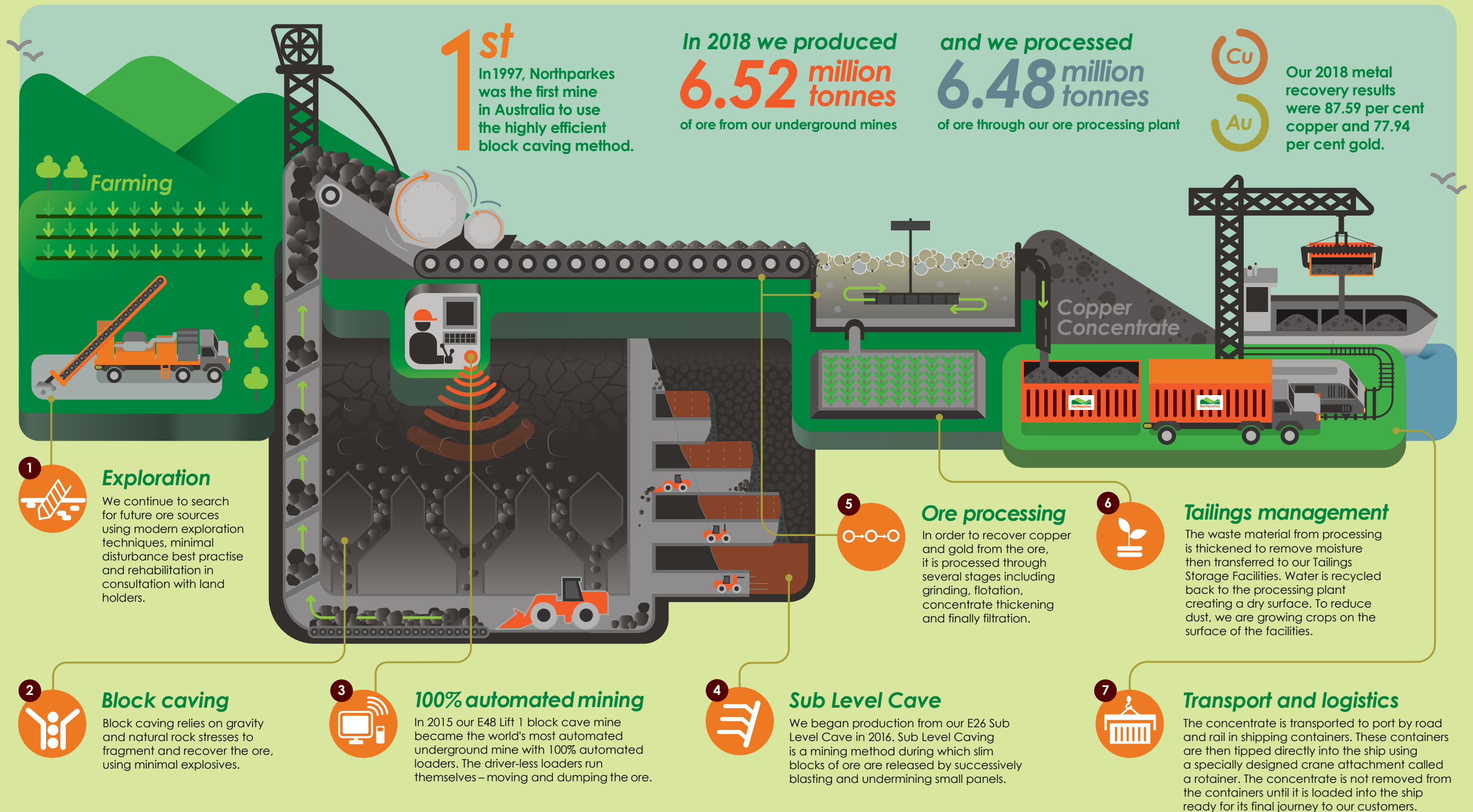


The Northparkes Report **2018**

Northparkes Valuechain



Zeroharm

Our journey towards Zero Harm Operations is a relentless focus across our entire sphere of operation: our people, our community, our environment and our equipment. We believe this approach is why we have been successful for over two decades, and sets us up for further decades to come. Our vision for our business is for *A century of mining together*.

Thank you for your interest in Northparkes Mines.

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Northparkes is owned and operated by China Molybdenum Co., Ltd (CMOC) in a Joint Venture comprising CMOC (80%), Sumitomo Metal Mining Oceania Pty. Ltd (13% and Sumitomo Corporation (6.7%).

Our purpose

We produce the vital components of our modern quality of life: the miracle of copper, gold and grains. They are the metal building blocks of electronics, infection-fighting surfaces, and the foundation of our food chain.

Ourstory

Since 1993 Northparkes has been celebrated for our high-quality copper deposits, low cost operations and loyal, committed people.

Working at Northparkes is enjoyable: inspirational leadership matters and diversity is celebrated. We are proud to be a miner and a farmer, a good Parkes neighbour and valued contributor to NSW's Central West.

Zero Harm Operations describes our approach.

We are innovative and resilient, we embrace technology and new ways of working. We have decades of excellent mineral deposits and an entire mineral field to continue to explore.

We will discover the copper and gold deposits to take us even further into the future. We are setting up future generations of Northparkes miners for a century of mining together.

Our values



Zeroharm

Zero Harm is our approach to every aspect of our operations. We care for our people, our environment and the community in which we live and work.



Oneteam

We proudly work together towards our shared purpose.



Lifebalance

We realise the potential in everyone, support their wellbeing and enjoy what we do.



Improvement

We will be better tomorrow, than we are today.

From our CEO

Steele Li

CMOC Executive Chairman and CEO



In 2018, CMOC-Northparkes Mines (Northparkes) achieved a new underground production record and new records were set for throughput rates repeatedly during the year as a result of continuous improvements.

Northparkes' journey towards Zero Harm Operations is a relentless focus across their entire sphere of operation. This approach is why the team at Northparkes have been successful for over two decades. Zero Harm is ingrained in each and every employee and is an essential part of the culture.

Throughout 2018, CMOC has focused on striving to make continuous improvements in the field of sustainable development while coordinating production operations. Northparkes continues to implement improvements and technologies to work smarter, and remain a cost competitive operation for years to come.

In 2018, our direct economic contribution across the world totalled \$5.1 billion. In particular we continue to implement the active community investment policy in places across the world where we have business operations, covering livelihoods, health care, education, agriculture, infrastructure and resettlement, with a total investment of \$62 million, an increase of \$29 million compared with 2017.

As we continue into 2019, we will unswervingly assume our corporate social responsibility and make continuous improvements in sustainability fields such as safety, environmental protection and employee development, and share development results with investors, employees, communities, governments and all other stakeholders. We will continue to strive to achieve our vision of becoming a respected diversified world-class resource company.

Northparkes is the world's most automated underground block cave mine and we are proud of their history and achievements. The mine has been operating for 24 years and has a vision of 'A century of mining together', in the Central West of New South Wales.

In early 2019, in conjunction with our joint venture partner Sumitomo, we announced a new block cave at Northparkes, called E26 Lift 1 North. We are really excited to see this project come to fruition and to watch Northparkes continue to develop and grow. Northparkes plays a pivotal role in our strong and long-term presence in Australia and as an internationally renowned mining company.

I would like to extend my sincere appreciation to all Northparkes employees for their hard work and dedication to the operations and thank you for taking the time to read through the 2018 Northparkes Report.

We are really excited to see this project come to fruition and to watch Northparkes continue to develop and grow. Northparkes plays a pivotal role in our strong and long-term presence in Australia and as an internationally renowned mining company.

From our Managing Director

Hubert Lehman
 Northparkes Mines
 Managing Director



Welcome to the 2018 Northparkes Report. This report recognises and celebrates the achievements and milestones we reached throughout the year.

Since 1993, Northparkes has been celebrated for our high-quality copper deposits, low cost operations and loyal, committed people.

In 2018, we reached a new underground production record of 6.52 million tonnes. In our Ore Processing department, we produced 6.48 million tonnes of ore. Key major projects continued to progress, including the Expansion study, the Single Flotation Project and E26 Lift 1 North.

On our farming operations, we planted a range of crops including canola, monola, wheat, barley, chickpeas and lentils. With only a minimal amount of rainfall across the region, we were lucky to have anything to harvest at all.

In March, Manager – Mining Operations Rob Cunningham was recognised at the NSW Mining Industry and Suppliers Awards at Parliament House in Sydney. Rob received the Outstanding Contribution to Mining award. We are extremely proud to have Rob as part of our team at Northparkes. It's fantastic to see Rob being recognised for his incredible achievements and dedication to not only Northparkes, but the mining industry.

We held our first ever Northparkes Family Day in April. Our employees were invited to bring their family members and friends to site to tour our operations and show them where we come to work every day. The day was a great success, with over 350 people in attendance.

As we head into 2019, we will continue to focus on our commitment to Zero Harm by caring for our people, our equipment, our environment and the community in which we live and work.

At Northparkes, we recognise that getting a job in the mining industry can be challenging with little to no experience. In 2018, we developed an underground mining traineeship program for local residents in the Central West who are interested in working in an underground mining operation. After receiving an overwhelming response, we welcomed six new mining trainees to Northparkes.

Northparkes has proudly supported the White Ribbon campaign for several years now. In 2016, we became the first mine in Australia to become a White Ribbon accredited workplace. In 2018, we hosted Rosie Batty, the founder of the Luke Batty Foundation and the 2015 Australian of the Year, to share her story with our employees and local emergency service providers and first responders.

As we head into 2019, we will continue to focus on our commitment to Zero Harm by caring for our people, our equipment, our environment and the community in which we live and work.

Earlier this year CMOC and Sumitomo announced the final approval of our new block cave mine called E26 Lift 1 North. The investment will be more than \$200 million over a three and a half year period. Construction has commenced with full production expected in mid-2022. The project will produce approximately 40 million tonnes of ore over a 10 year period.

This is a major investment in the future of our business and a very exciting time for Northparkes. At the peak of construction, the project will employ up to 180 people, which will be a mixture of employees and contractors.

Thank you for your interest in the 2018 Northparkes Report; I hope you enjoy reading about our achievements in 2018. I look forward to leading the team at Northparkes and having the opportunity to share our future accomplishments with you as we strive to achieve our vision of 'A century of mining together'.

We value
caring for our
people, our
environment
and the
community.

Ze



ero**harm**

Our Zero Harm approach

We work to achieve Zero Harm Operations by looking out for each other during every task, every time. We know Zero Harm is achievable and it is an essential part of our culture.

Our Zero Harm performance

Zero Harm is our approach to every aspect of our operations. We care for our people, our equipment, our environment and the community in which we live and work.

In 2018, we had eight recordable injuries. The injuries were medically treated and each person has returned to normal duties at work.

2018 injuries:

Hand	4
Back	2
Arm	2

In 2018, we received zero community complaints and had zero environmental incidents.

2018 incidents:

Community	0
Environmental	0



Zero Harm Innovation and Leadership Awards

At Northparkes, we believe innovation and leadership in Zero Harm should be recognised and rewarded. During our staff communication sessions, we recognise those who have been nominated by their peers for their Zero Harm achievements.

Zero Harm Leadership Award winner:

Nathaniel Dixon received a Zero Harm Leadership Award for his contribution to Zero Harm in the workplace.

He displays strong leadership skills and consistently focuses on safely executing small tasks right, each and every time.

Zero Harm Innovation Award winners:

Tim Dunn and Rem Henry designed a canvas cover for the monitoring equipment unit used in the underground Technical Services team. This improvement allows the operator to undertake monitoring in unfavourable conditions, it increases the life of the equipment and it makes it a lot easier to see the screen when working in direct sunlight.



Zero Harm Shift Program

In 2018, we introduced the Zero Harm Shift Program, a training course designed to create a thriving culture of safety ownership, accountability and care across the business.

The process recognises that systems don't keep people safe, people's attitudes, beliefs and values towards safety keep people safe and as such govern the effectiveness of safety systems in achieving safety goals.

This program was attended by approximately 60 leaders. A follow-up program will be delivered across site to all our employees and contractors in 2019.



Our community and environment

Our environment and the community in which we live and work are critical to our Zero Harm approach.

Air Quality

We regularly sample air quality at key locations on and adjacent to our mine site. The program is designed to determine the effectiveness of control measures and ensure we are compliant with consent and licence conditions. The program comprises a combination of real-time BAMs (Beta Attenuation Monitoring for PM10), high volume air samplers and directional and depositional dust gauges.

There were zero dust exceedances recorded during the year.

Noise

Noise monitoring is conducted quarterly by an external specialist who monitors and analyses noise data at four of our closest neighbouring properties. Noise levels must comply with the requirements set out in our Project Approval, and associated standards and policies. Noise monitoring comprises a combination of real-time (unattended) monitoring and attended noise monitoring surveys. There were zero exceedances in 2018.

Water

40% of the water used onsite was recycled in 2018. Its main use was to process crushed ore into copper concentrate.

We manage our water use through an internal infrastructure system aiming to:

- Ensure a reliable and sustainable long-term supply of water to site
- Minimise fresh water use by recycling water from mining and processing activities
- Monitor surface and groundwater resources to assess the impact of our operations

Environmental incidents and community complaints

There were no environmental incidents or community complaints in 2018.



Our farming operations

On our farming operations, we planted a range of winter crops in 2018 including canola, monola, wheat, barley, chickpeas, and lentils. Unfortunately for us and many others, 2018 was one of the driest years on record since our farming operations commenced.

With only 129 millimeters of growing season rainfall received, we were lucky to have anything to harvest at all. This is a testament to the improvements of modern farming along with our long-term vision and commitment to conservation tillage practices.

The combination of yield and high commodity prices saw our chickpeas, wheat and barley being the higher returning of our crops.

At Northparkes, we are proud to be a miner and a farmer. On 21 November, we celebrated and recognised the amazing work of our local farmers for National Agricultural Day. Did you know that agriculture is the largest employer in many of Australia's rural and remote communities?

2018 again saw our farm host many industry research and development trials. We played host to the 2018 Mixed Farming Technology Agribusiness Today Forum including guest speakers and static machinery displays, which was attended by over 60 industry people and growers.

We continue to practice industry leading techniques with regards to weed management. This has had a significant effect in reducing our annual grass weed pressure.

We had another successful year at the 2018 Parkes Show – each year we enter our grains from the previous year into the agricultural produce section. We were lucky enough to win the following categories:

- Most Successful Exhibit
- Agricultural Produce Grand Champion
- Grain of Show Champion
- Wheat of Show Champion
- Canola of Show Champion
- Barley of Show Champion
- Alternate Grain of Show

We also successfully planted 5,000 trees in what was a challenging year for establishment.



Consultation

In addition to supporting community initiatives, we have several approaches to formally engage, monitor and report to our community stakeholders.

Community Consultative Committee (CCC)

The CCC meets twice a year to update members on business operations and receive community feedback. The committee is made up of Northparkes mine management, Councillors from Parkes and Forbes Shire Councils and community representatives from Parkes and Forbes. The two meetings were held in April and December.

In 2018, the committee focused on developing projects related to employment, education, training and community engagement.

Wiradjuri Executive Committee (WEC)

The WEC meets quarterly to identify opportunities and develop projects which support Wiradjuri people in the community. The WEC is made up of two members from the Wiradjuri Council of Elders, two from Peak Hill Local Aboriginal Land Council and two senior Northparkes employees.

In 2018, the committee focused on developing projects related to employment, education, training and community engagement. One of the projects that came to fruition included a cultural heritage assessment training day for local high school students in the Central West.

Neighbours meetings

Northparkes hosts formal onsite meetings open to neighbours twice a year and meets with many neighbours individually throughout the year. In 2018, we held meetings in February and December. During the Neighbours meeting in February, our neighbours were taken on a tour of our Tailings Storage Facilities.

Source community newsletter

Published twice a year and distributed online and via local newspapers.

Website

www.northparkes.com

Facebook

www.facebook.com/northparkes

LinkedIn

www.linkedin.com/company/cmoc-northparkes



Victorian Mines Rescue Competition

Last October, we sent members of our Emergency Response Team (ERT) to compete in the Victorian Mine Rescue Competition. This well respected national competition has been held for 25 years, and attracts around 10 teams from mines across Australia.

We're extremely proud of the team and all of the effort that goes into training and preparing for such a big event. This event sees teams from mine sites across Australia come together to compete against each other to test different emergency response skills. Events include firefighting, rope rescue, first aid, theory, underground search and rescue, plus more.

This year our team was led by Jamie Pope (who also received the Noel Justice award), Wayne Sargent, Matt Flynn, Wade McConnell, Jacob Brady, Dan Ryan, Scott Mackenzie and Mick Carty.

Manager – People, Safety and Environment Stacey Kelly said, "Zero Harm Operations is our approach to all we do, and our ability to respond to emergency scenarios is a critical part of this. Competitions such as this allow us to practice our skills and benchmark ourselves against others in the industry.

"The entire Northparkes ERT works extremely hard throughout the year to ensure we are always at the top of our game. Congratulations on another fantastic year," she said.



Australia's first White Ribbon accredited mine

Northparkes has proudly supported the White Ribbon campaign for several years now. In 2016, Northparkes became the first mine in Australia to become a White Ribbon accredited workplace. As a White Ribbon accredited workplace, we are leaders in our industry who are committed to preventing and responding to domestic and family violence.

Northparkes is recognised by White Ribbon Australia as a pioneer in contributing to national cultural change to prevent and respond to violence against women. Accreditation lasts for three years, evidencing an ongoing, sustainable commitment.

Northparkes Managing Director Hubert Lehman said, "As a large employer in the Central West, it is important to us that we help break the cycle of domestic and family violence by supporting initiatives that improve the wellbeing of the community in which we live and work."

CEO, White Ribbon Australia Delia Donovan said, "Northparkes has been a longstanding and valued White Ribbon Workplace, working with White Ribbon Australia for almost five years. In 2016, White Ribbon Workplace Assessors named Northparkes a leader in the mining industry in gender equality in Australia."

Each year Northparkes employees band together to participate in local White Ribbon events alongside

community members to stand up, speak out and act to prevent domestic and family violence. As part of our ongoing commitment, this year we hosted Rosie Batty in Parkes. Rosie is the founder of the Luke Batty Foundation and the 2015 Australian of the Year.

"Rosie visited us onsite to share her story with our employees and to further educate us on family violence. We then held a session in town with our first responders and emergency service providers. This session was designed to encourage discussion around how we, as a community, can continue to work together to prevent and respond to domestic violence," Mr Lehman said.

Rosie then met with the local Family and Domestic Violence committees of Parkes, Forbes and Peak Hill to discuss new ways they can support their local communities.

Mayor of Parkes Shire Council Ken Keith OAM said, "Congratulations to Northparkes on inviting Rosie Batty to Parkes. Her moving story and important message of reducing domestic and family violence in our community was inspirational. Her dialogue with the range of health and welfare practitioners in attendance was warmly received and appreciated."

"We look forward to working with Northparkes towards a successful reaccreditation to ensure men and women continue to stand up, speak out and act to prevent men's violence against women."

Delia Donovan, CEO, White Ribbon Australia



We value
working
together
towards
our shared
purpose.

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Production

In 2018, we produced 6.52 million tonnes of ore from our underground mines, a new record and we processed 6.48 million tonnes of ore through our ore processing plant. Our 2018 metal recovery results were 87.59 per cent copper and 77.94 per cent gold.

New records were set for throughput rates repeatedly during the year as a result of continuous improvement projects. Manager – Ore Processing Roslyn Dalton said, "Increasing throughput rates resulted in a reduction in recovery and the team are proud we mitigated the vast majority of recovery losses."

A significant change was made to the ore processing plant with the two separate flotation circuit modules decommissioned and replaced with a single flotation circuit. "This project saw the removal of 16 Dorr Oliver tank cells and the installation of three replacement Outotec cells. This is the largest investment in the processing plant in the history of Northparkes," she said.

Scheduled maintenance was completed across site, both underground and on the surface, with multiple shutdowns carried out in line with our preventative maintenance program. Maintaining our assets properly requires planned downtime in order to perform repairs, upgrades and to conduct monitoring activities.

Such scheduled maintenance ensures our mine and mill will continue to operate safely and efficiently for many years to come.



Our people

We strive to support the learning and development of our people.

We ensure we provide our employees with opportunities to undertake formal and informal training to enhance their skills and knowledge. In 2018, Northparkes employees received around 10,438 hours of operational training and 1,625 hours of organisational development training.

	Male	Female
Site Management	4	2
Financial Management	19	12
People, Safety & Environment	16	15
Ore Processing	39	3
Mining Operations	103	9
Asset Management	89	4
Life of Mine Studies & Exploration	8	5
TOTAL	278	50



Family Day

In April 2018, we held our first ever Northparkes Family Day. The concept behind the Northparkes Family Day was to provide employees with an exclusive opportunity to bring their families and friends to site to show them where they come to work every day.

The day kicked off at 9.00am with buses departing from Northparkes Oval in Parkes. On arrival, our guests were greeted by our friendly volunteers and Champ the Northparkes mascot, informing them of all the activities we had in store.

The Northparkes Family Day was a way of giving back to and rewarding our employees. It was fantastic to see everyone filled with so much pride while touring our operations. Having the opportunity to bring your family and friends to site to personally take them on a tour of our operations is really special and not something you get to do every day in the mining industry.

The day was a huge success with over 350 people in attendance to see the mine and take part in activities which were enjoyed by young and old alike.

Attendees toured the ore processing facility, the underground SCADA Control Room, the underground surface operations, the laboratory, the warehouse and the workshop.

Kid's corner and our heavy machinery display were very popular with the younger generation. It was such a great relaxed and happy atmosphere. Everyone relished the opportunity

to spend time with their family and friends, showing them what we do at Northparkes every single day.

Kid's corner included two jumping castles, a rock climbing wall, face painting, entertainment by local performing artist Jordie Dwyer and a range of food on offer prepared by Parkes Rotary Club and Parkes Quota Club Inc.

Northparkes Managing Director Hubert Lehman said, "We would particularly like to thank our suppliers who went above and beyond to be a part of our Northparkes Family Day including Sandvik, WesTrac, Epiroc, Boart Longyear and Orica, who organised to bring heavy equipment along to display. I would also like to thank our employees and their families for continuing to support our operations."



R U OK? Day

R U OK? Day is a reminder to check in with the people at work and at home who might be going through a tough time.

Last R U OK? Day we held a BBQ breakfast onsite to check in with each other while enjoying a coffee and a bacon and egg roll.

We were also lucky enough to host Brian Dowd, The Walkabout Barber, who delivered a session on resilience and recovery. You may have recently seen Brian on the Today Show supporting drought awareness by offering 'fresh cuts' in his Walkabout Barber enterprise. Brian shared his story and provided some valuable tools to use to support the people that we see on a daily basis who might be struggling.



Vacation Program

During 2018, we hosted five undergraduate university students as part of our Vacation Program. The program is designed to give students a solid foundation to kick start their mining career and fast track them into employment.

The program runs for eight weeks over the summer university holidays. The students spend time with the department most relevant to their studies. Brad Rearden, a Chemical Engineering student from the University of Newcastle, travelled from his hometown on the Central Coast to complete work placement in our Ore Processing department.

One of the key projects the students are given is to design and build the Northparkes float for the Parkes Elvis Festival's Northparkes sponsored street parade.

"I chose Northparkes because one of my friends from uni highly recommended the vacation program at Northparkes, having previously completed work placement there himself. I learnt so much during the program – I loved going out into the

ore processing plant and gaining hands-on experience," said Brad.

One of the key projects the students are given is to design and build the Northparkes float for the Parkes Elvis Festival's Northparkes sponsored street parade.

The Northparkes Mines Street Parade is a major highlight of the Parkes Elvis Festival. Elvis-themed floats, vintage

and classic cars and motorbikes, led by Northparkes, travel down the main street of Parkes in front of thousands of Elvis fans. Our employees and their families are invited to dress up and jump on board our float to join in on the fun.

What better way to showcase the creativity and passion of our employees and the region? The Parkes Elvis Festival is one of the many community events we are involved with – we are enthusiastic and active event hosts and participants in the Parkes and Forbes communities.



Apprentice of the Year Award

On Thursday 21 February 2019, Northparkes hosted an Employee Pipeline event to award the Lester Plummer Apprentice of the Year Award and welcome new employees to the business. Our employee pipeline includes apprentices, trainees, graduates, scholarship holders and work placement students.

Manager – People, Safety and Environment Stacey Kelly said, “The Lester Plummer Apprentice of the Year Award was first introduced in 2016, in honour of our friend and colleague, Lester Plummer, who passed away in 2015. Lester worked at Northparkes for many years, where he displayed a keen interest in the development of our apprentices. His caring and fun loving nature, combined with his trade knowledge and skills, meant that he was a perfect match to mentor our apprentices.”

“I feel extremely honoured to have received the Lester Plummer Apprentice of the Year Award during my apprenticeship.”

The Lester Plummer Apprentice of the Year was awarded to third year Mechanical Fitter, Matt King. Matt was recognised for being a quiet

achiever who takes on responsibility, leads others and consistently strives to improve and develop his skills. Matt also received exemplary results at TAFE, with four out of five assignments marked at over 95%.

“I feel extremely honoured to have received the Lester Plummer Apprentice of the Year Award. During my apprenticeship I have been lucky enough to have worked with various tradespeople across site, who have positively influenced and developed my attitude, skills and knowledge,” said Matt.

Brandon Keep, Luke Wallace, Oliver Dagger and Steven Butler who finished their apprenticeships last year were also recognised for their efforts during the pipeline event.

Stacey added, “By building the skills of young people, we are able to build a community of talented and experienced tradespeople whose skills will benefit both Northparkes and the community in which we live and work.”



Mining trainees

Last year, we introduced a mining traineeship program to create a 'foot in the door' opportunity for local residents who demonstrate initiative, a positive attitude and the desire to work in an underground mining environment.

Manager – Mining Operations Rob Cunningham said, "The traineeship program at Northparkes is a new approach to attract people into mining at an entry level role. The traineeship is creating a pipeline of new people into the mining industry."

At the conclusion of the two year traineeship, each trainee will be a multi-skilled miner, having had practical hands-on experience, including the opportunity to operate heavy machinery and learn about automation, whilst gaining a nationally recognised Certificate III in Metalliferous Mining.

Six trainees began their two year structured program in our Mining Operations department in July. Each trainee will spend 12 months working with the underground development crews, six months working with the underground production crews and six months with our underground service crews.

Mining trainee Elise Jackson said, "This program has given me the opportunity to step into the world of underground mining with no previous experience. I have gained so many new skills, met some great people and have been provided with plenty of development opportunities. Plus, I get to be home with my family every single night – what more could you want!"

"This program has given me the opportunity to step into the world of underground mining with no previous experience. I have gained so many new skills, met some great people and have been provided with plenty of development opportunities."

Elise Jackson, Underground Mining Trainee



Scholarship holder offered graduate role

Michael Thomas from Wellington was one of our 2014 recipients of the Northparkes Indigenous Scholarships. Michael studied a Bachelor of Environmental Science at the University of New England, Armidale campus.

In addition to financial support, Michael was provided with the opportunity to complete work placement at Northparkes during his university vacations. "Work placement provided me with the skills and experience I needed to set myself up for success when I entered the work force following the completion of my degree.

"I completed my degree in 2017 and was offered a contractor's position at Northparkes in the Community, Environment and Farm team. This position gave me the opportunity to learn more about the role the environment team provides across

the business, as well as regulatory compliance with state and federal legislation," he said.

In September 2018, Michael was offered the Graduate Environmental Advisor role. Our two year graduate program of structured mentoring, development and support is designed to provide a solid foundation to kick start your mining career.

"Since starting my graduate position, I have worked across a portfolio of complex initiatives and contributed to their successful delivery. I am extremely grateful for all the opportunities Northparkes has provided me with so far. I look forward to getting as much as I can out of my graduate program.

"The work/life balance Northparkes offers gives me the flexibility to travel to my home town of Wellington every weekend to see my family and friends," said Michael.



Jamie Pope wins Noel Justice Award

A massive congratulations to our very own Jamie Pope (Popie) who took out the Noel Justice Award at the Victorian Mines Rescue Competition this year.

Popie commenced his career at Northparkes in 1995 as an operator working in the Ore Processing department. In late 1996, Popie joined the Northparkes Emergency Response Team (ERT) as a rookie, officially becoming part of the team in 1997. He has now been a member of ERT for 21 years.

Popie is incredibly deserving of the Noel Justice Award. We are extremely proud of him and are so happy his dedication to mine rescue has been recognised.

Congratulations to Andrew Burt from Coal Services who was also recognised with the Noel Justice Award.



Scholarship programs

Northparkes Indigenous Scholarships

Thomas MacRae of Parkes and Peter Lindsay of Tottenham were the successful recipients of the 2018 Northparkes Indigenous Scholarships. Thomas is studying a Bachelor of Engineering Honours Electrical and Electronic at the University of Newcastle and Peter is studying a Bachelor of Engineering Honours at the University of Wollongong.

Northparkes Managing Director Hubert Lehman said, "It's great to see these scholarships being presented to such outstanding students. We are proud to welcome Thomas and Peter to our employee pipeline."

"Working onsite has helped me further understand what I have learnt in my degree by seeing the concepts applied practically at Northparkes."

Thomas MacRae, Indigenous Scholarship Holder

The scholarship program awards \$5,000 per year to non-technical scholarship holders and \$10,000 per year to technical scholarship holders. The recipients also receive a laptop to assist them with their tertiary studies. In addition to financial support the students receive work placements onsite at Northparkes and throughout Australia.

Thomas and Peter join a cohort of Indigenous tertiary students across NSW who study in a variety of fields including electrical engineering, environmental science, social work, communications and media.

The scholarship program is available to Indigenous students aged 30 years or younger who have been accepted into a tertiary degree. Both Thomas and Peter completed their work placement at Northparkes during their university holidays. "This scholarship has enabled me to study away from hometown of Tottenham and support myself whilst at university," said Peter.

"Working onsite has helped me further understand what I have learnt in my degree by seeing the concepts applied practically at Northparkes," Thomas said.



Sumitomo Metal Mining Oceania Scholarships

In 2018, Brianna Duncan and Brody Munday were each awarded a 2018 Sumitomo Metal Mining Oceania (SMMO) supported Scholarship. The aim of the scholarship program is to promote and encourage careers in the mining industry.

Northparkes Managing Director Hubert Lehman said, "Since the program's inception in 2014, we are proud to say we continue to provide local students with the opportunity via SMMO to pursue a career in mining."

Brianna is in Year 11 at Red Bend Catholic College. "I am interested in becoming an Engineer in either the Chemical or Mechanical areas," she said. Brianna has an interest in chemicals and their properties and also likes to understand how things work in order to improve processes. Brianna has various sporting achievements in netball as well as academic awards.

Brody is in Year 11 at Kandos High School. "I would like to study either Geotechnical Engineering or Chemical Engineering when I finish school. My ultimate goal is to become a Senior Engineer and one day even a Mine Manager," he said. Brody has been involved in various fundraising initiatives and has also done a three month exchange to New Zealand.

Brianna and Brody will receive \$500 for successful completion of Year 11 and \$1,000 for successful completion of Year 12. \$2,000 is also granted to those scholarship students who enter and successfully complete their first year at university in a mining related course.

The SMMO Scholarship program is administered by Northparkes, with which SMMO is a joint venture partner. The scholarship is a voluntary investment by SMMO above and beyond sponsorship and community grants already provided by Northparkes.

In addition to financial support provided by SMMO, Northparkes offers paid work experience and career mentoring to SMMO scholarship holders both onsite and throughout Australia.

"I would like to study either Geotechnical Engineering or Chemical Engineering when I finish school. My ultimate goal is to become a Senior Engineer and one day even a Mine Manager."

Brody Munday, SMMO Scholarship Holder



NSW Mining Industry and Suppliers Awards

In March we attended the NSW Mining Industry and Suppliers Awards at NSW Parliament House in Sydney. Robyn Teet won the Young Achiever award and Rob Cunningham won the Outstanding Contribution to Mining award.

Robyn joined Northparkes in 2016 with the Life of Mine and Exploration department and has since transitioned to the Mining Operations department as the Operations Geotechnical Engineer.

In 2017 Robyn received The Australasian Institute of Mining and Metallurgy (AusIMM) 'New Professional Award' for her work promoting mental health across the wider mining industry. Robyn was instrumental in developing the relationship between AusIMM and beyondblue to highlight the importance and raise awareness of mental health in young minerals professionals.

Rob Cunningham joined Northparkes in 1993 when the operations first opened, starting as an operator. Rob is responsible for safe production in our underground operations, as well as delivering quality product to the operation's ore processing facility. Over the last decade, Rob has been dedicated to the ongoing development of a Zero Harm working environment at Northparkes. In 2015, Rob played an integral role in the full automation of Northparkes' E48 Lift 1 block cave mine, the world's most automated underground mine, with 100 per cent automated loaders.

Rob is also a representative for metalliferous mining on the Mine Safety Advisory Council, responsible for researching, examining and developing health and safety strategies for the NSW mining industry.

"It was very humbling to receive this award. It has enabled my profile to grow in the mining community. The award is a representation of

Northparkes providing development opportunities for their people. 25 years ago, I was an operator and now I am a Mining Manager leading a great team," said Rob.

Northparkes Managing Director Hubert Lehman, said, "We are extremely proud of both Rob and Robyn and their achievements."

"It was very humbling to receive this award. It has enabled my profile to grow in the mining community. The award is a representation of Northparkes providing development opportunities for their people. 25 years ago, I was an operator and now I am a Mining Manager leading a great team."

Rob Cunningham, Manager – Mining Operations



Xtreme2 Ambulance Challenge

On Sunday 27 May 2018, we hosted over 80 personnel from NSW Ambulance, Fire and Rescue NSW and NSW SES for the Xtreme2 Ambulance Challenge.

The day is a multi-casualty exercise day aimed at enhancing the skills of ambulance officers and community first responders across the state.

A big thank you to Matt Flynn and his team for coordinating the day and to our amazing employees and their families for volunteering their time to act as casualties.

Without the support of the volunteers, the day wouldn't have been such a success.



Jes'Se Rushby

Jes'Se Rushby, one of our Indigenous Scholarship holders and former Forbes High School students, recently graduated with a Bachelor of International Studies. Jes'Se hasn't finished there though; she is doing a double degree and will now focus on completing her Bachelor of Law. What an achievement! Congratulations Jes'Se, we are incredibly proud of you.



Our value
is in being
better
tomorrow
than we are
today.

Improve



ement

Improving our business



As an action out of the 2017 Employee Engagement Survey, a working party was formed to review the current underground rosters. A survey was distributed to the Mining Operations department in February last year to further understand potential options regarding rosters.

There was an overwhelming interest from the Development and Service crews to trial a seven on/seven off roster. The results also revealed that the Production crews wanted to stay on their current roster.

Following a risk assessment to determine the risks and required controls, a 10 month trial was approved, commencing on 5 April 2018. To measure the success of the trial, key performance indicators (KPIs) were developed. The KPIs focused on safety, fatigue, incidents, production performance and absenteeism.

Midway through the trial, a survey was conducted focusing on the fatigue risk and impact to the operators both at work and at home. The survey results identified improvement in fatigue and work/life balance.

The trial concluded in February 2019 and has now been implemented permanently. We have seen improvements in production, team morale, fatigue and work/life balance as a result of the trial.

Owner's team

Our Underground Mining team focused on delivering their own underground development projects, using an owner's team of Northparkes employees. The owner's team approach has been instrumental in improving metre rates and costs to deliver the sub level cave (SLC) project.

The recent completion of the fourth level of our SLC was delivered three months ahead of schedule at better than industry rates, for cost per metre development. The learnings from the SLC have been applied to the E26 Lift 1 North block cave project, contributing to a real estimate of development costs and time in our ground conditions.

Manager – Mining Operations Rob Cunningham said, "The owner's team concept has many benefits including costs, quality, metre rates and schedule delivery. In addition to these benefits, we have also seen improvements to our Zero Harm culture, reputation and employee engagement, plus we are seeing the benefits stay in the local community."

Life of mine studies and exploration

In order to achieve our vision of 'A century of mining together', we are actively exploring the full extent of our exploration leases. In 2018, the major focus for the Life of Mine and Exploration (LOMEX) team was the feasibility study for E26 Lift 1 North and the pre-feasibility study for E22.

During the first half of the year, we were able to work with a number of different land owners within our exploration lease to complete drilling programs on their properties. In the second half of the year, we focused on drilling within our current mining lease.

In December 2017, we purchased a Case IH Puma 155 Tractor to use predominately on our farming operations. The tractor was also made available to support the Exploration team with drill pad preparation and rehabilitation work to return drilling sites to their original state.

In early 2018, the tractor was put to the test to perform rehabilitation work on one of our neighbour's properties where drilling had recently been completed – a great result was achieved.

Completing this type of preparation and rehabilitation work in-house compared to using a contractor's equipment, provides a significant cost saving on an annual basis.



Make Your Mark

The mining industry has ramped back up across Australia, which makes finding and attracting the best talent hard, and it's only going to get harder. Last year, we began a campaign to identify what makes Northparkes unique and why people would want to work here, as opposed to other mine sites.

The process began with a workshop of a cross section of employees from site. Some new starters, some who have been here 20 years, operators, professionals and tradies.

From this workshop we developed the essence of why people want to work here. 'Make Your Mark' focuses on what Northparkes offers people and our biggest selling points are identified by those who work here. One of the stand outs was the ability for people to have fulfilling lives alongside a rewarding career – whether that is through returning to their families each day, getting to play sport or buying their first home in an affordable market!

We targeted skilled workers for our operator and tradespeople roles via regional press in fly-in fly-out areas, where a better lifestyle is an attractive proposition. To reach professionals, we targeted online journals and newsletters that we knew they would be reading every single day.

We also included editorial pieces and aligned all our communication platforms, including our website, our Facebook page and our LinkedIn page.

This campaign enabled us to gain huge exposure in the mining industry and gain more and more skilled applicants for our jobs. The best news is that we aren't finished yet - later this year, we are going to bring you a whole new suite of material and more reasons why you would want to work at Northparkes ... if you don't already.

'Make Your Mark' focuses on what Northparkes offers people.



Tony Melhuish – Tenke Fungurume Mining

Last year, Tony Melhuish, our Mobile Equipment Maintenance Planner of the Asset Management department, was given the opportunity to complete a secondment at Tenke Fungurume Mining (TFM).

TFM is one of the other mining operations owned by CMOC and is located approximately 177 kilometres north-west of Lubumbashi, which is the second largest city in the Democratic Republic of Congo.

"I was at TFM for two six-week rotations, returning home in between for two weeks. I spent four months working for the Mine Maintenance team looking at their systems to recommend and implement improvements," said Tony.



2018 MetFest

In October, some of our Ore Processing Technical team attended the MetFest in West Wyalong.

MetFest is an opportunity for people across the Central West who are interested in sharing and learning new things in relation to ore processing in mining.

This year, a number of our employees presented during the conference. Jim Davis, our Senior Analytical and Evaluation Metallurgist, presented on 'Game of Chromes'. His presentation was awarded the most creative of the conference. Well done Jim and all our other employees who presented.

WIMnet NSW

In late November, we hosted the Women in Mining NSW event onsite, where we saw 17 females from the Central West who work within the mining industry in attendance.

Rural mental health specialist Di Gill presented on self-care in our everyday lives. Di's presentation was followed by networking and a site tour.



Linda Snyman presents in Chile

Linda Snyman, our Senior Geotechnical Engineer, was asked to present at a conference in Chile on underground mine conditions. "Chuquicamata Mine hosted the Geomechanics Workshop and I was approached by Normet and asked if I would present the work done at Northparkes on convergence that we've experienced.

"I arrived in Chile on a Monday night and early Tuesday we set off to the mine, 21 kilometres outside of Calama. My presentation on the successful redevelopment and opening of the plugged drives at Northparkes was well received. The attendees then split into

groups to discuss various options for dealing with poor ground conditions," said Linda.

After lunch Linda was taken underground where she experienced first-hand the enormity and expanse of their underground operations. "I visited San Pedro de Atacama in the foothills of the Andes to experience some of Chile's natural beauty and wonder. I am very grateful for the opportunity CMOC gave me to travel across the world. It was a very valuable learning experience, that I won't forget," she said.



Workplace Insights – 2018 and Beyond

Manager – People, Safety and Environment Stacey Kelly represented Northparkes in the Workforce Insights – 2018 & Beyond event hosted by AMMA – Australian Resources & Energy Group in Melbourne.

Stacey was part of a panel that covered important workforce challenges and opportunities for the resources and energy industry. Stacey shared Northparkes' insight into how we are breaking new ground on workplace issues, on a panel of industry members.



Tailings Storage Facilities

Some significant changes were made to our Tailings Storage Facilities (TSF) in 2018. Tailings were being distributed between Rosedale Stage 1, Estcourt Stage 1 and 2, Infill and the TSF 1 Closure project.

Estcourt Stage 2 tailings deposition started in March after the successful completion of a five metre upstream raise on the north and west embankments. This will enable deposition of a further 6.8 million tonnes of tailings over a two and a half year period.

The TSF 1 closure project earthworks was completed in August 2018, enabling tailings to be deposited along a central causeway to begin the formation of a domed tailings structure. This structure has the capacity to hold 4.5 million tonnes.

A different tailings deposition strategy has been designed to create a domed structure by central deposition, rather

than the normal deposition method where the tailings is deposited to the perimeters of the facility.

Dry tailings have been taken from within the facility to help create a buttress on the embankments for added strength.

Infill tailings Stage 1 deposition was completed in July 2018, with 2.1 million tonnes of tailings deposited. This project started in late 2017 and has provided tailings deposition between TSF 1 and TSF 2, increasing the structural strength of the embankments of the original TSF.

Rosedale Stage 1 tailings deposition was completed in October 2018, with an additional 1 million tonnes deposited along the TSF 2 boundary. Depositing tailings throughout spring also helped to prevent dust lift-off from the Rosedale TSF. Early works and contractor mobilisation for the Rosedale Stage 2 project occurred during December, with completion expected in August 2019.

Single flots

The Single Flotation Project commenced in mid-2018. The project involved replacing the original flotation circuit, which had reached its life expectancy. In order to increase throughput rates in the future, a substantial amount of maintenance would have been required.

Installation of the flotation cells was completed within six months, with the cells being commissioned in November 2018. Over 60 contractors were involved in the construction of this project together with various Northparkes employees.

In addition to the installation of the new cells, this new technology will allow us to improve the efficiency in flotation processes.



We value
the potential
in everyone.

Life **ballo**



ance

Volunteer Leave Program

In 2018, we continued to support the local community through our Volunteer Leave Program. The award winning program was implemented in 2013, with the principle that the best contribution to our community could be made by our people.

Throughout 2018, our employees volunteered their time towards 12 projects across the Central West, including:

- Setting up marquees at Forbes North Public School
- Swimming laps in the Life Education Swim Relay
- NSW Ambulance Day
- White Ribbon Rugby League Cup
- Boys Night In
- Parkes Show Clean up
- Parkes Show
- Trundle Bush Tucker Day
- Love Bites Program
- Central West Pride March
- Forbes White Ribbon March
- Parkes White Ribbon March

In-kind

- 516 hours of volunteer service to the Central West
- Equipment pool – Northparkes has a range of equipment available for public use, including 3 x 3 marquees, a blow up big screen television and eskies used by schools and community and sporting groups.



Community Investment Program

In 2018, we supported 33 initiatives from across the Central West through our Community Investment Program. We hold two rounds per year, with \$40,000 donated each round at the discretion of an independent committee.

The successful 2018 recipients included:

- Adavale Lane Community Hall
- Australian Red Cross Parkes
- Bedgerabong Show
- Bedgerabong War Memorial Union Church
- Bogan Gate branch of Country Women's Association
- Bogan Gate Public School
- Country Women's Assoc. of NSW Central Western Group
- Currajong Disability Services Ltd
- Forbes Amateur Swimming Club
- Forbes Country Music Club Inc.
- Forbes District Soccer Club
- Forbes High School
- Forbes Veteran Golfers
- Friends of Parkes Hospital
- Mitchell Conservatorium Inc.
- Northparkes Charity Golf Day
- Paint Parkes REaD
- Parkes Boppers Dance Troupe
- Parkes Christian School
- Parkes Community and Allied Health Service
- Parkes Community Choir
- Parkes Dragon Boat Club
- Parkes High School
- Parkes Touch Association
- PCYC Parkes
- Peak Hill Domestic Violence Committee
- Peak Hill Show Society
- Relay for Life Parkes and Districts
- St George's Toy Library
- Tottenham Late Notes
- Trundle Central
- Tullamore Bowling & Citizens Club
- Tullamore PA&H Association Inc

Northparkes Managing Director Hubert Lehman said, "Congratulations to the successful applicants and thank you to everyone who took the time to apply for the program. As usual, it was a difficult task for the committee to select the successful funding recipients due to the number of high-quality initiatives."

For more information, please visit our website at www.northparkes.com or contact our Community and External Relations Advisor on 02 6861 3621.



Sports Grants

To achieve our vision of 'A century of mining together', we invest in the future of our community through meaningful partnerships.

In conjunction with the Parkes Sports Council, each year we offer two rounds of funding available for sporting groups in Parkes. Northparkes recognises how vital sport is to our local community; supporting the Parkes Sports Councils' Grants Program is one way we can contribute to some of the teams and clubs that do a great job helping to keep Parkes healthy and happy.

In total \$30,000 was awarded to the following sporting groups in 2018:

- Parkes Gun Club
- Parkes Hockey Inc.
- Parkes Horse and Pony Club
- Parkes Hotel Football Club
- Parkes Marist Junior Rugby League Football Club
- Parkes Netball Association
- Parkes PCYC
- Parkes Railway Bowling Club
- Parkes Senior Cricket
- Parkes Tennis Club
- Trundle Boomers Football Club
- Trundle Central School

For more information, please visit <https://www.parkes.nsw.gov.au/your-council/grants-funding/councils-grants-programs/sporting-grants/> or contact Council's Grants Officer on 02 6861 2398.



International Women's Day

On 8 March 2018, we had a fantastic morning in Cooke Park sipping on coffee whilst enjoying breakfast and sharing stories with one another to celebrate and recognise International Women's Day. Thank you to everyone who joined us, it was great to see so many new faces.

A big thank you to Steph Hughes of Hughes & Co. Lawyers & Conveyancing for sharing your inspiring story with us, Aileen Allen for delivering the welcome to country, Lara from Larz Coffee for supplying us with delicious coffee and Quota International of Parkes Inc. for providing a beautiful breakfast.



Flexible work arrangements



On 6 June 2018, we celebrated Flexible Working Day by recognising the benefits that flexible work offers our people. Flexibility provides our employees with the opportunity to work in ways that allow them to achieve their best.

Gabe Albert is our Sales and Shipping Advisor at Northparkes. Gabe and her husband John, who also works at Northparkes, have three beautiful kids. After returning to work from maternity leave, Gabe was able to return on a flexible basis, working onsite as well as from home each week to suit her lifestyle.

"Being able to work flexibly has allowed me to spend time with my family, study and achieve my career aspirations. I'm very grateful to work within an organisation that offers flexibility."

Gabe is currently studying Human Resources Management whilst working full-time. "Being able to work flexibly has allowed me to spend time with my family, study and achieve my career aspirations. I'm very grateful to work within an organisation that offers flexibility," she said.

Aboriginal Project and Grants Officers

We have partnered with Parkes Shire Council again to extend the Parkes Shire Grants and Aboriginal Project Officer positions for an additional three years, signing a new Joint Funding Agreement.

Both roles were established to build capacity, achieve long-term sustainability for community based projects and initiatives, and deliver improved outcomes for Parkes Shire residents.

Northparkes and Parkes Shire Council have been funding the Grants Officer and the Aboriginal Project Officer positions since 2012 and 2013 respectively.

Parkes Shire Mayor Cr Ken Keith OAM said, "We are delighted to continue the close partnership we share with Northparkes to co-fund these positions for a further three years.

"The partnership is creating value and opportunities for the community that

"We've been operating in Parkes for over 24 years, and we understand the vital role these positions have played in delivering improved outcomes for the residents of the Parkes Shire."

Hubert Lehman, Northparkes Managing Director

neither organisation could achieve on their own."

Making the announcement at the Parkes Shire Council Chambers, Northparkes Managing Director Hubert Lehman said, "The new agreement was part of CMOC's strategy to identify and

implement long-lasting benefits for its host communities.

"We've been operating in Parkes for over 24 years, and we understand the vital role these positions have played in delivering improved outcomes for the residents of the Parkes Shire.

"Northparkes is proud to support this partnership, and we hope our contribution will make a lasting difference to the Parkes community," Mr Lehman added.

Between 2013 and 2018, the Grants team have submitted 412 successful grant submissions, securing over \$35.5 million in grant funding for the Parkes Shire. Furthermore, 167 community groups have been assisted with funding applications, with over 300 representatives from community and sporting organisations attending grant writing workshops and presentations.

Central West Pride March

In October 2018, 14 of our employees and their families and friends travelled to Dubbo to represent Northparkes at the Central West Pride March.

The march started at the Bligh Street soccer ovals and ended in Victoria Park. The participants marched to celebrate this year's theme 'Unity'.

A big thank you to those employees and their families and friends for supporting this event!



Our contribution

In 2018 Northparkes contributed \$90.6M to the Central West through salaries, sponsorships, government dues and payments to local businesses.

Our contribution to Central West NSW	\$M
Salaries and wages paid per town of residence	
Parkes	29.5
Forbes	3.8
Orange	0.8
Dubbo	0.5
Trundle	0.5
Tichborne	0.3
Bogan Gate	0.3
Other	3.5
Suppliers of goods and services	
Central West	49.8
Sponsorship and donations	0.1
Local government payments	
Parkes and Forbes	1.5
TOTAL	90.6

\$90.6M

At year end, we employed 328 people; during the year we paid salaries of \$29.5M to Parkes residents and \$3.8M to employees in Forbes.

Employees by town of residence	2018
Parkes	233
Forbes	34
Orange	6
Dubbo	4
Tichborne	2
Trundle	4
Bogan Gate	3
Other	42
TOTAL	328

328

Notes

Northparkes Mines
A century of mining together

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