conditions of the mining environment.

The NSW Coal Industry Medical Induction Program was developed based on these findings to provide an understanding of the health risks associated with coal mining and to better equip medical providers to monitor workers' health for early detection of occupational disease.

Completion of the program is a requirement for medical providers performing Order 43 medical assessments.

Workshops commenced in June 2018.

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**28%** increase in  
immunisations  
administered

# Occupational Exposure Monitoring



The detection, evaluation and control of physical and chemical hazards is the core of workplace health and safety. Coal Mines Technical Services (CMTS) provides a range of gas-related technical and occupational hygiene services that help protect workers against harmful exposure to the hazards inherent in mining and other industries.

**18** dust suppression plans were received and approved by Coal Services during the year.

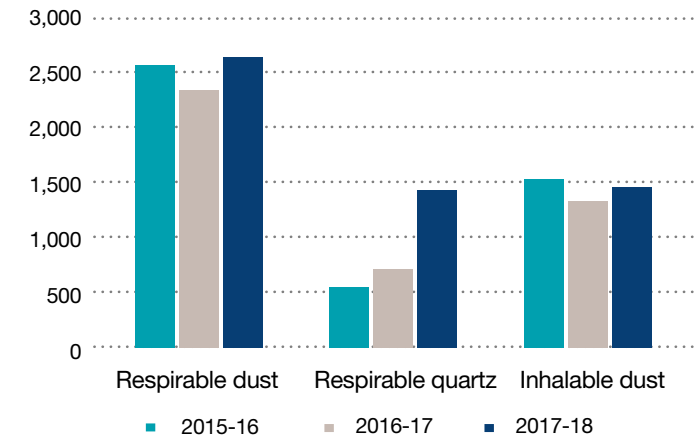
## Order 42 – Coal Services – Monitoring Airborne Dust

Order 42 gives powers to Coal Services inspectors to enter coal mine operations for the purposes of monitoring airborne dust, collecting dust samples and other functions and activities necessary to monitor airborne dust.

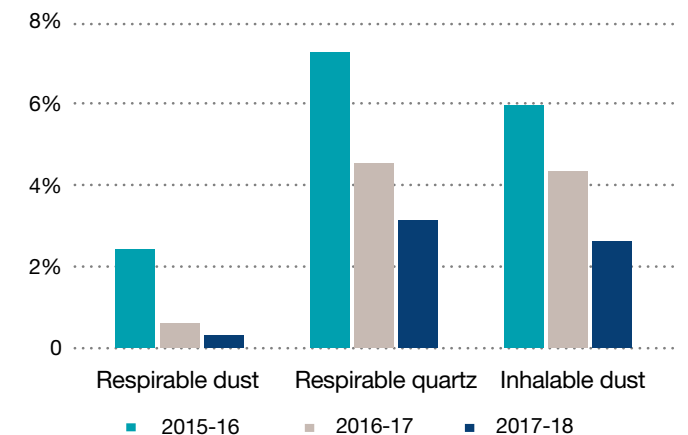
A comprehensive, targeted monitoring program is conducted in NSW to determine whether dust levels at coal mines are maintained below the approved airborne dust exposure limits. Regular onsite dust monitoring and analysis provides essential data for mines to review the effectiveness of dust control measures and identify areas or tasks that potentially present a respiratory health risk for workers.

Statutory respirable and inhalable dust samples were taken from the breathing zones of 4,047 NSW mine workers in 2017-18; an 8.4 per cent increase on statutory sampling in 2016-17. Any results found to have exceeded prescribed airborne dust occupational exposure limits were reviewed to identify potential exposure contributing factors and opportunities for exposure control. Airborne dust occupational exposure limit exceedance rates have continued to improve on previous year's results.

Order 42 Airborne Dust Exposure Results Collected



Order 42 Airborne Dust Rate of Occupational Exposure Limit Exceedances



# Occupational Exposure Monitoring *continued*

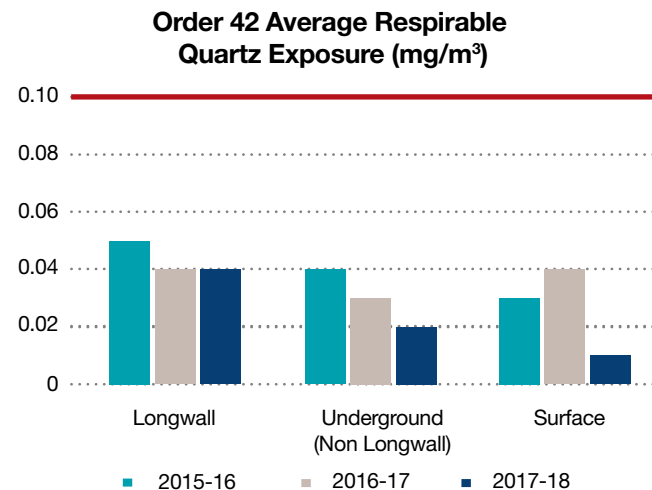
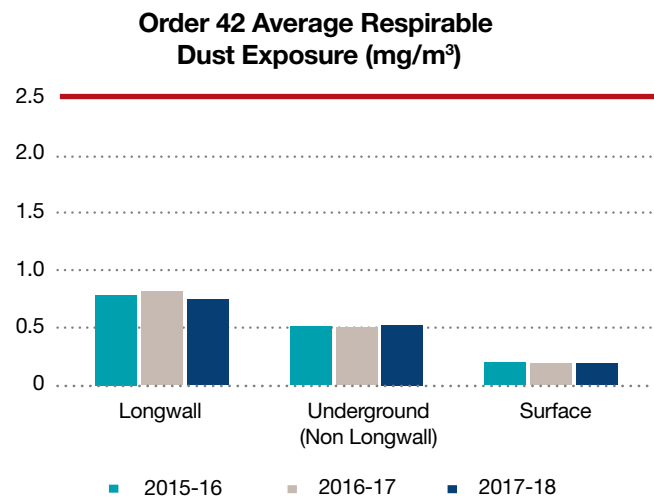


2,607 workers were assessed for respirable dust exposure in 2017-18, of whom 0.3 per cent were found to have exposure results that exceeded the specified occupational exposure limit. Respirable dust exceedance rates continued to improve when compared to the previous year's results with an exceedance rate of 0.6 per cent recorded in 2016-17. Average respirable dust exposure levels remained stable compared to 2016-17 results.

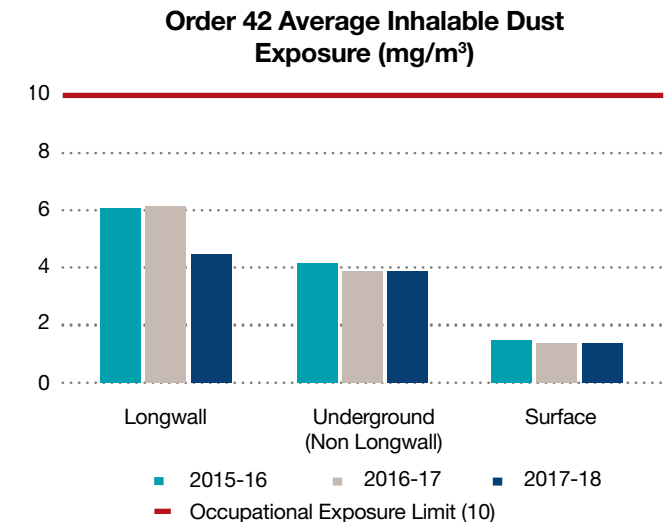
1,412 workers were assessed for respirable crystalline silica (quartz) exposure in 2017-18 of whom 3.1 per cent were found to have exposure results that exceeded the specified occupational exposure limit. Respirable crystalline silica (quartz) exceedance rates continued to improve when compared to the previous year's results with an exceedance rate of 4.5 per cent recorded in 2016-17. Average respirable crystalline silica (quartz) exposure levels improved for both underground and surface workers when compared to 2016-17 results.

The number of respirable crystalline silica (quartz) results collected increased substantially by 99.7 per cent compared to the previous year. This increase was due to the additional collection of samples as part of research into respirable crystalline silica exposure risk in NSW surface coal mining (see details below).

1,440 workers were assessed for inhalable dust exposure in 2017-18 of whom 2.6 per cent were found to have exposure results that exceeded the specified occupational exposure limit. Inhalable dust exceedance rates continued to improve when compared to the previous year's results with an exceedance rate of 4.3 per cent recorded in 2016-17. Average inhalable dust exposure levels improved for longwall workers and remained stable for general underground and surface workers when compared to 2016-17 results.



Graph showing average exposure against the occupational exposure limit over the same period. These are raw results - additional significant protection is provided by wearing RPE.



Graph showing average exposure against the occupational exposure limit over the same period. These are raw results - additional significant protection is provided by wearing RPE.



# Occupational Exposure Monitoring *continued*



## Order 40 – Abatement of Dust on Longwalls

Over 80 per cent of all coal produced by underground mining is via the longwall system as it is by far the most productive underground mining technique. However; this mining method produces significantly more airborne dust than other mining methods. As such, Order 40 requires NSW coal mine operators using longwall mining methods to submit to Coal Services a dust mitigation plan outlining the controls they intend to have in place to limit personal exposure to airborne contaminants. The plan must be approved by the Coal Services Board prior to production starting on a new longwall face.

An audit of the dust mitigation plan must be submitted once production commences to ensure that all provisions of the application, and any conditions within the approval, are in place and operational.

18 dust suppression plans were received and approved by Coal Services during the year.

## Airborne dust control assistance

The independent, accompanied airborne dust monitoring undertaken by CMTS continued to provide valuable insight into NSW coal airborne dust exposure trends. CMTS worked closely with individual mine operators to help them understand their site's airborne dust exposure risk and to assist in the review and improvement of airborne dust management plans. For example:

- Conducting real-time dust monitoring and dust mapping to identify dust sources and best practise operator positioning
- Pre and post control monitoring and verification assessments
- Providing extensive education programs to workers on airborne dust management across all regions. CMTS delivered 69 customised dust awareness presentations to 17 individual sites reaching around 2,400 workers. The aim of these sessions is to ensure workers are better informed to make smart choices in relation to control standards, operator positioning and respiratory protection use.

These education sessions are also of benefit to new starters and contractors and have been added to the Generic Underground Induction and the six-monthly CABA refresher courses respectively. These are both conducted by Mines Rescue and will assist to ensure this important component reaches as broad an audience as possible.

## Investigating respirable crystalline silica (RCS) exposure risks in NSW surface coal mining

CMTS successfully obtained a research grant to investigate respirable crystalline silica exposure risk across NSW surface coal mining operations. The project required the collection of additional personal respirable dust samples across all NSW surface coal mining operations in 2017 and 2018. Exposure risk findings will be reviewed by CS Health to ensure that evidence-based health surveillance guidelines are in place to monitor and protect NSW surface coal mine workers.

All samples collected are being analysed for respirable crystalline silica and all results are reported back to each site. This additional monitoring, analysis of samples, provision of data and reporting comes at no extra cost to each mining operation and is being funded by the Coal Services Health & Safety Trust.

Statistical analysis and review of data and observations will form the basis of a de-identified report that will be communicated to all industry stakeholders on completion of the research project in late 2018.

# Occupational Exposure Monitoring *continued*



## NATA certification for quartz analysis

CMTS achieved accreditation from the National Association of Testing Authorities (NATA) to perform respirable quartz analysis. The new accreditation adds to an array of NATA-approved testing, analysis and calibration services to help identify and mitigate risk in the mining environment.

Until now, respirable crystalline silica (quartz) samples were outsourced for analysis. The new accreditation means that respirable dust samples will be analysed for quartz content in-house with an expected significantly faster turnaround time for reporting.



## Diesel particulate matter (DPM)

The exhaust fumes from diesel-powered equipment pose a potential risk for workers. Mine operators can better understand the risk profile of their workers by using personal monitors to measure DPM exposures. The data can then be used to identify areas of risk and implement effective controls.

- CMTS collected 401 individual DPM samples during the year; an increase of almost 30 per cent on the number of samples collected in 2016-17. These samples included personal exposure monitoring and static positional monitoring.
- Mining regulators and mine operators actively seek practical measures to reduce human exposure to diesel particulate matter. CMTS conducted 1,600 diesel engine tests across NSW and Qld to assist mine operators maintain DPM levels as low as reasonably practicable.
- CMTS also provided customers with assistance to develop diesel emission management plans to help minimise worker exposure to DPM.

## Risk profiling using similar exposure groups (SEGs)

CMTS continues to collate, analyse and report on contaminant exposure data using NSW Coal Similar Exposure Groups (SEGs). A SEG is a group of workers with the same general exposure to health risk due to similarity:

- and frequency of the tasks that they perform
- of the materials and processes with which they work
- in the way that they perform tasks.

Categorising workers into SEGs allows more detailed risk profiling and benchmarking to be undertaken and reported back to operations and industry. Examples of hazards assessed within SEG monitoring programs by CMTS in 2017-18 include airborne dust, noise, diesel particulate, gases and vapours, welding fumes, vibration, lighting and mould. CMTS employed an additional three occupational hygienists in 2017-18 to ensure adequate technical assistance can be provided in all regions.

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**CMTS employed an additional three occupational hygienists in 2017-18 to ensure adequate technical assistance can be provided in all regions.**

# Occupational Exposure Monitoring *continued*



## Gas monitoring, analysis and calibration of equipment

CMTS is accredited by NATA to perform testing, repairs and calibration of gas detection equipment. This critical service assists to keep mine environments at safe levels of flammable and noxious gases.

- There were 13,500 NATA calibrations conducted in 2017-18 for both NSW and Qld mining operations.
- CMTS also performed 477 mine atmosphere gas analysis services during the year.

The purpose-built SMARTGAS system provides gas chromatograph analysis to monitor mine atmospheres and identify potential or actual hazardous conditions. Maintaining the system onsite provides management with the ability to monitor mine atmospheres as frequently as required. Data acquisition and remote transfer technology also enables the system to be remotely accessed, calibrated and monitored by experienced CMTS technicians.

- Eight SMARTGAS systems were maintained during the year, including the addition of a new system in Moolarben.

## The Standing Committee on Airborne Contaminants and Occupational Hygiene

The Standing Committee on Airborne Contaminants and Occupational Hygiene (known as the Standing Dust Committee or SDC) is a sub-committee of the Coal Services Board and has operated continuously since 1954. The purpose of the SDC is to ensure reduced exposure to airborne contaminants, improvements in occupational hygiene and elimination of occupational disease.

Membership is comprised of representatives from Coal Services with hygiene, health and technical expertise, persons nominated by the Resources Regulator with mining and engineering expertise, as well as representatives from the CFMMEU, NSW Minerals Council and Mine Managers Association plus two independents offering additional expertise.

The functions of the SDC are to:

- Monitor the results of nominated hazard sampling
- Evaluate results and discuss improvement strategies
- Identify hazards which may present emerging health issues
- Research improved control strategies and methods for nominated hazards

- Educate mine personnel in control of nominated hazards
- Report back to industry stakeholders.

The SDC met six times during the year at sites across the NSW mining regions. The purpose of the mine visits was to promote the work of the SDC and to investigate and inspect issues that had been identified through routine statutory monitoring.

The SDC has witnessed many improvement initiatives across the industry resulting from the increased focus on occupational lung disease. These have been in both the open cut and underground sectors. One of the roles of the SDC is to disseminate both information and good practice solutions to controlling airborne contaminants. A project that has commenced will compile engineering controls into a handbook for practitioners. Additional to this is the continuance of Information Bulletins that report statistics and key observations the SDC feels is of importance to both mine operators and workers. All stakeholders have expended considerable effort during the year and are working collaboratively to keep occupational lung disease under control.

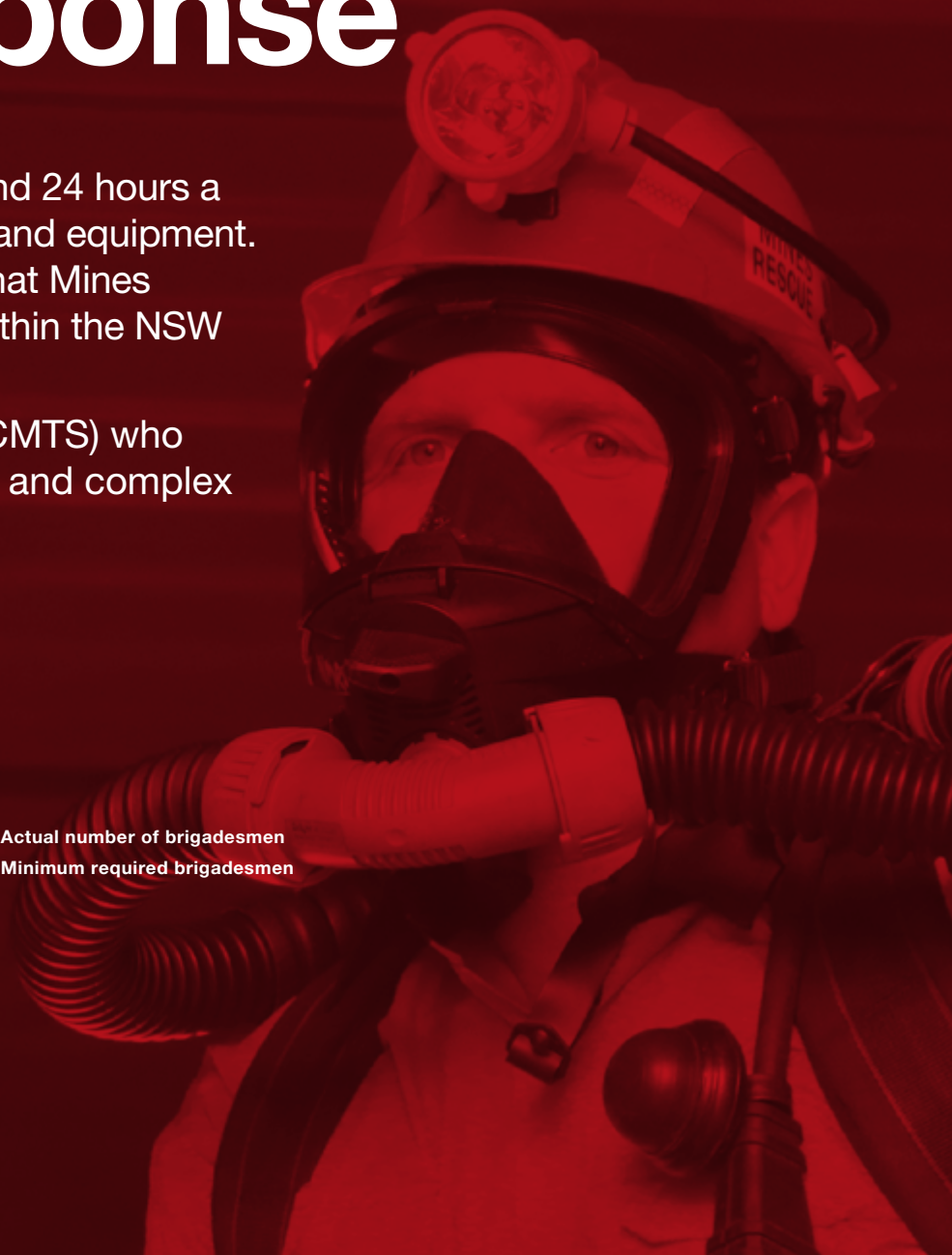
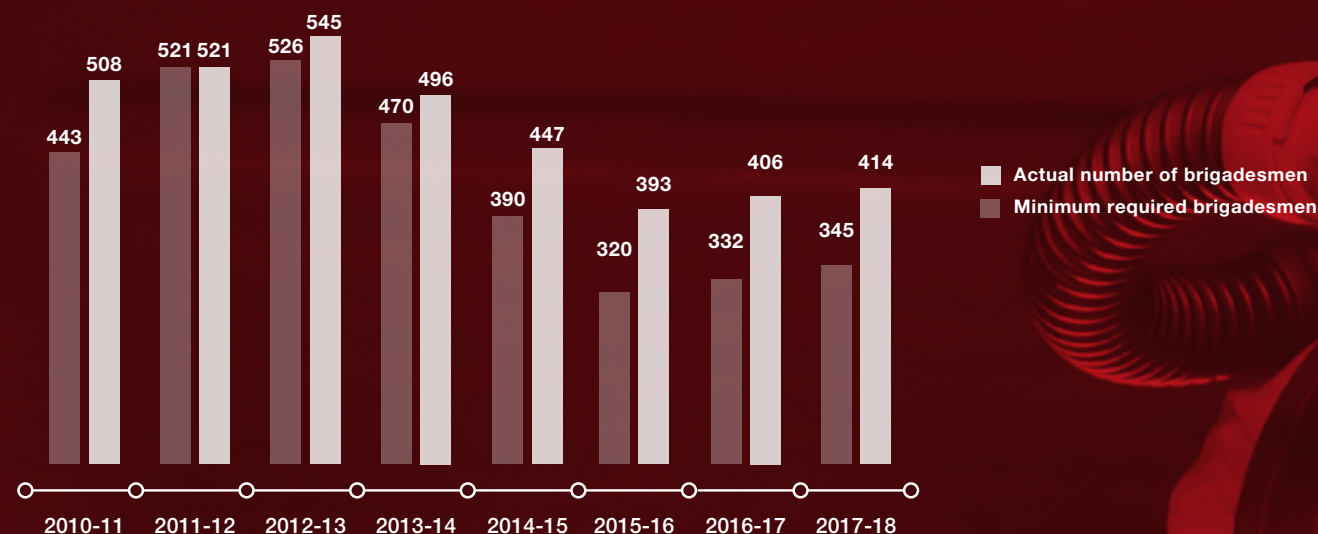
# Emergency Response



Mines Rescue are fully resourced and equipped to respond 24 hours a day, 365 days a year with trained brigadesmen, systems and equipment. This provides miners and operators with peace of mind that Mines Rescue is response-ready for any emergency situation within the NSW coal industry – quickly, safely and efficiently.

They are supported by Coal Mines Technical Services (CMTS) who provide critical technical expertise when rapid, accurate and complex data analysis is required for mines rescue deployment.

Mines Rescue brigadesmen





# Emergency Response



Mines Rescue has a statutory obligation to provide emergency response services for the NSW coal industry. They are responsible for training and maintaining a competent brigade of rescue personnel and providing expert advice and equipment in the event of an incident.

CMTS supports Mines Rescue by providing critical technical expertise when rapid, real-time data and analysis is required for Mines Rescue deployment.

## Incident response

Fortunately, today's mining operations are centred on safe work practices with robust controls in place to manage occupational hazards. The number of major incidents requiring the assistance of Mines Rescue and brigadesmen is limited which is a credit to the safety culture of the industry. Brigadesmen, with their specialised knowledge and skills, play an integral role in maintaining safety standards that assist in risk mitigation and incident prevention. However; should an incident occur they are ready to assist in bringing the incident under control, or lead their workmates to a safe escape.

Mines Rescue was called to attend one incident in 2017-18.

## Maintaining response capability

A minimum five per cent of the underground workforce (plus full-time equivalent contractors) must be trained to provide mines rescue support. At the end of June 2018 there were 414 colliery-nominated brigadesmen in NSW, which is above the minimum levy requirement.

A core function of Mines Rescue is to maintain response capability by training volunteer brigadesmen in rescue techniques and other specialised tasks. Brigadesmen must attend six rounds of training each year to maintain their skills and active status. New recruits are required to complete a ten-day induction at Mines Rescue stations. 55 new recruits completed this training during the year.

In addition to specialised training, brigadesmen must also be assessed as fit, competent and capable of providing emergency services in the event of a mining emergency or incident. A fit-for-purpose mines rescue functional capacity evaluation was developed by CS Health in conjunction with Mines Rescue and the University of Wollongong. A trial of the new assessment will be conducted from August 2018 with roll out across all mines rescue districts expected later in 2018.



# Emergency Response *continued*



## Emergency simulations

Mines Rescue collaborates with industry to organise, manage and respond to emergency simulations and management reviews as required by mining industry legislation. This ensures employees maintain a current knowledge of all emergency response requirements. There were two major simulations involving Mines Rescue and other emergency response agencies during the year.

Mines Rescue competitions also provide an opportunity for emergency response personnel to practice their skills

and emergency preparedness in a realistic, high-pressure environment.

More than 300 brigadesmen, surface emergency responders and first aid personnel competed at NSW regional competitions during the year.

The top four teams in NSW, as determined by the district competitions, were eligible to compete at the 55th annual Australian Mines Rescue competition held on 12 October 2017. The event was co-hosted by NSW Mines Rescue and Queensland Mines Rescue and was held in Narrabri

NSW for the first time in its long history. Peabody's Wambo team won the event and with it, the opportunity to represent Australia at the international competition to be held in Russia in 2018.

### Competition details outlined below:

Competition	Date	Venue	No. Teams	Winners
Northern	23 June 2017	Newcastle Mines Rescue station	9	Composite team
Hunter Valley (underground)	21 July 2017	Glencore Bulga Underground	6	Peabody Wambo
Southern	18 August 2017	Glencore Tahmoor	5	Glencore Tahmoor
Western	1 September 2017	Western Mines Rescue station	5	Centennial Springvale Red
Hunter Valley (open cut)	15 September 2017	Hunter Valley Mines Rescue station	10	BHP Mt Arthur
Northern First Aid*	3 November 2017	Newcastle Mines Rescue Station	10	Centennial Mandalong
	25 May 2018	Newcastle Mines Rescue Station	10	Centennial Mandalong
Western First Aid	1 December 2017	Moolarben Mines Rescue Station	9	Glencore Ulan Underground
Australian Mines Rescue Competition	12 October 2017	Whitehaven Narrabri (NSW)	8	1. Peabody Wambo 2. Moranbah North 3. Broadmeadow

\*Two competitions held in 2017-18 due to the competition being held later in 2017.

# Emergency Response *continued*



## Mines Rescue Working Group

The Mines Rescue Working Group is a collaborative forum with representation from mining companies, the Mine Managers Association, the Resources Regulator and the CFMMEU. The group is facilitated by Mines Rescue to encourage all stakeholders to keep abreast of current and emerging issues in emergency management and related fields; and to participate in determining the capabilities and capacity of the Mines Rescue service.



## Improving communications channels

A new emergency contact line was implemented in December 2017. The centralised number relies on interactive voice response technology with in-built back-ups designed to maximise reliability and efficiency in the event of an emergency.

This system complements the Whispir Notification System that has been in use at Mines Rescue since 2015 to send simultaneous mass activation messages to selected personnel and/or brigadesmen as required in an emergency situation.

NSW Mines Rescue and Queensland Mines Rescue conducted two underground trials of a new radio system in May. The RESYS Polish Underground Radio System is a unique wireless mines rescue communications system that will improve communications in an emergency response situation. Mines Rescue are working with the Polish company to have the system approved for use in NSW and Queensland.

## Cadets program

Four new cadets commenced the Mines Rescue cadet program early in 2018. Over a two-year period, the cadets will undergo extensive training in safety, equipment, maintenance and procedures including 12 weeks of underground work experience. Cadets will learn the skills and competencies of a Mines Rescue Training Officer with the objective of gaining industry employment on completion of their cadetship.

Past cadets have gone on to roles in such as Mines Rescue employees, Production Managers, Undermanagers, Ventilation Officers, Deputies, Fire Officers and Health & Safety Advisors.

The program commenced in 2004 but ceased in 2014 with the downturn in the industry. The decision to reinstate the program in 2017-18 was a reflection of the changes to the current mining cycle and the upswing in employment opportunities.

## Emergency Response *continued*



**New Mines Rescue emergency response trucks were delivered across NSW during the year.**

### **New livery enlivens vehicles**

New Mines Rescue emergency response trucks were delivered across NSW during the year. A new CMTS mobile workshop was also delivered.

The vehicles featured new livery to ensure they are easily identifiable, particularly in an emergency response situation.

### **Improved response to remote mining districts**

#### **Moolarben Mines Rescue Station**

The Moolarben Mines Rescue station was officially opened on 1 December 2017. The station is located on the Yancoal Moolarben Coal Mine lease and services the five coal mines in the Ulan mining region near Mudgee.

The opening of the Mines Rescue station follows extensive consultation with stakeholders to improve mines rescue emergency response capability to mines in the region.

#### **Mutual Assistance Scheme**

Plans to establish a Mutual Assistance Scheme in the Ulan region progressed in early 2018.

A Mutual Assistance Scheme committee, comprised of representatives from surface operations in the area, NSW Mines Rescue and CS Health, developed an agreement to provide an enhanced emergency response service to respond to and manage emergencies arising at surface coal mines in Ulan region. The agreement details roles and responsibilities of each stakeholder, and the training and health requirements for Emergency Response Teams.

The Mutual Assistance Scheme is modelled on the underground response systems and will be fully implemented during the 2018-19 financial year.

## Emergency Response *continued*



### Sharing knowledge to improve safety

- Nearly 200 delegates representing mines rescue organisations from 18 countries gathered to share current mines rescue practices and challenges at the 8th International Mines Rescue Body Conference held in Russia in September 2017. The program focused on innovations and ways to improve mine emergency preparedness, planning and response under the theme, 'Extending Knowledge. Improving Safety'.

NSW Mines Rescue, a founding member of the IMRB, participated in the IMRB General Meeting and delivered two presentations at the conference. NSW Mines Rescue's contribution to the International Mines Rescue community was recognised with the presentation of an official medal 'For cooperation between rescue services' by the Ministry of the Russian Federation for Affairs of Civil Defence, Emergencies and Disaster Relief (EMERCOM). The medal was one of six awarded to international delegates to the conference.

- An essential piece of emergency response equipment used by Mines Rescue personnel across the world is the BG4 closed circuit breathing apparatus.

Dräger recently invited Mines Rescue representatives from across Australia and New Zealand to test a new prototype to feedback into their product research and development in Germany. The user-testing took place in the training gallery at the Newcastle Mines Rescue station in May.

- Police Rescue personnel visited Mandalong in June to learn about the equipment utilised underground in emergencies and the potential hazards that could be encountered in the underground environment. The group also learned about Mines Rescue's capabilities as an emergency response agency and are interested in inter-agency training in the future.
- Mines Rescue has a reputation for safety leadership and expertise that is acknowledged throughout the world. Delegations from Turkey, Poland and Thailand visited Newcastle Mines Rescue station to learn about the safety management systems employed in NSW, the regulatory framework for safety and training as well as air quality monitoring and management.
- Major General Dave Gawn, CEO Pike River Recovery Agency and Tony Forster, Chief Inspector & Strategic Advisor to Coordinator General for Central Coast, NSW Government Resources Regulator visited Newcastle Mines Rescue Station during March 2018.

The purpose of the visit was to share information and knowledge on NSW Mines Rescue structure, capabilities and processes, including the potential use of virtual reality to simulate the mission for the New Zealand public and unmanned aerial vehicles (drones), which are being developed by NSW Mines Rescue as a direct outcome of the Pike River tragedy.

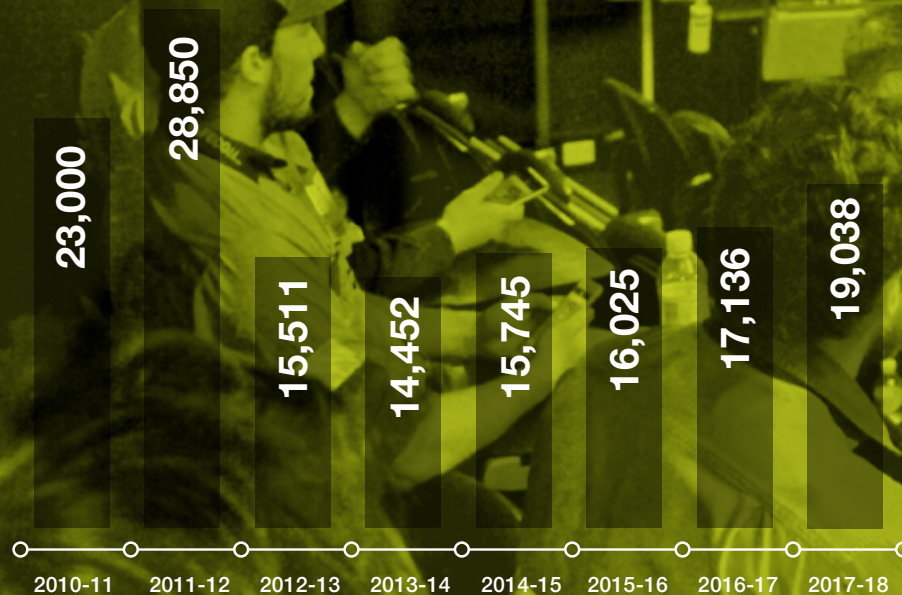


# Training



The NSW coal industry maintains one of the highest safety records in the world. As a Registered Training Organisation (RTO) and provider of specialist industry training, Mines Rescue plays a critical role in assisting workers and employers to manage risk and operate safely.

Attendance at Mines Rescue training courses



# Industry education and training



## Order 34 – ensuring training schemes are in place

Order 34 requires NSW coal mine operators to have a mine site Training and Competency Management Scheme (TCMS) in place to maintain a properly trained workforce. This is essential in ensuring that mines meet the highest standards of safety and efficiency.

The Order provides scope for Coal Services to issue guidelines and other tools to assist mine operators meet their legislative requirements in this regard.

Coal Services works with operators to verify that submitted training plans meet the requirements of the guideline and help identify opportunities for improvement. Twelve TCMS were reviewed and approved during the year.

This process is enhanced by routine audits of operating practices by a skilled team of auditors with wide industry and training expertise. During the year Coal Services' Order 34 team completed an audit of all mines' training and appointment processes and commenced a full industry survey of mine preparation for the NSW Resources Regulator maintenance of competence scheme for practising certificates.

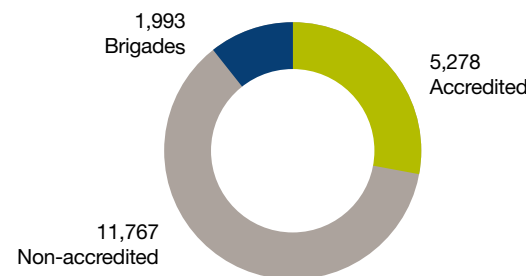
Regional communications forums and workshops were held throughout the year to provide ongoing support to mines' safety and training personnel. The sessions included participation from the NSW Resources Regulator and other industry leaders to share knowledge and advice.

## Training numbers

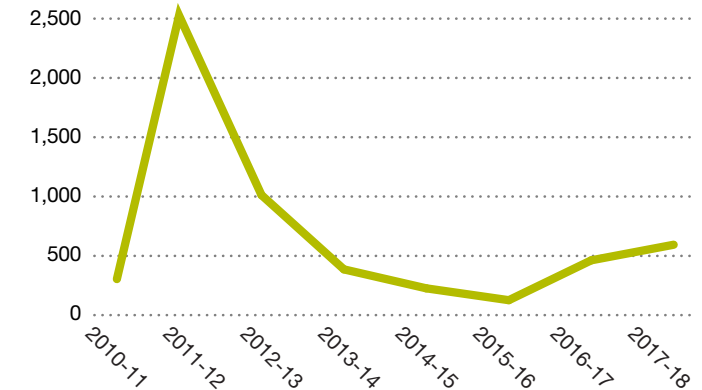
Overall attendances at Mines Rescue training courses reached 19,038 in 2017-18, increasing 11 per cent from 17,136 the year before. The number of attendances has been steadily increasing since 2013-14 where training numbers declined to a low of 14,452 due to the industry downturn at that time.

Attendances at the Generic Underground Induction for Coal Mines (GUI) grew for the second consecutive year to 592. While the GUI course intake is far from the 2,489 seen at the peak of the industry boom in 2011-12, the increasing number is a slow but encouraging indicator of industry growth.

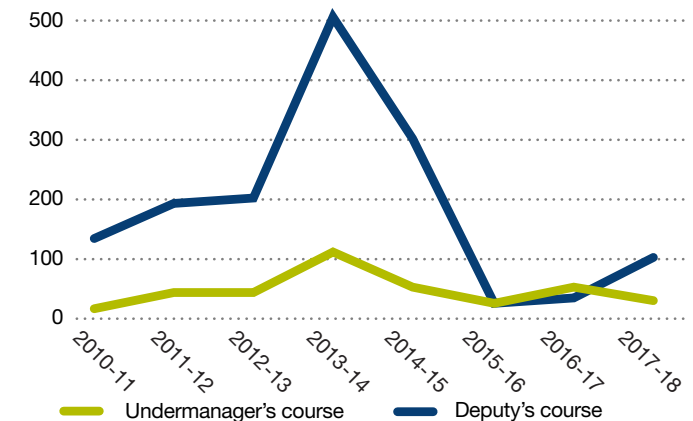
Overall training numbers



Attendance at the Generic Underground Induction for coal mines



Attendances at statutory courses



\*Undermanager's course full title: Diploma of Underground Coal Mining Management Deputy's course full title: Certificate IV in Underground Coal Operations.

## Industry education and training *continued*



### RTO comes of age

Mines Rescue's diverse offerings include accredited and non-accredited courses and those that are tailored to the unique needs of our customers and industry.

In October 2017, Mines Rescue celebrated its 21st anniversary as a Registered Training Organisation (RTO). Mines Rescue is registered with the Australian Skills Quality Authority (ASQA) which ensures all accredited training is developed and delivered to a national standard.

### Meeting industry demand

All courses delivered by Mines Rescue are reviewed annually and updated accordingly based on participant and trainer feedback. New courses are developed, trialled and launched in response to industry training needs and specific site requirements.

- During the year Mines Rescue became the first RTO in Australia licensed to deliver a new nationally-accredited course for the mining industry's frontline trainers and assessors. The Course in Field-based Training and Assessment (10235NAT), developed by Training Services Australia, focuses on the learning needs of workplace trainers and assessors who are tasked with delivering non-accredited workplace training such as company or site-specific subjects or competencies.

The 'fit for industry' Course in Field-based Training and Assessment was introduced following the expiration of the Certificate IV Training and Assessment in October 2017 and its replacement with a more rigorous qualification that was more suited to those working in RTOs.

101 trainers and assessors have completed the course since it was introduced in January 2018.

- An Emergency Preparedness and Response course for surface and metalliferous mines was launched in the Mudgee-Ulan region in response to a growing demand for training in this area. The course is targeted towards mining engineering managers, electrical engineers, mechanical engineers and quarry managers to provide the required skills and knowledge to establish and maintain mine emergency preparedness and response systems. 43 people have completed the course since it commenced in August 2017.
- Mines across NSW have also expressed interest for training in other safety areas, specifically 'Work Safely with Industrial Chemicals and Materials' and 'Perform Rescue from Live Low Voltage Panel'. Both courses were released in 2017-18 with 14 and 103 attendances respectively.

### Moolarben Mines Rescue station

The Moolarben Mines Rescue station is located on the Yancoal Moolarben Coal Mine lease and was officially opened on 1 December 2017 as an emergency response and training facility. While the station's underground training facilities are complete, there is demand to expand the facilities to include specialist training resources for the open cut sector.

The station complements the services provided by CS Health and CMTS in the region.





## Industry education and training *continued*



### Virtual learning and Augmented Reality

Access to and use of virtual reality enables Mines Rescue to provide effective, relevant and realistic training in a safe environment. As an integral part of Mines Rescue's training arm, our Virtual Reality team has developed scenarios to assist miners and emergency response personnel to better understand and react to their environment.

Interest in the Virtual Reality Technologies (VRT) team's 'Gen4' suite of training software continued to grow during the year. It has become standard practice for Mines Rescue and our Registered Training Organisation teams to ask themselves 'how can VR enhance the training and learning outcomes'. The result is that it heavily features in most course content and in conjunction with eLearning, is seen as an integral part of future training needs.

### Electronic classroom

An 'electronic classroom' pilot was established at the Southern Mines Rescue station in February 2018. South 32 have utilised the facility to conduct safety refresher training using a blend of virtual reality scenarios, eLearning, face-to-face presentations and competency-based practical assessments.

To date, over 2,500 miners in the Southern districts have been exposed to virtual reality training. Training at the station will migrate to the electronic classroom model following the success of the pilot.



### Maintaining competence

The Resources Regulator introduced a practicing certificate and maintenance of competence scheme in September 2017. The scheme aims to keep current the knowledge and skills of those who hold a practicing certificate to exercise specific statutory functions.

A logbook companion app (known as the maintenance of competence (MOC) app) was developed to help certificate holders keep track of the specified hours of recognised learning required under the scheme. The app was requested by and has been developed in consultation with industry and was showcased at the Order 34 workshops in June 2018 before a public launch at the NSW Minerals Council conference in August 2018.

Over one hundred people are currently using the application and over twenty organisations are making use of the workforce administration features of the MOC app.

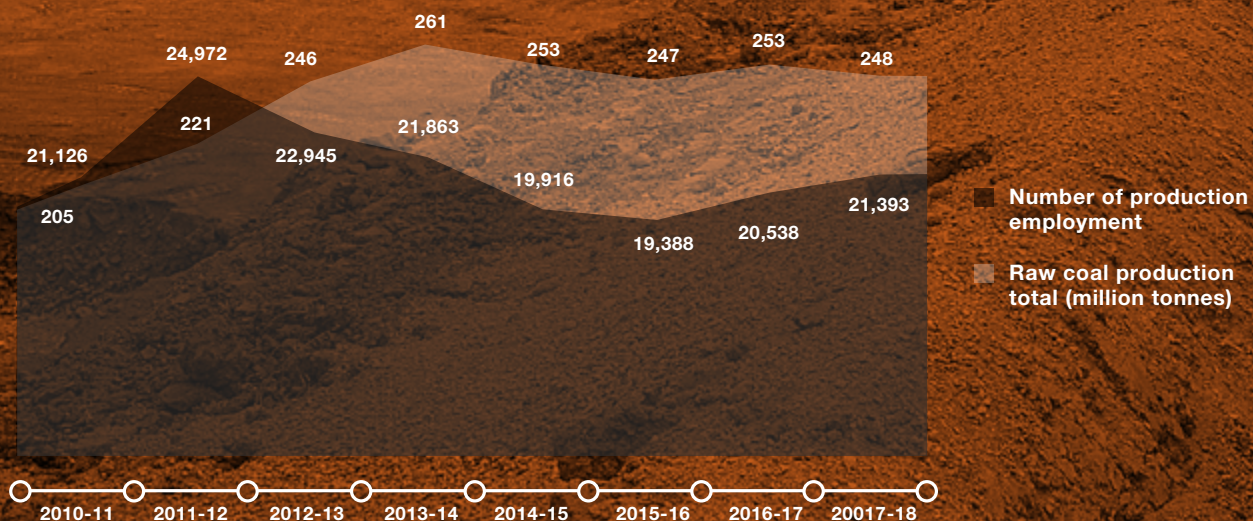


# Industry statistics



Coal Services Statistics' comprehensive current and historical data series describing the NSW coal industry provides a unique resource for all stakeholders. With the cooperation of NSW coal producers, shippers and coal consumers, the Coal Services Statistics team is able to collect data on key aspects of the NSW coal industry.

Raw coal production vs. production employment



# Industry statistics



## NSW mining operations

At 30 June 2018 there were 41 coal mining operations in NSW: 19 underground mines (including 15 longwall operations) and 22 open-cut mines.

One mine opened and one mine closed during the year:

- Whitehaven's Sunnyside open-cut mine in Gunnedah commenced production in January 2018 after being in care and maintenance since 2012.
- Yancoal's Moolarben underground mine commenced longwall production in October 2017.
- Glencore's Bulga underground mine ceased production in May 2018. The mine will be sealed, the redundant infrastructure decommissioned and the site rehabilitated.

## Raw coal production

Total raw coal production was 248.6 million tonnes, down 4.8 million tonnes (1.9 per cent) compared to 2016-17. Production in all coalfields declined except in the Western region.

Total raw coal production was down 7.7 million tonnes (6.1 per cent) compared to 2016-17 for the first half of the year and up 2.9 million tonnes (2.3 per cent) compared to 2016-17 for the second half of the year.

Underground coal mines produced 60.7 million tonnes of raw coal, down 3.6 million tonnes (5.5 per cent) compared to 2016-17.

Open-cut coal mines produced 187.9 million tonnes of raw coal, down 1.2 million tonnes (0.6 per cent) compared to 2016-17.

The decrease in raw coal production is in part due to the following key factors:

- Six longwall moves at mines across the Hunter, Newcastle and Mudgee coalfields during the September 2017 quarter.
- Gas and geotechnical issues at the Appin Colliery impacting production in the Southern coalfield.
- Operations at Wongawilli ceased in July 2017 due to the contracting company going into administration. Production resumed in late September 2017.
- Industrial action (lost hours) across Glencore mines.
- No longwall production at Chain Valley from January 2018 due to high gas levels.
- Ongoing regulatory action at Austar prohibiting longwall mining since April 2018.

NSW coal industry		Raw Production		Change	
Coalfield	# Mines	Million Tonnes		2016-17 to 2017-18	
Gunnedah	7	30.6	-0.5	-1.6%	
Hunter	15	145.8	-2.8	-1.9%	
Newcastle	6	11.2	-1.3	-10.7%	
Western	8	51.0	2.6	5.5%	
Lithgow region	3	7.6	0.3	3.8%	
Mudgee region	5	43.3	2.4	5.8%	
Southern	5	10.1	-2.8	-21.6%	
<b>NSW total</b>	<b>41</b>	<b>248.6</b>	<b>-4.8</b>	<b>-1.9%</b>	

\* Due to rounding, there may be some discrepancies between the sum of the line items and total.



# Industry statistics *continued*



## Saleable coal production

Total saleable coal production was 194.3 million tonnes down 3.9 million tonnes (2 per cent) compared to 2016-17.

Exports accounted for 85 per cent of total sales, down 1 per cent on 2016-17. Corresponding domestic sales increased by 1 per cent to 15 per cent of total sales.

## Exports

Total NSW coal exports were 161.4 million tonnes, down 8.8 million tonnes (5.2 per cent) compared to 2016-17. Exports were the lowest they have been since reaching a peak of 172.9 million tonnes in 2014-15. Up until that time exports had been increasing year on year.

The Free On Board (FOB) value of coal exports increased 8.1 per cent to \$19.67 billion with an average FOB value of \$121.87 per tonne. The average FOB value per tonne increased by \$14.90 (13.9 per cent) per tonne compared to 2016-17.

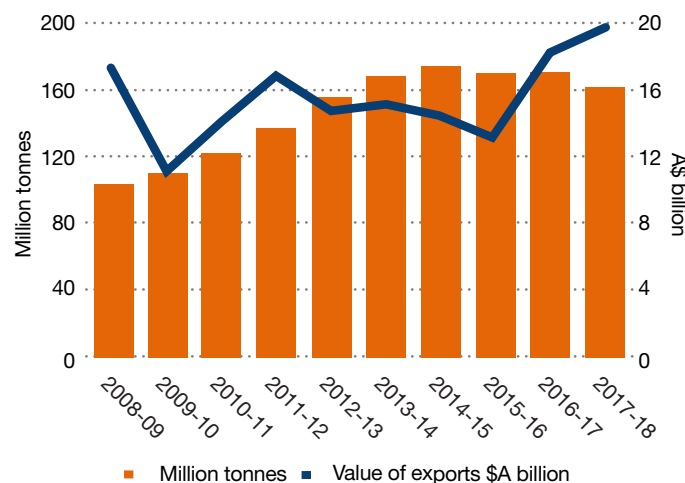
Metallurgical coal exports decreased by 5.5 million tonnes (21.3 per cent) to 20.4 million tonnes which accounted for 12.6 per cent of total exports. The FOB value of metallurgical coal exports decreased by \$0.8 billion dollars (18.2 per cent) to \$3.6 billion dollars with an average FOB value of \$176.61 per tonne, an increase of 3.9 per cent on 2016-17.

Steaming coal exports decreased by 3.3 million tonnes (2.3 per cent) to 141 million tonnes which accounted for 87.4 per cent of total exports. The FOB value

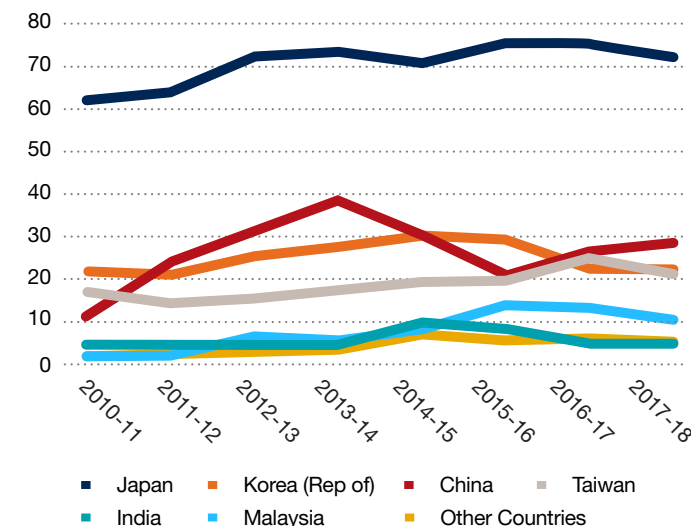
of steaming coal exports increased by \$2.27 billion dollars (16.4 per cent) to \$16.07 billion dollars with an average FOB value of \$113.97 per tonne, an increase of 19.1 per cent on 2016-17.

NSW coal was shipped to 18 countries during the year. Japan, China, the Republic of Korea and Taiwan accounted for 88.1 per cent of total exports, with Japan retaining the market majority of 71.4 million tonnes (44.2 per cent). Exports were down in all markets except for China, which increased by 7.5 per cent on 2016-17, and 'Other Asia' which increased by 6.9 per cent.

**New South Wales coal exports,  
tonnes and FOB value**



**NSW coal exports by major destinations,  
million tonnes**

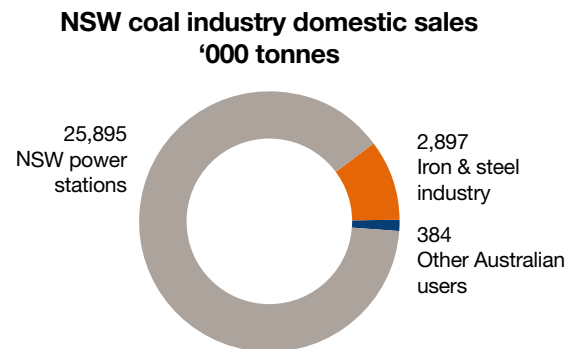


# Industry statistics *continued*



## Domestic market

Overall sales to domestic markets increased by 9.8 per cent to 29.2 million tonnes, driven by increased demand from the energy sector. While sales to the iron and steel industry and other Australian users declined, sales to the NSW power industry increased by 15.4 per cent. Power stations accounted for 25.9 million tonnes (88.8 per cent) of all domestic sales.



## Production employment

NSW coal industry production employment is defined as all persons working in or about the coal mine or coal preparation plant, pertaining to its operation, whether employed directly by the mine owner or the mine operator or by a contractor.

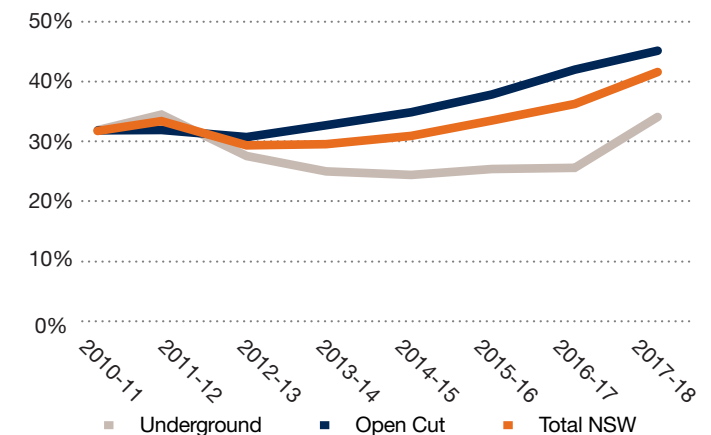
During the 12 months to 30 June 2018, there was net job growth of 4.2 per cent (855 workers), taking the production workforce at NSW coal mines up to 21,393 workers. Overall employee growth was strongest in the Gunnedah region with an overall increase of 33.3 per cent, while employment in the Hunter region fell by 1.7 per cent.

The NSW coal industry average annual production employment for 2017-18 increased for the first time in six years. The average number of workers at NSW coal mines increased by 978 (4.9 per cent) to 20,838 for the year.

The industry has lost 14.3 per cent of the peak workforce numbers reached in June 2012. At that time the production workforce was 24,972.

The contractor share of workforce numbers has steadily increased across both the underground and open cut sectors. At 30 June 2018 contractors represented 41 per cent of the industry workforce compared with 33 per cent in 2012.

## Contractors as percentage of total industry workforce



## Industry statistics *continued*



### Productivity per employee

Productivity calculated as raw coal production tonnes won per employee fell for the first time in six years, down 6.5 per cent to 11,930 tonnes for 2017-18.

Raw coal tonnes produced per mine worker per hour worked during the year fell by 0.53 tonnes to 6.17 tonnes; a drop of 7.9 per cent when compared to 2016-17.

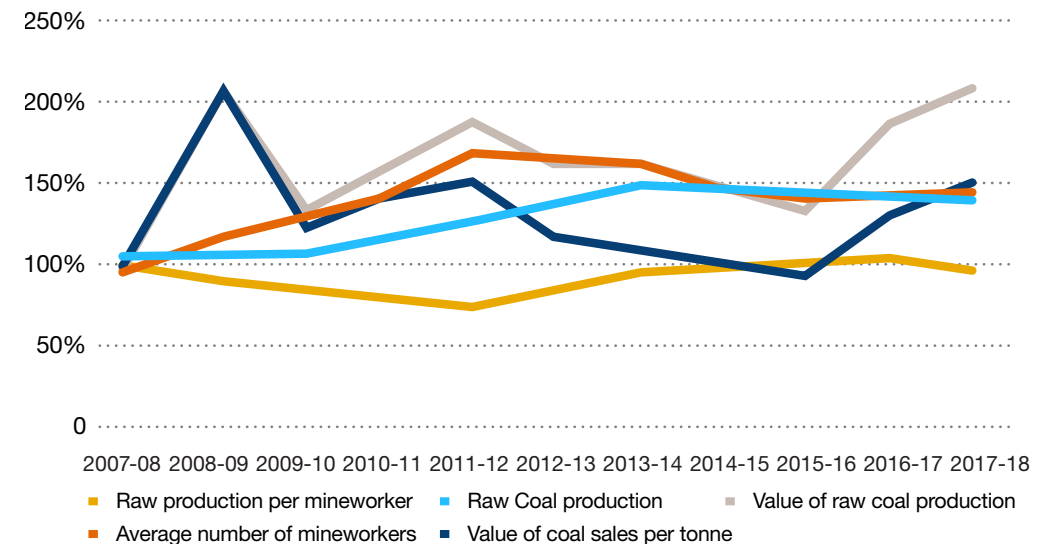
Saleable coal tonnes produced per mine worker per hour worked during the year fell by 0.42 tonnes to 4.82 tonnes; a drop of 8 per cent when compared to 2016-17.

### NSW coal industry performance

The graph below plots the NSW coal industry performance as an index, using the year 2007-08 as its base for comparing each successive year. It shows the relationship between the number of mine workers employed, raw coal production levels and productivity.

The value of sales per tonne has been calculated using the average FOB value of exports for metallurgical coal and steaming coal and discounting transport costs. The value of raw coal production has been derived from the value of sales per tonne.

**NSW coal industry performance**





Industry statistics *continued*

NSW Coal Industry Statistics	03-04	04-05	05-06	06-07	07-08	08-09	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18
Number of coal mines at 30 June	52	55	58	60	60	60	62	61	61	55	51	44	42	41	41
Raw coal production underground mines (million tonnes)	49.3	51.9	52.2	57.2	61.3	63.1	62.8	62.2	60.5	69.0	74.4	77.4	65.5	64.3	60.7
Raw coal production open cut mines (million tonnes)	97.7	104.4	108.9	113.1	115.9	118.9	126.0	142.7	160.5	176.8	186.6	175.8	181.4	189.1	187.9
Raw coal production total (million tonnes)	147.0	156.3	161.1	170.3	177.2	182.0	188.8	204.9	221.0	245.8	261.0	253.2	246.8	253.4	248.6
Saleable coal production (million tonnes)	114.2	122.1	124.6	131.3	135.1	138.5	145.4	157.0	167.2	185.6	196.6	196.4	191.0	198.2	194.3
Coal sales to power stations within Australia (million tonnes)	26.6	27.8	28.5	30.4	30.8	30.6	28.5	27.8	23.6	24.2	23.1	21.9	22.5	22.4	25.9
Coal sales to others within Australia (million tonnes)	6.2	6.1	5.6	5.9	6.0	4.3	5.5	5.7	4.8	4.5	4.3	3.9	4.0	4.1	3.3
Coal sales within Australia (million tonnes)	32.8	33.9	34.1	36.3	36.8	34.9	34.0	33.5	28.4	28.7	27.4	25.8	26.5	26.6	29.2
Metallurgical coal exports overseas (million tonnes)	21.0	18.6	17.9	20.4	25.4	21.2	28.8	25.1	23.3	25.5	25.1	24.1	25.6	25.9	20.4
Steaming coal exports overseas (million tonnes)	64.0	68.0	71.9	71.1	75.1	82.1	81.1	96.7	113.0	129.8	142.2	148.8	144.0	144.3	141.0
Coal exports overseas (million tonnes)	85.0	86.6	89.8	91.5	100.5	103.3	109.9	121.8	136.3	155.3	167.3	172.9	169.6	170.2	161.4
FOB value of metallurgical coal exports overseas (\$A billion)	1.1	1.3	2.0	1.8	2.6	5.7	3.7	4.5	4.4	3.3	2.9	2.6	2.5	4.4	3.6
FOB value of steaming coal exports overseas (\$A billion)	2.6	4.2	4.7	4.4	5.7	11.4	7.5	9.6	12.3	11.7	12.3	11.8	10.7	13.8	16.1
FOB value of coal exports overseas (\$A billion)	3.7	5.5	6.7	6.2	8.3	17.1	11.2	14.1	16.8	15.0	15.2	14.4	13.2	18.2	19.7
Average FOB value of metallurgical coal exports (\$A per tonne)	50.77	71.81	110.89	88.37	103.15	272.48	129.85	178.85	190.49	129.01	114.49	107.73	98.38	169.91	176.61
Average FOB value of steaming coal exports (\$A per tonne)	41.57	61.15	65.98	61.47	75.56	138.49	92.31	99.47	109.24	90.01	86.68	79.57	74.29	95.67	113.97
Average FOB value coal exports (\$A per tonne)	43.85	63.43	74.92	67.46	82.52	165.95	102.16	115.80	123.11	96.41	90.86	83.5	77.92	106.97	121.87
Average number of employees insured (exposed to risk) at 30 June <sup>1</sup>	10,736	12,272	14,726	16,691	17,628	19,312	20,383	23,407	30,595	30,065	27,740	24,990	22,803	22,591	24,650
Number of production employment at 30 June <sup>2</sup>	9,998	11,290	12,658	13,392	15,387	16,914	19,109	21,126	24,972	22,945	21,863	19,916	19,388	20,538	21,393
Saleable coal output per mineworker per year (tonnes)	11,380	11,680	10,240	9,970	9,430	8,410	8,130	7,750	7,000	7,830	8,820	9,270	9,460	9,980	9,320
Saleable coal output per mineworker per hour (tonnes)	5.82	5.73	4.95	4.87	4.74	4.15	4.09	3.87	3.49	3.91	4.46	4.98	4.99	5.24	4.82
Days worked per mineworker per year	279.2	291.1	295.6	292.2	284.4	289.6	286.7	286.4	286.6	286.0	282.6	266.1	270.8	272.2	276.4
Lost-time injuries per million tonnes raw coal produced	2.9	2.4	2.6	2.6	2.3	2.5	2.0	1.9	2.1	2.3	2.1	1.6	1.5	1.4	1.6
Lost-time injuries per million tonnes saleable coal produced	3.7	3.1	3.4	3.3	3.0	3.2	2.6	2.5	2.8	3.0	2.8	2.0	2.0	1.8	2.0
Lost-time injuries per million hours worked	21.5	17.7	16.6	16.2	14.2	13.5	10.5	9.7	9.6	10.4	12.4	10.0	9.8	9.7	9.6

<sup>1</sup> The exposed to risk average is calculated on data available in the August of the following year.

<sup>2</sup> Production employment includes working proprietors, persons engaged as employees of the operator of the mine or as employees of a contractor undertaking work relating to coal production, coal preparation, overburden removal, drivers transporting coal from the mine to a preparation plant or in administration/clerical work at the mine site and is a subset of exposed to risk numbers.

# Board of Directors



## Peter Jordan

### Non-Executive Chairperson

Nominee for Construction, Forestry, Maritime,  
Mining and Energy Union  
Term of appointment (1 January 2012 – Current)

Peter Jordan was appointed as a Director of Coal Services on 1 January 2012. He was also appointed Chairman for the two-year period of 2018-19. Peter has represented mine workers in the NSW coal mining industry for more than 32 years. He is President of the Northern Mining & NSW Energy District of the Construction, Forestry, Maritime, Mining and Energy Union (CFMMEU) (Mining & Energy Division), a position he has held since October 2009, and is a Central Executive member of the CFMMEU National (Mining & Energy Division) and is a National Executive member of the CFMMEU. He is also President of the NSW Branch of the CFMMEU. He was also Vice President of the Northern District Branch of the union from April 1993.

Peter was previously the NSW Mining Official of the Federated Engine Drivers and Firemen's Association (FEDFA), a position he held from 1986 until its amalgamation with the United Mineworkers Federation of Australia. Peter is also a Trustee of the Mineworkers Trust and represents the CFMMEU as a Director of Unite Organising Pty Ltd, Mining & Energy Workers Services Pty Ltd and United Collieries Pty Limited. Peter was appointed by the Minister as a member of the NSW Mine Safety Advisory Council (MSAC) on 8 February 2011. Peter is also a member of the Health Management Advisory Committee (HMAC). He has been a Non-Executive Director of the Hunter Region Westpac Rescue Helicopter Service Limited since 2007 and is also a member of its finance committee.

## Board of Directors *continued*



### **Lucy Flemming**

#### **Managing Director/CEO**

Term of appointment (19 December 2011 – Current)

Lucy Flemming joined Coal Services in August 2010 as Chief Financial Officer and was appointed Managing Director/CEO in December 2011, becoming the first female Director in the 90-year history of Coal Services and its predecessors.

Lucy's career spans over 30 years during which time she has held executive positions in accounting, business, finance, investment and retail areas across both the private and public sectors. Her career includes 15 years of workers compensation experience, having spent seven years at WorkCover NSW where she managed various facets of workers compensation insurance.

Lucy continues to influence change in a challenging industry landscape by actively participating in forums, events and committees to raise the profile of Coal Services and its role in protecting workers and the NSW coal industry. She is a Trustee of the Coal Services Health & Safety Trust and sits on the NSW Mines Rescue Working Group, as well as advising many key industry health and safety groups and mining bodies. This involvement has been instrumental in building a robust specialist health and safety scheme, which over recent years has experienced injury rates and premiums at some of their lowest levels under her leadership.

Lucy holds a Bachelor of Business degree with a major in Accounting and sub-major in Law and is a qualified CPA. She is a Graduate Member of the Australian Institute of Company Directors, and has been a Director of Hospitality Employers Mutual Limited since February 2015.

## Board of Directors *continued*



### **The Hon. John Hannaford, A.M.**

#### **Independent Non-Executive Director**

Term of appointment (1 January 2013 – Current)

The Hon. John Hannaford was appointed as a Director of Coal Services on 1 January 2013. John is the former Chair of the NSW Mine Safety Advisory Council, Chair of the Wentworth Institute of Higher Education Pty Ltd and Chair of Patrick Careers Academy.

John is a lawyer and was a full-time Examiner with the Australian Crime Commission from 2003 to 2011 and was appointed a part-time Examiner with the Australian Crime Commission until 2017. Between 2000 and 2003 he held various appointments including Adjunct Professor with University of Technology Sydney; Corporate Facilitator, Mediator and Arbitrator with part-time appointments to the NSW Workers Compensation Commission and District Court; member of the Commonwealth Government's National Alternative Disputes Advisory Council; Special Inquiry Steward with NSW Harness Racing; Chair of the Panel to review the Aboriginal and Torres Strait Islander Commission for the Commonwealth Government; and, has an appointment to the Professional Standards Review Panel of the Catholic Church in Australia.

From 1984 to 2000 he was a Member of the Legislative Council in the NSW Parliament where he held appointments as the Minister for State Development; Minister for Health; Minister for Community Services; Minister for Industrial Relations; Minister for Justice and Attorney-General. He was also Leader of the Government and of the Opposition in the Legislative Council. In 2017 John was awarded as Member in the General Division of the Order of Australia (AM) for his significant service to the Parliament of New South Wales through a range of senior ministerial roles, to law reform, and to the community.



### **Mark Genovese**

#### **Independent Non-Executive Director**

Term of appointment (1 January 2013 – Current)

Mark Genovese was appointed as a Director of Coal Services on 1 January 2013. Mark has over 30 years' experience within the Australian Credit Union Movement, including periods as Chief Executive Officer of Esso Employees Credit Union and the public service-based Comtax Credit Union. He is now Chief Executive Officer of Unity Bank, formerly Maritime Mining and Power Credit Union (MMPCU). The Credit Union officially changed its name to Unity Bank on 1 March 2017.

Mark previously worked at Australia's peak Credit Union body, Credit Union Services Corporation Australia, where his specific responsibility included managing the retail banking products provided to credit unions. He also represented the industry on the Australian Payments Council and VISA Australia Boards.

Mark managed the Australian Credit Union Movement's international development activities, which are primarily focused within the South Pacific and South East Asian regions, and domestic development activities including the development of new credit unions and the expansion of existing credit union services within rural and regional Australia.

In recent years Mark has played a pivotal role in the development of the first cooperative raising of capital, where credit unions pooled their balance sheets to secure 'mutual friendly', affordable capital. He is also a Director of Cuscal.



## Board of Directors *continued*



### Jamie Frankcombe

#### Non-Executive Director

Nominee for NSW Minerals Council

Term of appointment  
(20 September 2017 – Current)

Jamie Frankcombe was appointed a Director in September 2017. Jamie has been the Chief Operations Officer at Whitehaven Coal since February 2013. He was previously Director Operations at Fortescue Metals Group Ltd.

Prior to that he has had extensive senior experience in coal mine operations and development including as the Chief Operating Officer of PT Adaro Indonesia, Executive General Manager - Americas for Xstrata Coal and General Manager Operations for Xstrata Coal's Hunter Valley open cut operations.

Jamie holds a Bachelor of Engineering (Mining) from Wollongong University and a Master of Business Administration (Technology) from APESMA Deakin University. Additionally he holds First Class Certificate of Competency qualifications for both the NSW and Queensland coal industry.



### David Moulton

#### Non-Executive Director

Nominee for NSW Minerals Council

Term of appointment (1 January 2015 – Current)

David Moulton was appointed as a Director of Coal Services in January 2015. He was also appointed Chairman for the two-year period of 2016-17. After qualifying in 1979 as a mining engineer, followed by an MBA from The Nottingham Business School, Nottingham Trent University, UK, David spent nine years as a mine manager with British Coal and RJB Mining PLC (more recently UK Coal PLC).

In 1995, David moved to Pittsburgh, USA, as Global Business Development Manager for Joy Mining Machinery with responsibility for the USA, UK, Republic of South Africa and Australia.

In July 1997, he moved to Australia with Joy Mining Machinery as the Regional Vice President with responsibility for Queensland.

In January 1998, David joined Centennial Coal Company Limited as the General Manager, Operations, and subsequently assumed the role of Chief Operating Officer before being appointed to Managing Director & CEO in July 2011 through to April 2017.

David is currently an Independent Non-Executive Director of Yancoal Australia Limited; and a member of the University of NSW Education Trust Advisory Committee. He was previously a Non-Executive Director of Centennial Coal Company Limited; director of the Minerals Council of Australia; director (and past chairman) of the NSW Minerals Council; chairman of the Australian Coal Association Low Emissions Technologies Limited Board (ACALET); and Australian Coal Association (ACA).

## Board of Directors *continued*



### **Andy Honeysett**

#### **Non-Executive Director**

Nominee for Construction, Forestry, Maritime

Mining and Energy Union

Term of appointment (1 January 2016 – Current)

Andy Honeysett was appointed a Director in January 2016. Andy is the President of the South-Western District Branch of the CFMMEU (Mining and Energy Division). He has held that position since December 2009 representing miners from Mudgee, Lithgow, Wollongong and Broken Hill regions.

Andy has held positions on the District Board of Management and the Mining and Energy Division's Central Council, the divisions governing body. He is a member of the National CFMMEU Executive, a Trustee of the Mineworkers Trust and holds an executive position with the State Branch of the CFMMEU.

Andy has 24 years of experience as an underground coal miner. He was appointed to the NSW Mine Safety Advisory Council in 2011, appointed to the Mining Competence Board in 2012 and is a member of the NSW Resources Advisory Forum.

# General Management Team



**Martin Linz**

**Chief Financial Officer**

Martin Linz joined Coal Services as Chief Financial Officer in June 2012. Martin is responsible for all corporate services within Coal Services covering Finance; Investments; Property; Risk Management and Internal Audit; Human Resources; Work Health, Safety and Environment; Fleet Management; Records Management; Policies and Procedures; and Statistics.

Martin developed his broad range of financial and commercial skills as a Partner of 23 years with PwC. He worked in a diversity of industries across mining, energy, aluminium, engineering, construction and health services in both NSW and Queensland. He also carried out work internationally in India, China, South East Asia, West Africa and the UK.

Martin has strong leadership, mentoring and staff development skills. He holds a Bachelor of Commerce Degree, is a Fellow of the Institute of Chartered Accountants, and is a Graduate Member of the Australian Institute of Company Directors.



**Bruce Grimshaw**

**Company Secretary/Legal Counsel**

Bruce Grimshaw joined Coal Services in February 2008 as Chief Operating Officer and before becoming Company Secretary/Legal Counsel in 2010.

Immediately prior to joining Coal Services Bruce was employed by Home Wilkinson Lowry (HWL) Lawyers as Special Counsel in the Litigation and Corporate Division of the Firm since 2006.

Bruce has worked with Energy Australia as the Manager, Industrial Relations; NSW Premiers Department, as the Director Change Management; Industrial and Employment Law Section, as an Associate Partner with Turner Freeman Solicitors. He also worked as Senior Policy Adviser to the Hon. Jeff Shaw, QC, NSW Attorney General and Minister for Industrial Relations and was the Secretary of the Australian Services Union (NSW Branch).

## General Management Team *continued*



### **Matthew Fellowes**

**General Manager, Mines Rescue and  
Regulation & Compliance**

Matthew Fellowes joined Coal Services in January 2015 as the General Manager of Mines Rescue and Regulation & Compliance.

Prior to joining the company Matt spent six years as a consultant working directly with sites to optimise mine design and safety.

With his engineering background, Matt's principal functions in these roles included assessment and control design for Principal Hazard Management Plans, continuous improvement initiatives, mine design and feasibility and project management.

Matt also has over 20 years' experience in operations management roles across NSW where he has been responsible for site safety, production and financial performance. Matt is a former brigadesman and his qualifications include a BE (Mining) with Honours, Ventilation Officer and OH&S and Mine Manager Certificate of Competence. Matt is the current Chair of the Standing Dust Committee.



### **Mark O'Neill**

**General Manager, CS Health**

Mark O'Neill joined what was then Joint Coal Board (JCB) Health in 2000. Since that time Mark has held various roles within CS Health including Regional Manager and Operations Manager. Mark was appointed to the position of General Manager, CS Health in 2008. Prior to joining CS Health Mark spent nearly ten years with Email Australia Metals Division where he led a team that focused on delivering service and supply solutions to mining and industrial clients in the Hunter Valley.

Mark's qualifications include a Degree in Business Administration & Leadership from the University of New England, as well as Diplomas in Business, Human Resources and Information Technology. Mark is a Graduate of the Australian Institute of Company Directors and is also a member of the NSW Mining and Extractives Industry Health Management Advisory Committee.



## General Management Team *continued*



**Narelle Caldwell**

**General Manager, Insurance**

Narelle joined Coal Services in April 2016 to lead the Coal Mines Insurance business line. Since that time, she has focused on reviewing all aspects of the Coal Mines Insurance operations to provide customer-focused workers compensation services to the NSW coal mining industry.

Narelle has held senior leadership roles in finance, health, primary industry and environment with a strong track record in business transformation, strategic planning, change strategy, and stakeholder engagement.

Narelle has over ten years' experience in workers compensation insurance, including administering the NSW workers compensation scheme between 2007 and 2011. During this time she negotiated a \$3 billion contract aimed at improving workers compensation services to employers and workers in NSW.

Establishing her consultancy in 2012 to help organisations execute agile and adaptive business strategy, Narelle has successfully completed contracts with the National Disability Insurance Scheme; Coal Services; Xchanging Integrated Services; Safety, Return to Work and Support and the NSW Department of Finance, Services and Innovation.

Narelle holds a Bachelor of Business from the University of Newcastle and is a guest lecturer at the University of Sydney's Faculty of Medicine and ADAPT pain management program.



**Lynette Harper**

**Deputy General Manager, Insurance**

Lynette joined Coal Services in October 2012 to undertake a review of the CMI Scheme's premium system, which resulted in the implementation of a number of reforms aimed at ensuring the Scheme meets its objectives of being fair, affordable and financially viable.

Since joining Coal Services Lynette has worked in a variety of roles focused on reviewing and improving the operation of the CMI Scheme, including in particular the Scheme's legal management framework.

Prior to starting with the company, Lynette spent almost 10 years at WorkCover NSW – seven as the Director, Premiums – and was responsible for the oversight and management of the WorkCover NSW Scheme's premium system.

Lynette also has non-executive director experience gained over three years as a Committee of Management member for a not for profit charity organisation, two of those as Chair. She is a graduate member of the Australian Institute of Company Directors.

## General Management Team *continued*



### **Pieter Marais**

#### **General Manager, Transformation and Strategy**

Pieter joined Coal Services in March 2015 as Financial Controller and was appointed to the role of General Manager, Transformation and Strategy in 2017.

Pieter has gained extensive experience in various senior roles across mining, financial services and construction. He spent ten years at PwC responsible for assurance and project engagements within the mining, financial services and construction industries. Subsequent to his time spent at PwC he managed large global transformation projects for multinational companies, covered multinational companies as an equity analyst at an investment bank and was an executive board member of a listed construction group before joining Coal Services.

Pieter's diverse background has seen him demonstrate leadership in strategy and execution, business planning, innovation, business improvement, financial management and operations management. He is a Chartered Accountant, Chartered Financial Analyst and also has a Masters in Business Administration (MBA).

# Governance

Coal Services maintains an important set of values that recognise its responsibilities to its stakeholders, including the Minister for Resources, Minister for Energy and Utilities, and the Arts, shareholders, customers, employees and suppliers.

The Coal Services Board places great importance on maintaining the highest standards of governance and continually reviews its governance practices. Coal Services has adopted the Australian Stock Exchange (ASX) Corporate Governance Council's 'Corporate Governance Principles and Recommendations' (3rd Edition) and AS 8000 – 2003: Good Governance Principles. This has been adopted by Coal Services to comply with Clause 1, Schedule 2 of the Company's Notices of Approval and provides a structure for implementing good governance. Full disclosure is made to the Minister for Resources, Minister for Energy and Utilities, and the Arts as well as the Construction, Forestry, Maritime, Mining and Energy Union and NSW Minerals Council as shareholders of Coal Services in accordance with the above.

## Governance framework

The separation of responsibilities between the Minister for Resources, Minister for Energy and Utilities, and the Arts (the Minister), Managing Director/CEO, the Board and the General Management Team is governed by the *Coal Industry Act 2001* (NSW) and the *Corporations Act 2001* (Cth).

## Board nominations and appointments

The Minister is responsible for overseeing Coal Services' operations in respect of its statutory functions including the appointment of Directors to the Coal Services Board. Specific details on Board nominations and appointments can be referred to Schedule 5 of the *Coal Industry Act 2001* (NSW).

## Board independence

Board members have a range of relevant general financial knowledge, as well as specific skills and expertise in the coal industry and financial services sector. Specific details for each individual Director are set out in the Board of Directors section. Four of the six Non-Executive Directors are directly connected with Coal Services shareholders, as required by the *Coal Industry Act 2001* (NSW). In relation to independent Non-Executive Directors, independence is assessed prior to nomination to the Minister for Resources, Minister for Energy and Utilities, and Minister for the Arts.

## Governance *continued*

If a conflict of interest arises through the course of the directorship, all Directors must comply with Coal Services' Code of Conduct and Conflict of Interest Procedure. Further details are provided in the Ethical Framework section. At the time of appointment and every two years, all Directors must complete a Fit and Proper Responsible Person Assessment as per the Coal Services Fit and Proper Policy.

### **Board induction and continued professional development**

On appointment, all Directors are offered an induction program that is provided by the Company Secretary/Legal Counsel. During the induction program, each Director is provided with a Board Information Pack which includes relevant information for the Director to familiarise themselves with the governance framework that Coal Services operates within, our Strategy and any current issues relevant to the proper functioning of a Board.

### **Company Secretary/Legal Counsel**

The Company Secretary/Legal Counsel is appointed and can be removed by the Board of Directors. The Company Secretary/Legal Counsel reports to the Chairperson and to the Managing Director/CEO (from a day-to-day operational perspective).

### **Performance evaluation**

#### **Board performance**

The Board performance evaluation process is conducted by an external facilitator and is performed approximately every two years. The first evaluation occurred in late 2014 and focused on the performance of individual Directors. During the evaluation a number of insights were provided in respect of policy matters, which are the primary responsibility of the Board. A further evaluation was conducted in 2016 which concluded that all responsibilities were appropriately met.



# Governance *continued*

## Ethical framework

### Code of Conduct

Coal Services is committed to conducting business with integrity and accountability in accordance with the highest ethical standards and in compliance with all applicable laws, rules and regulations. It is the responsibility of all employees, including the Board of Directors, to remain aware of, and comply with, the Code of Conduct.

The Code of Conduct describes the expectations from Coal Services in relation to the desired level of professionalism and excellence that supports Coal Services' business reputation and corporate image within the community.

Coal Services updated and launched a revised version of the Code of Conduct in September 2015. The Code of Conduct highlights the seven key principles that aligns with Coal Services mission and values being:

1. We act honestly, ethically and with integrity.
2. We value our Customers and Community.
3. We treat each other with respect.
4. We are accountable and transparent.
5. We respect and maintain Privacy and Confidentiality.
6. We recognise and declare any Conflicts of Interest.
7. We obey the law and comply with all company policies.

### Conflict of interest

All Directors are required to disclose any conflict of interest upon appointment and are required to keep these disclosures to the Board up to date. Any Director with a material personal interest in a matter being considered by the Board must declare their interest and, unless the Board resolves otherwise, may not be present during the boardroom discussion or vote on the relevant matter.

All employees are expected to disclose all conflicts of interest and have appropriate controls in place around the particular conflict.

The Conflict of Interest Procedure is supported by the Acceptance of Business Courtesies Procedure (referred to as the Conflict of Interest framework). This particular procedure provides Coal Services employees with guidance to manage their obligations relating to the acceptance of gifts.

### Protected disclosures

Coal Services re-launched the previous Whistleblower Policy as the Protected Disclosure Policy with an outsourced Protected Disclosure Management Provider in September 2015.

## Financial reporting and risk management

### Financial reporting

The Coal Services Board receives regular reports from management about the financial performance of Coal Services and all controlled entities. The Coal Services Board delegates the responsibility of the review of the various policies and procedures associated with financial reporting to the various Board Committees.

#### The Board is supported by the:

Board Finance Investment and Audit Committee: monitors the financial and investment performance against strategies and targets, oversees the internal and external audit process, as well as financial reporting.

Board Risk Management Committee: oversees Coal Services compliance with corporate policies, corporate governance and risk management policies, by monitoring implemented internal controls.

Board Insurance Committee: oversees the operation and effectiveness of Coal Services NSW coal workers compensation scheme, including reviewing actuarial valuation methods.

Board Remuneration Committee: oversees Directors remuneration and the remuneration and employment conditions of all Coal Services employees.

# Governance *continued*

## Risk management

The recognition and management of risks is a critical function within Coal Services. The risk management framework has been developed to manage:

- Capital, earnings and review targets
- Reputational, political and regulatory risk
- Insurance risk
- Operational risk
- Investment risk
- People risk
- Information technology and security risk

Whilst Coal Services is not required to comply with the Australian Prudential Authority's (APRA) Prudential Standards, Coal Services has adopted these Standards where appropriate.

The Coal Services Board is responsible for reviewing and approving the overall risk management strategy, including the Risk Appetite Statement. A full review of the risk management strategy including the Risk Appetite Statement was considered and adopted at the October 2016 Board Risk Management Committee meeting.

The Board re-approved the Coal Services Risk Appetite Statement with minor edits in November 2018. No changes were proposed to the risk management strategy and it remains in place.

## Internal audit

The Internal Audit function is overseen by the Head of Risk Management and Internal Audit who has a direct reporting line to the chairperson of the Board Risk Management Committee (BRMC) and the Board Finance, Investment and Audit Committee (FIAC) and to the Chief Financial Officer (from a day-to-day operational perspective). The Internal Audit function is governed by the Internal Audit Charter which is reviewed and approved by FIAC.

### The Internal Audit Function is authorised to:

- Have unrestricted access to the FIAC.
- Have unrestricted access to all functions, property, records and employees of Coal Services.
- Allocate resources and apply such techniques as may be required to fulfil the requirements of the annual audit plan and any additional audit activities that may be agreed.

The annual audit plan is resourced internally by the Internal Audit function and by other outsourced audit providers, as appropriate.

## External audit

Coal Services' external auditor is KPMG and has been appointed by the Coal Services Board. The role of the external auditor is to provide an independent opinion that Coal Services financial reports are true and fair, and comply with applicable accounting standards and the *Corporations Act 2001* (Cth).

KPMG receive all Board Finance, Investment and Audit Committee papers and attend, at a minimum, the Board Finance, Investment and Audit Committee meeting held in September annually to discuss the financial report. The external auditors are also welcome to attend any other Board or Board Committee meeting and have access to Board members and Coal Services employees at any time.

## Remuneration

As Coal Services is not a listed public company, no equity based remuneration payments are made to any Director or employee of Coal Services.

# Governance *continued*

## 2017-18 Board Attendance (Summary)

Director	Position	Board Meetings Coal Services <sup>1</sup> (inc. CMI & Mines Rescue)		Board Finance, Investment and Audit Committee		Board Risk Management Committee		Board Insurance Committee		Board Remuneration Committee	
		Eligible	Attended	Eligible	Attended	Eligible	Attended	Eligible	Attended	Eligible	Attended
Lucy Flemming	Executive Director	6	6	0	0	0	0	7	7	3	3
Jamie Frankcombe <sup>4,6</sup>	Non-Executive Director (from 20 September 2017)	5	4	0	0	0	0	5	5	0	0
Mark Genovese	Non-Executive Director	6	6	6	6	4	4	0	0	0	0
John Hannaford	Independent Non-Executive Director	6	5	6	5	4	3	0	0	3	3
Andy Honeysett <sup>8</sup>	Independent Non-Executive Director	6	6	0	0	0	0	0	0	1	1
Peter Jordan <sup>7,10</sup>	Non-Executive Director / Chairperson (from 1 January 2018)	6	6	0	0	0	0	7	7	2	2
David Mould <sup>2,9</sup>	Non-Executive Director / Chairperson (until 31 December 2017)	6	6	6	6	4	4	6	6	3	2
Greg Sullivan <sup>3,5</sup>	Executive Director (until 20 September 2017)	1	1	0	0	0	0	1	1	0	0

<sup>1</sup> The Boards for Coal Services Pty Limited, Coal Mines Insurance Pty Ltd and Mines Rescue Pty Limited are opened concurrently as one meeting (Coal Services' Boards).

<sup>2</sup> Appointed to Insurance Committee on 2 August 2017 for subsequent meetings.

<sup>3</sup> Removed from Insurance Committee on 2 August 2017.

<sup>4</sup> Appointed to Coal Services' Boards on 20 September 2017.

<sup>5</sup> Resigned from Coal Services' Boards on 20 September 2017.

<sup>6</sup> Appointed to Insurance Committee effective from 1 January 2018.

<sup>7</sup> Appointed to Remuneration Committee effective from 1 January 2018.

<sup>8</sup> Removed from Remuneration Committee effective from 1 January 2018.

<sup>9</sup> Appointment as Chairperson expired on 31 December 2017.

<sup>10</sup> Appointment as Chairperson commenced on 1 January 2018.

# Financial Overview

for the year ended 30 June 2018

	SEGMENT REVENUES <sup>1</sup>		SEGMENT RESULTS <sup>2</sup>	
	2018 \$'000	2017 \$'000	2018 \$'000	2017 \$'000
<b>Consolidated revenues and results by segment</b>				
Workers compensation insurance	138,916	124,257	(2,775)	(48,128)
Investment activities	27,828	30,588	25,113	27,771
Mines rescue services and training	14,310	13,476	(979)	936
Gas detection equipment services and sales	4,531	3,814	(284)	61
Occupational health and safety services	3,178	2,619	(820)	(1,093)
Virtual reality technology sales	392	317	(921)	(742)
Health and rehabilitation services	10,525	7,052	(2,606)	(2,457)
Corporate and other	1,571	1,641	2,108	(3,185)
Less: intersegment eliminations	(9,125)	(4,155)	–	–
<b>Group total</b>	<b>192,126</b>	<b>179,609</b>	<b>18,836</b>	<b>(26,837)</b>
<b>Other comprehensive income</b>				
Revaluation of property, plant and equipment			–	(2,958)
Defined benefit fund gains			43	2,910
<b>Total other comprehensive income/(loss)</b>			<b>43</b>	<b>(48)</b>
<b>Total comprehensive income/(loss)</b>			<b>18,879</b>	<b>(26,885)</b>

## Note

1 Segment revenues include intra-group transactions which are eliminated via the intersegment elimination line.

2 Segment results include intra-group transactions. No elimination is required as both income and expenses are recognised in the segment results.

A full set of audited statutory financial statements for the year ended 30 June 2018 can be downloaded from our website.



# Statement of Consolidated Comprehensive Income

for the year ended 30 June 2018

	2018 \$'000	2017 \$'000
<b>Revenue</b>		
Workers compensation premium	112,521	98,928
Mines safety levy cost recovery	26,154	25,329
<b>Total insurance revenue</b>	<b>138,675</b>	<b>124,257</b>
Mines rescue levy	8,964	8,703
Training services	5,113	4,762
Gas detection equipment services and sales	4,515	3,799
Occupational health and safety services	2,378	2,498
Virtual reality technology sales	138	75
Health and rehabilitation services	3,644	3,545
Corporate and other	871	1,382
<b>Total other revenue</b>	<b>25,623</b>	<b>24,764</b>
Investment income	27,828	30,588
<b>Total revenue</b>	<b>192,126</b>	<b>179,609</b>
<b>Expenses</b>		
Claims expenses	(78,727)	(117,090)
Mine safety levy expense	(26,154)	(25,329)
Employee benefits expense	(44,374)	(38,509)
Depreciation and amortisation expenses	(3,112)	(1,713)
Impairment of owner-occupied property	–	(3,250)
Profit on sale of assets	117	36
Recovery/(impairment) of receivables	357	(889)
Investment management expenses	(2,714)	(2,756)
Miners' pension income/(expenses)	151	(11)
Mines rescue materials expenses	(2,895)	(2,383)
Consultants and contractors	(4,949)	(5,178)
Medical related expenses	(1,760)	(985)
Travel and motor vehicle	(1,699)	(1,772)
Occupancy	(3,050)	(2,604)
General overheads	(4,481)	(4,013)
<b>Total expenses</b>	<b>(173,290)</b>	<b>(206,446)</b>
<b>Net profit/(loss) from ordinary activities</b>	<b>18,836</b>	<b>(26,837)</b>

# Statement of Consolidated Comprehensive Income *continued*

	2018 \$'000	2017 \$'000
<b>Other comprehensive income</b>		
<b>Items that will not be reclassified to profit or loss</b>		
Revaluation of property, plant and equipment	–	(2,958)
Defined benefit fund gains	43	2,910
<b>Total other comprehensive income/(loss)</b>	<b>43</b>	<b>(48)</b>
<b>Total comprehensive income/(loss) for the year</b>	<b>18,879</b>	<b>(26,885)</b>

## Notes

Amounts included here exclude intra-group transactions and therefore differ from those displayed in the segment report.

Workers compensation premium and claims expenses returned to a more balanced position in 2018 after a shortfall in 2017 due to significant increases in claims costs. The resulting comprehensive loss in 2017 was funded out of retained profits from prior years.

The surplus of premium income over claims costs as realised in 2018 is necessary to pay for the operating costs of Coal Mines Insurance as well as the occupational health and rehabilitation services which Coal Services has a statutory obligation to provide.

Employment benefits expenses have increased in order to progress modernisation projects across the whole of Coal Services. These expenses are expected to reduce as projects are fully implemented and efficiency benefits realised. Fixed term employees and contractors have been employed in preference to consultants and certain permanent positions in order to manage costs and improve adoption of changes by our workforce.

In addition, an increase in funding for one of the staff superannuation funds has been recognised in 2018.

# Statement of Consolidated Financial Position

for the year ended 30 June 2018

	2018 \$'000	2017 \$'000
<b>Current assets</b>		
Cash and cash equivalents	15,215	11,402
Receivables	14,548	30,943
Financial assets held at fair value through profit and loss	92,854	53,208
Inventories	194	182
Prepayments	1,054	583
<b>Total current assets</b>	<b>123,865</b>	<b>96,318</b>
<b>Non-current assets</b>		
Receivables	220	177
Financial assets held at fair value through profit and loss	428,924	443,325
Property, plant and equipment	46,751	46,476
Investment properties	41,300	39,700
<b>Total non-current assets</b>	<b>517,195</b>	<b>529,678</b>
<b>Total assets</b>	<b>641,060</b>	<b>625,996</b>
<b>Current liabilities</b>		
Payables	19,117	15,805
Provision for outstanding workers compensation claims	71,605	85,663
Provisions	12,150	11,699
<b>Total current liabilities</b>	<b>102,872</b>	<b>113,167</b>
<b>Non-current liabilities</b>		
Defined benefit superannuation scheme	1,851	1,794
Provision for outstanding workers compensation claims	326,486	319,803
Provisions	4,561	4,821
<b>Total non-current liabilities</b>	<b>332,898</b>	<b>326,418</b>
<b>Total liabilities</b>	<b>435,770</b>	<b>439,585</b>
<b>Net assets</b>	<b>205,290</b>	<b>186,411</b>
<b>Equity</b>		
Contributed equity	–	–
Retained profits	205,290	186,411
<b>Total equity</b>	<b>205,290</b>	<b>186,411</b>



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