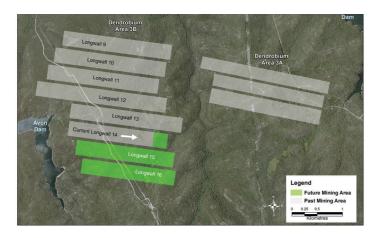


DENDROBIUM NEWS | JANUARY 2019

OPERATIONAL UPDATE



- We're on track to complete Longwall 14 by May 2019, with 1,750 metres extracted as at 10 January 2019.
- We're excited about the implementation of anti-collision software, which substantially assists our operations by aiding our operators to avoid dust exposure when operating longwall mining equipment, such as the shearer.
- Late last year, the Dendrobium Mine received final approval to commence extraction of LW15, at the specifications previously approved by the Department of Planning and Environment. The final approval came from the Dam Safety Committee and is the last prerequisite in the comprehensive approvals process.
- Toward the end of 2018 the team conducted an emergency evacuation drill which saw a crew don their self-escape equipment and the incident management team mobilised. The exercise was completed successfully, and a review conducted to ensure the operations are well prepared to respond to potential incidents.



UOW ILLAWARRA COAL SCIENCE FAIR

- More than 800 students presented projects in November.
- We are the major sponsor for the event and have been since its inception 11 years ago.
- 10 Illawarra Coal employees volunteered as judges for the event.
- We are excited to be involved with an initiative that promotes education in STEM.
- The demand for skills in these areas is the way of the future for numerous industries, including our own.



UPCOMING EVENTS

January: Mt Kembla Mining Heritage e-catalogue project commences

7 February from 6pm: DCCC and DCEC meetings

14 February 6pm: Shared Pathway
Group meeting

18 April from 6pm: DCCC and DCEC meetings



DENDROBIUM NEWS

Illawarra Coal



Illawarra Coal's Exploration Team in Poland.

The first consideration at Illawarra Coal is safety and ensuring all our employees are protected. As part of a wider effort to understand and improve coal burst management, a team of Illawarra Coal engineers recently undertook a research trip to Europe.

Illawarra Coal's Lachlan Cunningham, Roger Byrnes, Richard Johnson, Joe Mammen and Russell Thomas visited three underground coal mines in their tour of Poland, Czech Republic and Germany and undertook workshops at expert institutions with the intention of implementing new processes. Some mines in these parts of Europe have been managing coal bursts for a long period of time and are now using technology and innovation to improve their riskmanagement.

A coal mine burst or bump can be explained as a rock burst caused by the release of stored energy, resulting in the expulsion of the coal. Reinforced steel mesh on the walls of the mines offers some protection along with a number of

other risk mitigation measures, but Illawarra Coal is seeking to further improve its safety measures through collaboration with global experts. A takeaway from the study tour was the way the European mines implement the seismic monitoring systems. Their method will be applied to the improvement of seismic monitoring at South32's mines in the Illawarra.

"It was fantastic to have the opportunity to see the way in which the Europeans control their rock burst risk," said Superintendent Geotechnical Services Roger Byrnes.

"We were impressed with the maturity of the systems they use, the trust they place in the systems they have developed, and discipline they have in implementing the systems."

Mr Byrnes said the team learned different stress relief techniques in each country, with the Czech Republic focusing on extensive blasting above longwall panels and roadways, while Germany tested holes and relief hole drilling. In Poland they have developed notching technology to improve stress relief.

Illawarra Coal has a commitment to ensure that everyone goes home safe and well, and this study tour has helped to deliver on that value. The tour's outcomes will be shared with the NSW Resources Regulator.

ILLAWARRA COAL COMMUNITY CALL LINE

For any enquiries, please contact our 24/7 Community Call Line on 1800 102 210 or email ICEnquiries@south32.net



ILLAWARRA CONVOY

- \$2,000,000 raised for Illawarra Convoy 2018.
- Illawarra Coal was proud to host the event, as we have for over a decade, with the lead trucks taking off from our Appin North operation and West Cliff Preparation Plant.
- Over 1000 vehicles in fleet.
- Single largest fundraiser in NSW.
- Monies raised have gone to the Illawarra Community Foundation, more information go to: www.illawarraconvoy.com.au

SOCIAL BASELINE STUDY FINDINGS

We are invested in our community. To gain an insight into the current state of social and economic environments and characteristics, and to understand the needs and aspirations of the community, we have completed a Social Baseline Study of our region.

The social baseline study is a fourmonth study that gathers and compiles baseline data, describing the state of the social and economic environment and the characteristics of our community. It is a valuable way to research key community gaps and areas for improvement. The study contributes to the company's understanding of the socio-economic context of each of its host communities, inform approaches to engagement and community investment.

We've heard you! Using quantitative data such as; population, education and health data, derived from online local surveys, census reports and ABS statistics as well as qualitative data from community focus groups that you told us are of interest to your community. The following areas were highlighted:

- Education
- Health and wellbeing
- Community culture
- Employment
- Environment
- · Inclusion and access
- Infrastructure

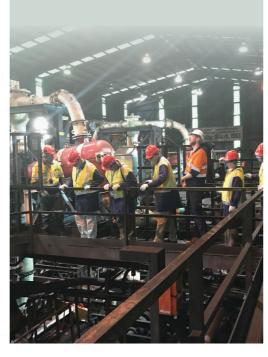
DCCC UPDATE

Our Dendrobium Community
Consultative Committee meets
every second month to discuss
operational, environmental and
community matters pertaining
to the Dendrobium Mine. In
our most recent session, we
welcomed our newest member
Jenny Evans, who joined the
DCCC in late 2018.

The DCCC toured the Dendrobium Coal Preparation Plant and BlueScope Steel to understand the role of metallurgical coal in making BlueScope's steel. The Hot Strip Mill was a clear highlight for the DCCC, a magnificent sight. The mill takes a slab of steel and stretches it, creating a long and very thin piece of steel, which is hard to imagine when you see a thick slab of steel!

Please reach out if you'd like to know more about the committee.

If you're interested in learning about the End of Panel Report for Longwall 13, please visit our website: https://www.south32.net/what-we-do/places-we-work/illawarra-metallurgical-coal/documents. The Report outlines the measured and observed impacts relevant to extraction of the longwall panel and it measures and analyses the monitoring results compared to relevant impact assessment criteria.



A CONVERSATION WITH ... JULES TAN

We are delighted to support budding STEM professionals gain valuable experience in STEM careers. We caught up with Jules Tan, an engineering student who will be learning from the best and assisting with South32 Illawarra Coal projects in 2019.



1. What makes you passionate about a career in STEM?

For me, a career in STEM has been a way to understand how to world works and gives me an opportunity to help shape the future. Every day at work or at university, I am learning and growing, developing my skills and understanding of new problems

The journey thus far has been very rewarding. As I look to my future, I hope to continue to be surprised and excited by the range of problems I may encounter.

2. How has your experience been at Illawarra Coal?

My experience at Illawarra Coal has been a big eye opener. Prior to taking up this internship I had mostly been invested in academia. To see a range of engineering disciplines applied on such a large scale and continually innovate toward a safe and efficient work environment has been invigorating.

3. Have you always been drawn to engineering?

I've always aspired to become an engineer. I remember when I was about 7 or 8, I was watching a recording of the moon landing for the first time and I thought the spacesuits were the coolest things I had ever seen. A self-supporting system that humans had created to survive one of the most extreme environments known to man. Since then, I've continued to be inspired to be creative and innovative with my approach to engineering.

4. What would you say to someone looking to explore a career in STEM?

Get some exposure! Speak to people with careers in STEM and discover the things that excite you!

While STEM might not be for everyone, there is always something for everyone. STEM fields rely on each other to uncover the unknown and in that, there will always be new opportunities to be explored. Start by considering what you enjoy doing and do your research; internet forums are a great resource in helping to define your interests. Lastly, don't let other people sway you from your passions and don't hold yourself back either, seize opportunities and learn from your experiences.

5. What do you do in your spare time?

I am an avid reader, most recently, I've been reading research articles in my areas of interest. I also play strategy games often, such as Civilization V and Oxygen Not Included, my excuse being that I'm keeping my wits about me. I do yoga often as it helps me in balancing my workload and taking care of myself. Occasionally, I go on hikes to take in nature and appreciate the need for a synergistic relationship between science and the environment.

THE PATH MORE TRAVELLED BY

The Mount Kembla Shared Pathway is a proud achievement for the community, promoting health and well-being. It is made possible by the Dendrobium Community Enhancement Program. This program is funded by three cents per saleable tonne of coal from our Dendrobium mine and supports activities that provide broad community benefit, are innovative and complement other activities in the local community.

We are excited to confirm that The Dendrobium Community Enhancement Program (DCEP) has committed more than \$40,000 to maintain the Pathway over the next three years.

The funding will contribute to weeds management and infill planting to increase biodiversity in the area.

Group Public Officer of the project Linda Costello said the group was pleased to have the continued support of the Dendrobium Enhancement Committee.

"The Pathway is incredibly well used by the community. The ongoing partnership between the Mount Kembla Shared Pathway Group, Wollongong City Council and the Dendrobium Community Enhancement Committee to keep the facility well-presented is an asset to our area."

In other news, the DCEC has recently approved a generous \$35,000 to Museums and Galleries NSW, working on a project to e-catalogue mining heritage artefacts in 2019. Watch this space!

Contact Linda Costello on 0417028906 for further information on the Pathway Group.

DENDROBIUM NEWS | OCTOBER 2018

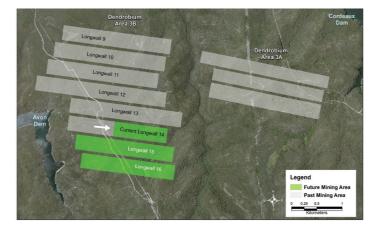
OPERATIONAL UPDATE

Extraction of Longwall 14 is on track to be completed by mid-2019.

Our Dendrobium team has been investigating ways to find alternative uses for our coalwash, a waste product of the coal washing process which removes soil and rock.

Up to 1.2 million tonnes of coalwash will now be used by local contractors on construction projects in the Illawarra, which would have previously been emplaced and rehabilitated at our West Cliff Emplacement Area. We have also partnered with the University of Wollongong and Australian Coal Research Association to investigate the sustainable use of coalwash for rail and road sub-base and in the cement making process. This forms part of Illawarra Coal's ongoing commitment to reduce impacts to the environment across our operations.

The team has also commenced a seven-year program to eradicate Mysore Thorn in five target areas along the rail corridor and nearby to Stage 1 of the Mount Kembla Mine Memorial Pathway Project. Working with Southern Habitat, Mysore Thorn will be closely monitored and treated with mechanical and chemical controls. To date the program has presented positive results in controlling the weed.



In other news the End of Panel Report for Longwall 13 is now available to be viewed on South32 Illawarra Coal's website https://www.south32.net/what-we-do/places-we-work/illawarra-metallurgical-coal/documents. The Report outlines the measured and observed impacts relevant to extraction of the longwall panel.

Our Annual Environmental Management Report for FY2018 is also available on the website. It outlines our environmental management and rehabilitation activities for the year and proposed activities for this financial year.

SOCIAL BASELINE STUDY UPDATE



In our previous newsletter we sought your input into an online survey about the community. Thank you to everyone who provided feedback and congratulations to Peter Green who was the lucky winner of cinema tickets in our prize draw.

As part of the survey we held two Focus Group sessions on Thursday 27 September at the Kembla Heights Community Hall. These were well attended by invited community members, local government representatives and local community groups.

The Focus Groups provided feedback on your neighbourhood, community, environment, future planning and related issues which will assist in informing our social performance in relation to engagement, impact management and investment.

We expect to share the outcomes of the Social Baseline Survey with you in our next community newsletter due out January 2019. If you would like to get in touch with us about this process please call 1800 102 210 or email icenquiries@ south32.net.

ILLAWARRA COAL COMMUNITY CALL LINE

For any enquiries, please contact our 24/7 Community Call Line on 1800 102 210 or email ICEnquiries@south32.net





DENDROBIUM NEWS

Illawarra Coal

OCTOBER 2018

DENDROBIUM COMMUNITY FUND TOPS \$1.5M IN LOCAL PROJECTS

The community fund supported by Illawarra Coal's Dendrobium operations has committed more than \$1.5million to local projects since its inception in 2004.

The Dendrobium Community Enhancement Program is funded by three cents per saleable tonne of coal from our Dendrobium mine, which goes to support activities that provide broad community benefit, are innovative and complement other activities in the community.

Over the past two years, more than \$195,000 was committed across eight activities that are either local to the area or service the area. These include:

- Mount Kembla Public School playground upgrade
- Life Education NSW school visits for 2017 and 2018
- Unanderra Public School 2018 Recreational School Program
- Darian Zam Coal Faces Book Project

Dendrobium Community Enhancement Program Committee member, Franca Facci, recognised the community groups that have worked hard to improve the local area since the program began in 2004, and she urged more people in the community to get involved.

"Without the efforts of volunteers who go above and beyond, the Dendrobium Community Enhancement Program would not be able to assist in the sustainable development of the communities surrounding the Dendrobium Mine."

"Our Committee is in the process of reviewing where we can develop activities and projects in our community. These will only be successful with people in the area willingly giving up their time to improve where we live."

The Committee recently welcomed two new members, Craig Hicks and Darren Nicholls. Both are local to Mount Kembla and passionate about rebuilding the local community spirit.

The Dendrobium Community Enhancement Program is funded by three cents per saleable tonne of coal from our Dendrobium mine.



Mount Kembla Public School students celebrate the opening of the new playground with DCEP representative Amanda Blunt.

SEEKING FUNDING FOR A LOCAL COMMUNITY PROJECT?

Get in touch with us to share your ideas by contacting our 24/7 Community Call Line on 1800 102 210 or at icenquiries@south32.net.



University of Wollongong mine engineering students prepare for their underground tour.

PARTNERING WITH TOMORROW'S LEADERS

Our own mine planner, Dan Pearce, was invited as a guest lecturer at the University of Wollongong as part of its Mining Engineering Program.

Dan parted his knowledge on technology used in underground longwall mining and detailed how the mining plan function works using Illawarra Metallurgical Coal processes as a real life example.

The lecture was followed up with an underground tour of our Appin operations to further embed the knowledge Dan shared.

"The students were eager to learn and asked a lot of questions that generated good discussion. They were very engaged and showcased great future talent for our industry," Dan said.

"The students were eager to learn and asked a lot of questions that generated good discussion," Dan said.

Dan reflected on this experience and his own time as a student, noting how important his industry experiences were in shaping his career pathway.

"These opportunities for the students offer an extremely useful experience and provide an insight into the industry that can shape careers."

South32 is also supporting the University of NSW through providing four scholarships to female engineering students. South32 is actively supporting achieving a more diverse workforce in mining, and supporting women studying STEM subjects is one way we accomplish this. The women have commenced a mentoring program which will see them visit our operations every semester.

COMMUNITY COMMITTEE UPDATE

The Dendrobium Community Consultative Committee (DCCC) meets every second month to discuss operational, environmental and community matters associated with our Dendrobium Mine.

Recently the DCCC was provided an overview of the Dendrobium Independent Environmental Audit report which is conducted every three years and saw the mine achieve overall environmental compliance.

The Annual Review and Annual Returns reports were also shared.

All the reports shared are available on the South32 website if you would like to review them https://www. south32.net/what-we-do/places-wework/illawarra-metallurgical-coal/ documents.

The DCCC is planning a tour of BlueScope Steel later this month. As a main customer of South32 Illawarra Metallurgical Coal, the DCCC is interested in understanding the role of metallurgical coal in BlueScope's steel making process.

The Committee is continuing to meet Please call 1800 102 210 or email outside its regular meeting cycle to

discuss Dendrobium's Plan for the Future – our next stage of operations at Dendrobium Mine. Recently the DCCC was provided updates on the Environmental and Social Baseline Assessments. Further detail on Dendrobium's Plan for the Future will be shared in the next Dendrobium Community Newsletter.

Please get in touch if you would like to ioin the DCCC or learn more about the Committee.

icenquiries@south32.net.

SOUTH32 BUSINESS UPDATE

South32 released its June quarterly report in July 2018, with Illawarra Metallurgical Coal recording its strongest performance for the year.

Illawarra Metallurgical Coal finished the guarter with 1.2 million tonnes - our best quarterly result for the year, and delivered a total of 4.2 million clean tonnes for FY2018. We are continuing to focus on embedding efficient systems that safely deliver reliable and sustainable performance.

In other news, South32 has expanded its metallurgical coal assets and footprint in Queensland, with a recent announcement that it has acquired a 50 per cent interest in, and assumed operatorship of, the Eagle Downs metallurgical coal project in Queensland's Bowen Basin. Aquila Resources, a subsidiary of China BaoWu Steel Group, will continue to hold the other 50 per cent interest in the project.

In announcing the acquisition, our CEO Graham Kerr said: "We have a long-standing relationship with BaoWu as a supplier of manganese ore and alloy. We are very pleased to be able to further strengthen this relationship by assuming operatorship of Eagle

Eagle Downs is a large metallurgical coal development project located approximately 25km south-east of the town of Moranbah. Queensland.

South32 has also entered into an agreement with Arizona Mining Inc. to

acquire the remaining 83 percent of issued and outstanding Arizona Mining shares. Since May 2018 we have held a 17 per cent interest in Arizona, with our initial 15 per cent interest established in May 2017.

Arizona Mining is the owner of the Hermosa Project in North America, which contains high-grade zinc. lead. silver, silver oxide and manganese resources.

The June 2018 quarterly report and details of recent acquisitions are available on the South32 website www. south32.net.



West Wollongong Probus Club enjoy their visit from Illawarra Metallurgical Coal representatives.

CONNECTING WITH LOCAL GROUPS

Earlier this year the West Wollongong ProBus Club invited us to its regular meeting to provide an overview of South32 and our Illawarra Metallurgical Coal operations.

Amber Cleary, Lead Community, said she was delighted to be given the opportunity to share information about current and future mine plans and our community engagement mechanisms.

"Given most of the members reside in communities surrounding our Dendrobium Mine operations, they had a genuine interest in learning about our business."

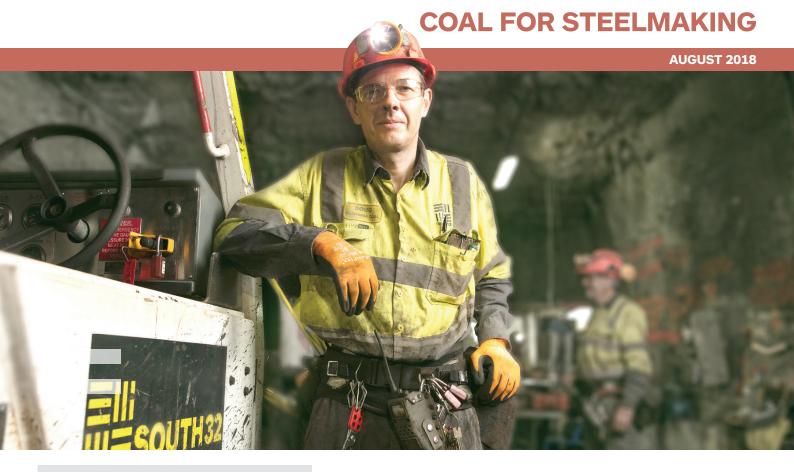
The West Wollongong ProBus Club provides retirees with the opportunity to join a Social Club to meet other retirees on a regular basis, listen to interesting speakers and join in activities and outings.

The West Wollongong Probus Club is looking for new members (men and women). Meetings are at 9.30am on the second Monday of the month at the Wests Illawarra Leagues Club. Visitors are always welcome.

Enquiries can be made to Secretary Colin Johnston westwollprobus@gmail.com.



DENDROBIUM MINE PLAN FOR THE FUTURE



PROJECT TIMELINE

Conceptual Project Development Plan

Lodge NSW and Commonwealth applications (advertised)

Prepare EIS

Lodge EIS with Government

Public exhibition of EIS

Public Hearings by Planning Assessment Commission

Planning Assessment Commission
Determination (including Public Meetings)

NSW Development Consent and conditions issued (if successful)

Federal Minister's Determination and conditions

Secondary approvals and conditions

South32 is continuing to prepare our Environmental Impact Statement (EIS) for the next stage of operations at Dendrobium Mine.

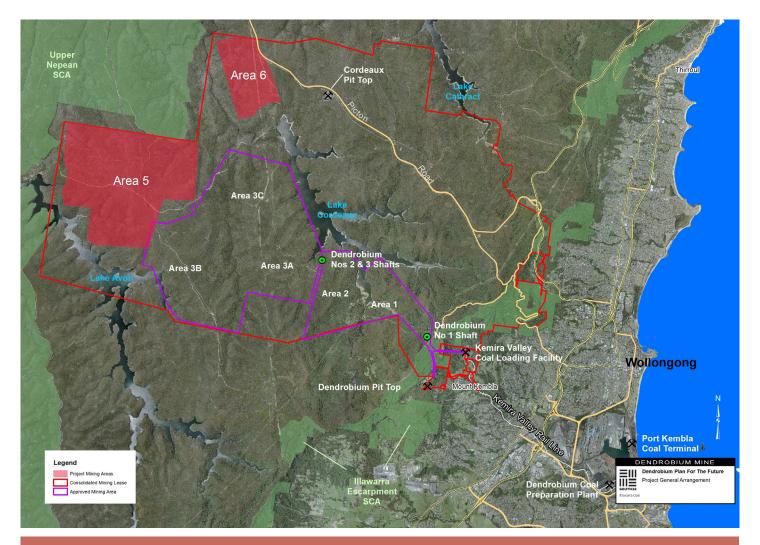
The EIS will be lodged with the NSW Government for assessment, and the project will also be assessed by the Commonwealth Minister for the Environment and Energy under the EPBC Act.

Expert consultants have completed or are completing a number of studies to assess potential impacts associated with the Project. The findings from these assessments will be included in the detailed submission for assessment through the NSW and Federal Governments' planning processes.

The proposed continuation of operations at Dendrobium Mine, if successful, would enable the operations to continue for a further 18 years until 2048. This would ensure the ongoing direct employment form more than 400 people and continued supply of coking coal for steelmaking.

Dendrobium, as well as our Appin operations, mine coal from two of Australia's richest metallurgical coal seams. Metallurgical coal is used in the production of steel, making it a critical material in providing the goods and services that our modern societies need and enjoy, including:

- Production of items we use in our everyday lives, including fridges, dishwashers and cars;
- Use in renewable energy technology;
- Construction in high-rise buildings and infrastructure, such as bridges.



South32 is seeking approval to gain access to additional areas within our Consolidated Coal Lease (CCL) 768. Specifically, the Project includes an extension of our current underground mining areas to additional coal within two proposed future mining areas – Area 5 and Area 6.

Referring to the map above, the next stage of operations would include longwall mining in both Areas 5 and 6, and the development of surface infrastructure associated with mine ventilation and

mine safety gas management.

The Project would utilise the existing Dendrobium Pit Top, Kemira Valley Coal Loading Facility, Dendrobium Coal Preparation Plant and Dendrobium Ventilation Shafts with upgrades and extensions where required.

The application will also seek approval for the continuation of transport of coal wash by road from the Dendrobium Coal Preparation Plant in Port Kembla to customers for engineering purposes (e.g. civil construction fill), other beneficial uses and/or for emplacement at the West Cliff Coal Wash Emplacement area.

FURTHER PROJECT INFORMATION

Dendrobium Mine is currently extracting coal to the west of Mt Kembla from beneath an area of the WaterNSW Special Area, and has been doing so since consent for the Mine was granted in 2001.

Our guiding principles for the planning of the Dendrobium Plan for the Future project include:

- Positioning longwalls away from key sections of large permanently flowing streams. This follows the Company's decision more than ten years ago not to position longwalls beneath rivers, and the subsequent decision to design its existing Dendrobium mine plan in order to protect Wongawilli Creek;
- Not positioning our longwalls beneath the reservoirs of the Catchment area or the dam walls;
- Recognising and sharing the community concern regarding existing mining methods beneath swamps

and not including mining beneath the swamp-rich area in the north-east of the mining lease in the proposal.

We are committed to keeping our communities informed and value your feedback. The Dendrobium Community Consultative Committee (DCCC) – Dendrobium Plan for the Future Working Group continues to meet to discuss progress and milestones of the project. Minutes of the meetings, and other documents relating to the project, are available on the South32 website (www.south32.net/illawarra-coal/documents).



DENDROBIUM MINE PLAN FOR THE FUTURE

COAL FOR STEELMAKING

MARCH 2018



South32 is continuing to prepare our Environmental Impact Statement (EIS) for the next stage of operations at Dendrobium Mine.

Dendrobium Mine is situated in Mount Kembla and produces premium quality hard coking coal for steelmaking.

The pit top is situated on Cordeaux Road and coal from the mine is stockpiled in Kemira Valley where it is loaded into rail wagons for transport to the coal preparation plant which is located at the Port Kembla Steelworks.

A new consent for the next stage of mining is required via the NSW and Federal Governments' planning processes.

Expert consultants are conducting a range of studies that are included in the EIS to assist Government in assessing the Project based on a range of criteria, including examining impacts to transport; water; biodiversity; air quality; noise; and heritage features.

ENVIRONMENTAL RISK ASSESSMENT

An environmental risk assessment for the Project has been completed, in line with the Government's requirements for the EIS (Secretary's Environmental Assessment Requirements).

Facilitated by a specialist risk consultant with support from key technical consultants, the environmental risk assessment considered new mining areas identified as well as new and existing surface facilities and activities required to support the Project.

The primary objective of the risk assessment was to identify hazards associated with future operations and to determine what controls, if any, are required to reduce or eliminate any identified hazards to tolerable levels as much as practical.

The report is currently being drafted, and will be finalised for submission with the EIS.

SOCIAL IMPACT ASSESSMENT

Following the surveying of residents and local businesses in the area as part of the Social Impact Assessment for the Project, South32 has endorsed a series of commitments and recommendations to ensure the Project makes a positive difference in the communities surrounding our Dendrobium Mine.

These commitments include:

- fully implementing South32's Diversity and Inclusion policies and strategies;
- working towards a 10 per cent female workforce, including 20 per cent of managers by the commencement of the operations relating to the Project and demonstrate year-on-year increases in female participation;
- making a positive contribution to Indigenous employment, including working towards the goal of increased Indigenous employment; targeted recruitment; and cultural awareness training;
- ongoing communication with Mount Kembla Public School regarding our operations and plans, and ongoing investment in the school's facilities and programs;
- continued engagement with residents affected by the Project and continuous improvements in mitigation; and maintenance of the Dendrobium Community Consultative Committee for the life of the Project.

The detailed impact analysis and significance evaluation has been completed, while the mitigation, management and monitoring plans associated with the Social Impact Assessment are currently under review. The final report is now being finalised and will be submitted to government as part of the EIS.



LAND CONTAMINATION ASSESSMENT

A Land Contamination
Assessment has been conducted in relation to key surface infrastructure at Dendrobium
Mine and the Project.

Results show that there is a low potential for the site to have become contaminated as a result of historical and/or current site uses. Preferential pathways leading off-site, where they exist, are controlled by site environmental management plans.

No remediation is required to make the overall site suitable for supporting the proposed extension of Dendrobium's underground mining operations. During any future ground disturbance works, the investigation recommended that work, health, safety and environmental management controls should be implemented.

PROJECT TIMELINE

Conceptual Project Development Plan

Lodge NSW and Commonwealth applications (advertised)

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TRANSPORT ASSESSMENT

A Transport Assessment has been conducted to address the likely transport impacts of the Project on the capacity, condition, safety and efficiency of the local and State road network and rail network.

The assessment examines the existing transport environment, including the road network; historic and current traffic volumes; road safety history; Mine-generated traffic; intersection performance; the general capacity of relevant routes; and the implications of the Project in conjunction with the future road environment.

Overall, the existing road network has spare capacity and operates at satisfactory levels of service at the times in which the Mine generates its greatest volumes of traffic. The crash history of the surrounding road network does not reveal any specific concerns with the safety of the key routes and access used by mine-related traffic.

Construction and operational activities associated with the Project would result in additional workers, deliveries and visitors accessing the Dendrobium pit top, however there would be no change in the number or distribution of vehicle trips to and from the Kemira Valley Coal facility and Dendrobium Coal Preparation Plant, nor the number of trains on the Kemira Valley Rail Line.

The assessment concludes that subject to proposed mitigation measures, and with the continuation of current Dendrobium Drivers' Code of Conduct, the Project can be satisfactorily accommodated by the road network, with acceptable impacts on the capacity, efficiency and safety of the road network.



AIR QUALITY ASSESSMENT

An Air Quality Assessment has been undertaken to predict concentrations for key pollutants from key components of the Project.

It was found that no sensitive receptors in the vicinity of the Dendrobium Pit Top and Kemira Valley would experience additional impacts from the Project.

Emissions from the ventilation shaft sites were also modelled and are expected to be low to negligible in relation to the Project, and therefore cumulative impacts are not expected.





DENDROBIUM MINE PLAN FOR THE FUTURE

COAL FOR STEELMAKING

OCTOBER 2017

ABOUT US

South32's Dendrobium Mine is situated in Mt Kembla and produces premium quality coking coal for steelmaking.

The pit top is situated on Cordeaux Road and coal from the mine is stockpiled in Kemira Valley where it is loaded into rail wagons for transport to the coal preparation plant which is located at Port Kembla Steelworks.



Illawarra Coal is currently preparing its Environmental Impact Statement (EIS) regarding the future of Dendrobium Mine beyond the life of the existing mining area and its consent, which expires in 2030.

The mine is currently extracting coal to the west of Mt Kembla from beneath an area of the WaterNSW Special Area, and has been doing so since consent for the Mine was granted in 2001. A new consent is required via the NSW and Federal Governments' planning processes which, if successful, would enable the operations to continue for a further 18 years until 2048. This would ensure ongoing direct employment for more than 400 people and continued supply of coking coal for the manufacture of steel.

Our guiding principles for the planning of this project include:

• Longwalls will be positioned away from key sections of large permanently flowing streams. This follows the Company's decision more than ten years ago not to position longwalls beneath rivers; and the subsequent decision to design its existing Dendrobium mine plan in order to protect Wongawilli Creek;

- None of our longwalls are positioned beneath the reservoirs of the Catchment area or the dam walls:
- The Company recognises and shares the community concern regarding existing mining methods beneath swamps and we will not include in this proposal mining beneath the swamprich area in the north-east of the mining lease.

THE ENVIRONMENTAL IMPACT STATEMENT

South32 has obtained guidelines from the NSW Government on what must be addressed in the preparation of our Environmental Impact Statement (EIS). These guidelines are referred to as the Secretary's Environmental Assessment Requirements, or SEARs.

Expert consultants have been engaged to address these requirements through a full range of studies for inclusion

in the EIS, including examining impacts to transport; water; biodiversity; social; air quality; noise; economic impact; and heritage.

We are committed to keeping our communities informed and value your feedback. To this end, there will be opportunities to review the study results for the project, including community information sessions to be held in the future, as well as during the public exhibition period in the EIS.

FLORA AND FAUNA ASSESSMENT

A number of works have been completed for the flora and fauna assessment, including detailed upland swamp monitoring, native vegetation mapping, targeted baseline fauna surveys, and mapping of the local koala habitat. The team will now complete a technical Upland Swamp assessment, as well as a biodiversity impact assessment for the project to quantify potential impacts. A Koala Management Plan is also being developed.



A detailed flora survey is being conducted in the project area.



The Mountain Dragon was one of the fauna species recorded during the baseline fauna survey.

PROJECT TIMELINE

Conceptual Project Development Plan

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Secondary approvals and conditions

AQUATIC ECOLOGY ASSESSMENT

Consultants are currently completing the Aquatic Ecology Assessment which investigates the aquatic habitat in the project area including the Avon and Cordeaux Rivers, Donalds Castle Creek and several largely ephemeral drainage lines. Baseline assessment results show that macroinvertebrate groupings sampled in the current study are comparable with those sampled from across the Dendrobium Mine Area during previous studies. Several species of native fish have also been identified in these waterbodies.

SOCIAL IMPACT ASSESSMENT

Thank you to everyone who took the time to participate in the survey as part of the Social Impact Assessment.

Residents and local businesses in the area were surveyed on a range of topics, including community access to facilities and services; quality of life; local business and employment opportunities; community wellbeing and safety; and environmental qualities.

Feedback received includes concerns residents have regarding the future plans for Dendrobium's operations as well as perceived benefits of the Project; key community values and lifestyle characteristics enjoyed by people in the area; and suggested mitigations for how the Company might avoid or reduce potential negative impacts from its operations

Information gathered will assist in assessing the potential for changes to local values and social conditions and developing strategies to avoid or reduce community impacts in relation to the project.

NON-ABORIGINAL HERITAGE ASSESSMENT

The Non-Aboriginal Heritage Assessment seeks to identify heritage items of significance within the project area. The consultant has examined the history of land use in the region, and has conducted the site inspections of the Avon and Cordeaux Dams to document views and outlooks of and from these assets.

ABORIGINAL HERITAGE ASSESSMENT

The Aboriginal Heritage Assessment is progressing, with 16 local Aboriginal stakeholder groups registering for inspections of Aboriginal sites identified within the project area. Archaeological or cultural sites identified include overhangs with and without art, stone tools, scar trees, dreaming sites, and grinding grooves.

A draft report will be provided to local Aboriginal stakeholder groups for comment prior to being finalised. The assessment will then be used to develop a Cultural Heritage Management Plan, including recommendations for the management of sites.



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