

# Bulga Complex News

Bulga Complex Newsletter  
August 2010, Issue no. 2



## News from the open cut

We are currently mining coal from the Bulga and Southern Extension pits. We have purchased new noise attenuated haul trucks and have installed a real time noise monitoring network to help reduce and manage the noise from the mine.

We are also assessing potential impact from blast fume and working with Department of Environment, Climate Change and Water (DECCW) regarding dust emissions from our operation.

## Managing noise at the Bulga Complex

### Real time noise monitors

Four real time noise monitors have been installed in strategic locations in the community which will allow us to proactively manage our operation to minimise noise emissions. The monitors provide instantaneous data on noise levels. If the mine noise levels are going to exceed an allowable level, the mines' activities will be modified to reduce noise emissions.

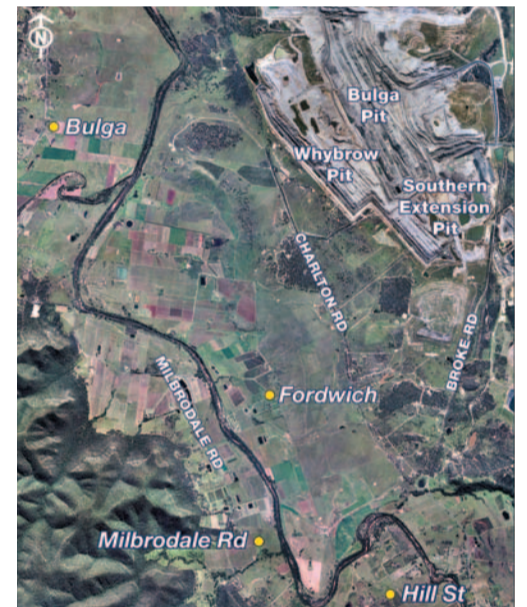
#### Noise attenuated trucks

Bulga Coal's recent application to modify our Development Consent in relation to noise criteria has been approved. The main commitment in this modification is to have the entire fleet of haul trucks noise attenuated by replacement or modification. Noise attenuated trucks are up to eight

decibels quieter than a standard truck. 10 new 793 Caterpillar trucks are on site with a further 20 scheduled to arrive throughout the year at an investment of \$180 million. These trucks will replace existing unattenuated equipment.

#### Mining strategies to reduce noise

Bulga Coal is also implementing day/night time dumping strategies and constructing bunds on haul roads in elevated areas to reduce noise emissions. Where practical, shielded dumps will be established to enable the mine to modify its operation to reduce noise. During adverse weather conditions exposed equipment will be relocated and the dumping activities will be moved to the shielded locations.



Real time noise monitors locations.

## Air quality

We have an extensive dust monitoring system to measure our dust emissions and results are reported annually to our regulators and in the Annual Environmental Management Report. We are currently working with DECCW in establishing a new monitoring network in the Hunter.

This network will consist of up to 14 high quality ambient air quality monitoring stations located around mining areas and population centres to give accurate, quality assured and up-to-date data to the community on regional air quality. This new data stream will provide information that can be used to identify the cause of any change in air quality and to help identify the major sources of particles in the region.

Bulga Coal is also working with DECCW who are conducting a review of international best practice to prevent or minimise emissions from coal mining. The aim of the review is to produce best practice dust management guidelines to help manage dust across coal mines in New South Wales.

#### Blasting and fume

We blast between 9am and 5pm, Monday to Saturday with the majority of blasts fired during the week at lunchtime.

In response to community concerns regarding blasting activities, Bulga Coal is reviewing the potential impacts from blast fume. We have sampled 14 blasts and we will assess the results and provide the report to the Community Consultative Committee.

## Employee profile

### Susan Farnsworth

**Position:** Short term planning Senior Mining Engineer, although I'm still performing Load and Haul Engineer duties at Bulga Coal.

**Lives:** in Singleton with my husband, Tim.

**Describe your job:** I do all of the scheduling and design for our 8,000 excavator and our two smaller 5,500 excavators and design and manage the dumps on site.

**A typical day:** Starts at 7am. I look at the production numbers from the last 24 hours. The numbers show me how much coal and dirt the excavators have moved. I always go for a look around the pit with the Open Cut Examiners. I attend daily production meetings and other technical services meetings throughout the week. I also do design work for the excavators and dumps and look at the schedule most days as well.

#### How long have you been in mining?

I started as a graduate 2006 and came to Bulga Coal in 2009 as the Coal and Partings Engineer. I then moved into the Load and Haul Engineer role and more recently into the Short term planning Senior Mining Engineer position.



#### My colleagues don't know this but:

I'm the striker for Singleton's women's soccer team.

**In my spare time:** I love to go snow skiing and I also love to travel. I am about to go to Europe for five weeks, which I am very excited about.

## Bulga Complex supports students with language needs

Broke Public School has implemented an innovative program called the 'Language Development Partnership', to assist with communication needs of children in the classroom. The Language Development Partnership is a team approach and involves Speech Pathologist Julie Macfarlane working with teachers at the school to identify students who may need additional language support.

A language problem may be a difficulty with receptive language (how we understand language) or a difficulty

with expressive language (how we use language to express ourselves).

"A key part of this program is to assist teachers with strategies to help the students in the classroom" Julie Macfarlane said.

Katie Bell teaches Years 1, 2 and 3 students at Broke School and has noticed the difference in her students. "There has been a marked improvement in their confidence when speaking in front of the class. During News time, the children are able to recount their weekend in order and use appropriate tense language," said Ms Bell.



The program also includes training for teachers and support staff at the school and is jointly funded by the Department of Health and the Bulga Complex for a period of three years.



## News from the underground

Beltana's new state of the art longwall mining system made its first cut of the Blakefield coal seam in June this year.

We are currently mining longwall panel 1 of our Blakefield South operation which will take approximately eight months to mine, with nine longwall panels in total. We are currently managing the impacts of subsidence from longwall panel 1 on Charlton Road, some privately owned property and on mine owned land.

Beltana No.1 operations is continuing with mining longwall panel 13 in the Whybrow seam. We expect to finish mining longwall panel 14 by the end of this year.

We have had some recent changes in staffing; Beltana has a new Operations Manager, Mark Munro, who comes from Xstrata's United Underground Mine; and Ralph Northey, who is now the Environment and Community Manager for the Bulga Complex and is focusing on building relationships with our community.

## Mining under Charlton Road

In June this year, we began mining longwall panel 1 of our Blakefield South operation, which passes under Charlton Road. The mining has caused some subsidence induced cracking of the road surface (within predictions) during July. While undermining, the road was monitored 24 hours a day, seven days a week and temporary repairs to the road surface were made when required to ensure the safety of motorists.



Repair works to Charlton Road.

Once the mining is complete and subsidence has stabilised, the road surface will be permanently repaired. This work will be carried out by the Mine Subsidence Board in consultation with the Singleton Council. Beltana has engaged a civil engineer to assist project manage the design of the final repairs to the road.

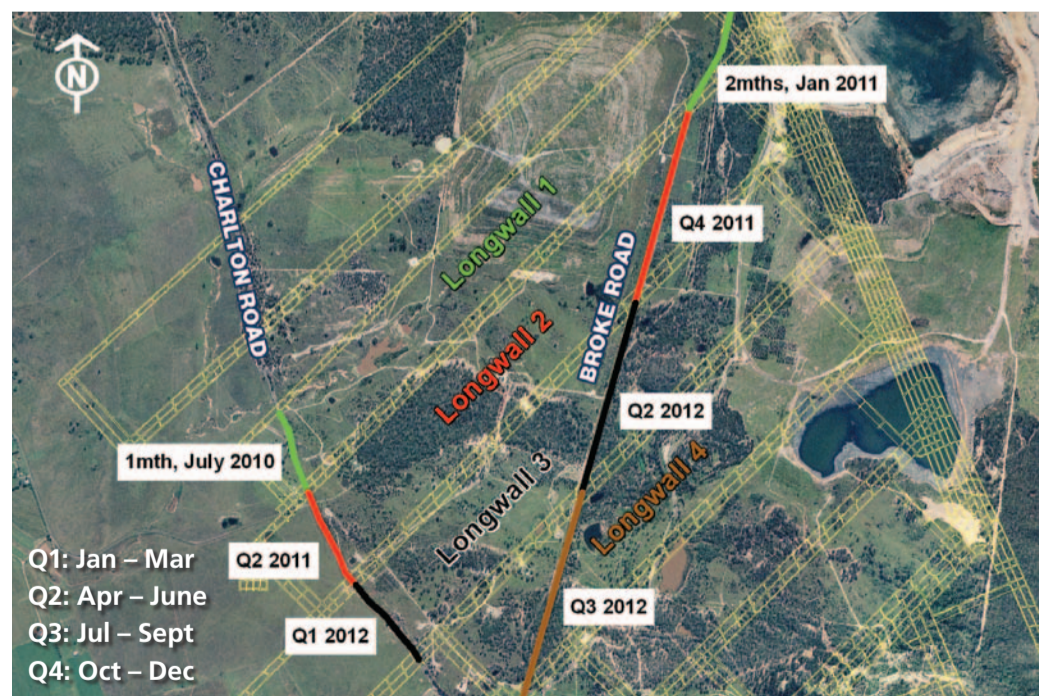
Management plans and mitigating measures have been developed in consultation with the infrastructure owners and are being implemented to manage the potential subsidence impacts on roads, powerlines, telecommunications, PID and water supply pipelines.

## Broke Road surface repairs

In January 2011, coal extracted from longwall panel 1 will impact the surface of Broke Road. During this period the road will be monitored 24 hours a day, seven days a week and cracking to the road surface will be repaired immediately. Speed restrictions will be in place and motorists will experience minor delays. Monitoring and temporary repairs are expected to take around two months due to the angle of the road to the longwall panel. Final repairs to the road will be completed after this.

Mining of Longwall panels 1 through to 4 is expected to impact Charlton and Broke Roads in the following sequence over the next 24 months (see figure below).

Community and stakeholder consultation will be held later in the year regarding mining under Broke Road. For further information, please contact Ned Stephenson or Nathan Lane.



Approximate sequence for undermining Broke and Charlton Roads.

## Generating power from methane

Beltana has received approval to generate up to 25 megawatts of power from the captured methane from our gas drainage system. Three gas-fired generator units, which will produce 9 megawatts of power, will be installed in early 2011. The power will be used on site, and in the future surplus power may be supplied to the public grid. Generating power from the captured methane will reduce our greenhouse gas impact. The generators will not be visible from Broke Road and are noise attenuated.

### Ventilation Air Methane

Beltana will commence construction of a pilot Ventilation Air Methane (VAM) abatement unit in October this year. The sole purpose of the VAM abatement unit is to reduce the greenhouse gas impact by converting mine ventilation air methane into carbon dioxide. The plant is expected to be operational in June 2011. The effectiveness of the VAM abatement unit will be assessed to determine what role this technology may play in our future efforts to reduce our greenhouse gas impact.

## Broke history interviews

Research into the history of Broke is currently being collated by Newcastle historians Rosemary Melville and Anne Dunne. Earlier in the year, Rosemary and Anne made several trips to Broke to interview descendants of pioneering families including Ted McInerney, Col Picton, John and Clemmie Tulloch, Ian and Dawn Russell, Muriel Bird, Daryl and Lorna Lesley, Ray and Jocelyn Burgmann and Jack Standing. We would like to say a big thank you to all of these families for sharing their memories with us. There will be more information about the history of Broke later this year.

## Draining gas from longwall panels 1 and 2

Beltana undertakes post-mining gas drainage to remove gas that accumulates in the collapsed area behind the longwall, called the goaf. Removing the gas is critical for the safety of our underground employees.

In order to drain goaf gases, gas wells are currently being constructed on longwall panels 1 and 2 of the Blakefield South operation, located between Broke and Charlton Roads. Noise barriers are used during drilling of the holes and screening such as colourbond sheds and native trees are used to reduce the visual impact.

## Employee profile

### Noel Trickey

**Position:** Surface Supervisor and Open Cut Examiner, Services Department.



### Describe your job:

I'm responsible for inspecting all the mine workings on the surface which includes the highwalls, dams, sumps and drains. I am also involved with the overall management of the water system. Another key part of my job is the design and control of surface earthworks and construction, along with contractor supervision of surface projects. It's both rewarding and satisfying.

### How long have you been in mining?

29 years as an open cut examiner. I worked for Saxonvale Coal (now Bulga Coal) for 19 years. I had a short break then started at Beltana in 2003 as Surface Supervisor. Before the mining industry, I worked with local government in road and bridge construction as an Engineering Surveyor.

### My colleagues don't know this but:

I used to be lead singer in a rock band. We parted ways because of study, but I had enough money from the band to buy my dream car, an MGA 1600 red soft top for \$1,100 in 1968.

### Lives: in Broke with wife Wendy.

We have two sons and two grandsons so far. I met Wendy when I was posted to Singleton in the Army (National Service). I was called up to National Service in 1969 as part of the lottery system. It was pretty hard going at first, but looking back now, it was a big influence on who I am today.

### Sporting achievements:

We used to have five cricket teams in Broke, two senior teams and three junior teams. I used to coach, umpire and play cricket every Saturday.

### In my spare time:

I spend time travelling, wining and dining, gardening and looking after the grandkids.



Goaf drainage wells.

### For further information contact:

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### Xstrata's commitment to Sustainable Development

We are committed to the goal of sustainable development. We balance social, environmental and economic considerations in how we manage our business. We believe that operating to leading standards of health, safety and environmental management, contributing to the development of sustainable communities, and engaging with our stakeholders in two-way, open dialogue, regardless of our location, enhances our corporate reputation and is a source of competitive advantage. This enables us to gain access to new resources, maintain a licence to operate, attract and retain the best people, access diverse and low-cost sources of capital, identify and act upon business opportunities, and optimise our management of risks.