

# MINE REPORT 2003

## ▶ General Manager's Report



Dartbrook Mine returned to optimum production during 2003 in longwall 10 after experiencing significant production problems throughout 2002. In Quarter 4 of 2003, the Coal Handling and Preparation Plant experienced difficulties due to coal quality variations and longwall 11 suffered production delays due to an in-seam fault, resulting in unfavourable mining conditions.

Dartbrook's focus on safety and health issues intensified as the year progressed. The level and emphasis of the Standards and Housekeeping Inspections has been increased with the close out of action items improving with each inspection. This has seen our safety standards improve, which is attributed to the consistent effort from all employees during 2003.

This effort has produced a marginal decrease in both the Total Recordable Case Frequency Rate and the Lost Time Injury Frequency Rate compared with 2002 performance. The majority of incidents comprised of strains and sprains to the back due to manual handling and machinery operation, and injuries to the upper limbs.

Initiatives to reduce the number of incidents include the introduction of road maintenance crews and completing the Lifting for Adaptability program, which commenced in Quarter 4, 2003. Existing and new safe behaviour programs have been reviewed and will be implemented in Quarter 1, 2004. We will reinforce our safe working practices and hazard identification to seek improvement in our performance.

We continued to engage diligently with our local stakeholders and began a number of initiatives that we hope will contribute meaningfully to our local communities. This includes the establishment of a State Forestry-administered tree plantation on 75 hectares of Dartbrook owned land, the largest such commitment by any mine in the Upper Hunter Valley.

This year, you will find that the summary information presented in this printed report is expanded on the Dartbrook Mine webpage of the Anglo Coal Australia website [www.anglocoal.com.au](http://www.anglocoal.com.au). Topics that are expanded upon are highlighted throughout the text. We welcome your feedback on this, our second year of reporting on our efforts to be a sustainable part of the local community.



Tim Hobson  
General Manager



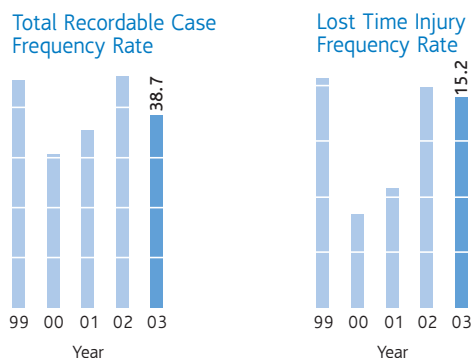
## ▶ Safety and Health

The majority of the 36 Total Recordable Cases recorded at Dartbrook during 2003 comprised 15 strains and sprains, 9 lacerations and 7 fractures.

The 15 strains and sprains consisted of 7 back or neck strains and the remainder were lower limbs and trunk. Four of the 9 lacerations were caused by the use of hand tools, whilst the remainder were related to being struck by coal or equipment. Fractures were suffered by 7 people as a result of incidents during the year. There were 2 cases of fractured ribs, 2 cases of fractured bones in employees' feet, 2 incidents resulting in fractured fingers and 1 case of a fractured arm.

These regrettable incidents occurred despite hazard identification and risk assessment training at our operation and the development and implementation of a site Risk Register.

### Safety Performance (per million exposure hours)



After an analysis of incidents was undertaken, Dartbrook implemented several initiatives in 2003. These included:

- ▶ **Safety Communication** sessions, components of which involved conducting a Manual Handling–Lifting for Adaptability program which focused on educating the workforce on key postures and positions for optimal manual handling;
- ▶ Hazard identification, which now involves the Senior Management Team and Process Owners leading Standards and Housekeeping inspections on a monthly basis;
- ▶ A **Hazard Review Program**, involving hazard assessments from crews' perspectives, risk ranking and the implementation of corrective and preventative measures;
- ▶ Introduction of snips as the preferred cutting tool to reduce the number of accidents; and
- ▶ Introduction of the Miners Tech Vest to help reduce lower back stress by distributing the weight of equipment and materials carried by underground workers.

## ▶ Employment

The mine operates with 212 full–time staff and 100 full–time contracting personnel working within the Dartbrook operation. Staff turnover remains under 5%.

We have enhanced our commitment to training young people in the Upper Hunter, continuing to host apprentices and

administration trainees during 2003. These programs will continue in 2004. Dartbrook actively participates in the Anglo Coal Australia graduate program, hosting graduates and work experience students across varying roles. In 2003, five university vacation students and one work experience student worked on–site.

In 2003, we successfully negotiated an alteration to consent conditions on a 2 km stretch of road enabling our staff to access the Kayuga operations via a safer and more convenient route.

## ▶ Community and Stakeholders

During 2003, we recorded the following proactive engagement processes with our key stakeholders:

- ▶ Seven site **Community Consultative Committee** (CCC) meetings were held, and we were represented on several regional CCC meetings. The site CCC meetings are generally attended by our Environmental Co–ordinator, General Manager, Technical Services Manager and Employee Relations Manager, and chaired by the Mayor of Muswellbrook;
- ▶ Two Family Days were held on site in December to further communicate our working conditions to the families of our staff members and elicit suggestions for improvements;
- ▶ Ongoing and individual engagement with private land holders on the mine site, to communicate our activities and provide feedback on our environmental monitoring results; and
- ▶ Ongoing and individual engagement with each of the six lessees of Dartbrook–owned land (which includes two dairies and graziers).

Dartbrook Mine representatives also manned a stall at the **Upper Hunter Show** in March 2003, providing opportunities for question–and–answer sessions with interested members of the public and distributing information flyers. In 2003, we continued our active involvement in the Mine Managers' Forum (strategic meetings held between various mines in the area to provide community benefits) and the Hunter Coal Environment Group, a collaborative of environmental professionals from industry, research and consulting bodies.

## ▶ Community Feedback

In 2003, we logged 28 complaints from neighbours; 15 on noise issues and 13 on dust, traffic, visual and access issues. In addition, 5 enquiries were received about various aspects of our operation, and were addressed as points of clarification.

In response to complaints regarding night–time noise from loader activities at the emergency coal stockpile area, we undertook trials on reversing alarms that adjust their volume dependent on ambient noise levels. Limited success was achieved, and we have elected to fit emergency stockpile vehicles with alternative alarms that have successfully been used in Europe to reduce nuisance noise.

## ▶ Community Donations

During 2003, we provided \$10,873 in monetary support to a variety of community events and charities, as well as the Advance Aberdeen Committee for the development of a heritage walk. In addition to direct donations, we committed to a small scale [forestry development](#) between our coal preparation plant and Aberdeen. Our contribution, the largest of any mine in the Upper Hunter Valley, involves the provision of 75 hectares of land and the annual management fee for a State Forestry-managed and resourced plantation that could contribute to a future local timber industry. The total commitment is for expenditure of \$225,000. The location of the plantation is expected to provide the added benefit of visual screening between operations and residents of East Aberdeen.

We also continued work on the restoration of [a local cemetery](#), with \$27,000 spent in 2003. Many of the monuments were in poor condition before the establishment of Dartbrook Mine. We have, together with local historians and the Heritage Committee, restored and re-erected damaged items. Our administrative contributions to the [Youth off the Streets](#) program, estimated at \$15,000 of in-kind support, continued during the year, although no added monetary donations were made.

Other support included around \$70,000 from rental income back into dairy farms, including:

- ▶ A pivot irrigator for improved pasture management;
- ▶ Variable speed drive pump facilities;
- ▶ Infrastructure for safer loading and unloading of cattle; and
- ▶ General upgrades to improve farming efficiency.



*The provision of equipment and technology to dairy farmers, such as this pivot irrigator, help support a locally sustainable industry.*

It is our intention that by encouraging efficient farming practices, these farms will operate well beyond the life of the mine.

During 2003, we participated in an Upper Hunter River Rehabilitation initiative to reinstate woody debris in the river, replicating conditions 200 years ago that controlled erosion and sediment loads and increased the availability of fish habitat. We provided tree logs and contributed \$3,400 in transport costs.

## ▶ Land

We increased the area of disturbed land that has been reshaped and topsoiled to 75.1 hectares in 2003, increasing our revegetated areas to 91.2 hectares. This includes an additional 15 hectares of Year 2002 rehabilitation works was re-done following less than satisfactory outcomes in the drought conditions of the previous year.

In 2003, we continued a process of formal consultation with six land owners who, by virtue of our licence conditions to mine underground, may be subject to undermining effects from our operations. In this process, we have attempted to engage with the land owners more proactively than required by regulatory expectations.

As part of our post-closure research, operations continued on the [amalgamated dairy farming](#) and broadacre cropping ventures supported by Dartbrook Mine. The economics of the forestry development venture discussed under Community Donations, whilst capable of yielding commercial timber, is reliant on the participation of other mines and energy industries in the area to be sustainable. Approximately 5,000 hectares needs to be planted over the next 10 years to achieve this.

## ▶ Water

In 2003, we increased the storage of water underground, resulting in reduced volumes of water held in surface dams that currently drain disturbed catchments. This has decreased our risk of discharging water into the Hunter River. Our pumping infrastructure was also relocated to allow mine operational areas better access to underground water storages. We expect that the relocation of the majority of our stored water to underground areas will also assist with managing recurring high pH in the water.

There were no discharges of mine water to the Hunter River in 2003.

Our water use in 2003 was recorded as 801 megalitres, reflecting our significantly increased production from last year and haul road dust suppression between Kayuga and Drayton.

In response to a request from the Community Consultative Committee, we undertook an assessment in 2003 to determine the source of [water seeping into the Hunter Tunnel](#), our conveyor tunnel located within the Hunter alluvials. Using a tritium tracer, it was shown that the seepage into the tunnel was old alluvial groundwater, allaying concerns that the seepage was directly connected to Hunter River water.

## ▶ Environmental Management

We continued work in 2003 on the development of our SHEC Management System. Our aim is to achieve certification to the ISO 14001 standard for environmental management systems by the end of 2004.

### ▶ Significant Environmental Incidents

A total of seven Level 1 incidents were logged during the year. These Level 1 incidents related to small spills of hydrocarbons which were contained on site, and one incident of unauthorised access to a fenced-off archaeological site, where no damage occurred.

In 2003, we received an administrative fine of \$1,500 for the late lodgement of our statutory environmental report to the EPA.

### ▶ Biodiversity

The land on which we undertake operations does not have any identified flora or fauna species of conservation significance.

### ▶ Energy and Emissions

Energy use and emissions for the mine in 2003 were:

*Energy Use:* 303,405 GJ

*Energy Efficiency:* 0.097 GJ/t saleable coal

*Greenhouse Emissions:* 788 kt CO<sub>2</sub>-e

*Greenhouse Efficiency:* 0.251 t CO<sub>2</sub>-e/t saleable coal

*Methane:* 20,278 t

*SO<sub>2</sub>:* 30 t

*NO<sub>x</sub>:* 42 t

*Ozone Depleting Compounds:* 0.015 t

### ▶ Waste

We recycle all scrap metal and waste hydrocarbons using approved recycling facilities. Our waste disposal and recycling activity during 2003 was:

Type of Waste	Disposed	Recycled
Tailings and rejects	941,380 t	0 t
Hazardous waste	94.4 t	0.0 t
Non-hazardous waste	1283.4 t	156.8 t

In 2003, we commenced preparation of a Statement of Environmental Effects to support an application to modify our Kayuga Project reject disposal concept. We propose to implement dry emplacement of rejects rather than a paste technology, because it is a more robust and proven traditional form of reject disposal. An added advantage is expected to be improved water management at the operation.

### ▶ Our 2003 Statistics at a Glance

- ▶▶ Saleable production: 3.14 million tonnes
- ▶▶ Land under company management: 4,292 hectares
- ▶▶ Land approved for mining activity: 3,262 hectares
- ▶▶ Land pending approvals for mining: 0 hectares
- ▶▶ Employees at 31 December 2003: 212
- ▶▶ Contractors at 31 December 2003: 100
- ▶▶ Trainees/apprentices during calendar year: 5
- ▶▶ Average hours of training per employee: 30
- ▶▶ Employee turnover rate: <5%
- ▶▶ Number of complaints: 28
- ▶▶ Community donations (cash): \$10,873

This SHEC report covers the period of 1 January to 31 December 2003.

Further details on the content of this report can be obtained by contacting Neil Winkelmann on 02 6540 8832. (email: [neil.winkelmann@anglocoal.com.au](mailto:neil.winkelmann@anglocoal.com.au)).

This report, its links to web-based supplementary material and an electronic feedback form can be viewed on [www.anglocoal.com.au](http://www.anglocoal.com.au).

*Our cemetery project continued in 2003, with individual gravestones and plots being restored to their original condition.*

