

mine managers message



Bill Knight—Manager of Mines

Welcome to the Spring Edition of our Mining News. Hopefully we get some late rains to fill our dams as we certainly didn't see much rain during winter.

As usual it has been a busy period for us, and our employees have been focused on cost saving strategies that will help our business and get Alcoa back on track following the downturn in the Global Economy.

This edition has some great stories about the projects that our people are undertaking to further strengthen our Environmental Management practices. The work by Dr Vicki Stokes (Alcoa's Fauna Ecologist) to install the artificial cockatoo nesting boxes is a great example of how we can improve the environment for threatened species like the black cockatoos.

It was nice to hear the laughter and excitement of the children from our local schools around our Huntly Offices during recent visits. The children had great fun on the haul truck simulator. They lunched with our staff members and were interested to learn about 'the types of job

that people do at Alcoa'. Mining provides a very wide range of career options and I hope this day has encouraged some of these children to think about a career in our industry.

We are continuing on with our 'mining process' theme in this latest edition of Mining News. Following on from our 'Top soil and Overburden' article in the last edition, the next mining process is 'Secondary Overburden Removal', often referred to by our people as 'SOBR'. I hope that this information is interesting to you. If you have any questions about any aspect of our Mining Operations please don't hesitate to contact a member of our Community liaison staff (you will find their contact numbers on last page), they will be very happy to assist in any way they can.

On a final note, I regret to inform you that our Environmental Operations and Community Manager—Carl Grant will be leaving Alcoa and moving to Brisbane at the end of October, Carl asked me to pass on his thanks and wishes you all the very best for the future.

With warm regards, Bill Knight, Mine Manager

Fauna rehabilitation 'Cockatubes' for our Cockatoos

Alcoa's threatened species management plans to offset mining impacts on threatened groups such as the black cockatoos.

Alcoa's Lee Goodall with one of the nests



Throughout 2010 Alcoa will be erecting 10 cockatoo nests, or 'cockatubes' as they are sometimes known, as part of a trial program.

The nests were constructed and purchased from the Serpentine/Jarrahdale Landcare Centre where local Keysbrook resident, Alan Elliott volunteers and co-ordinates the cockatubes manufacturing process.

The artificial nests are made from a dense black poly pipe, with a top entrance which is designed to discourage bees from using them.

As always, safety is the paramount concern when installing these cockatoo nests, and with the knowledgeable assistance of Lee Goodall from the Alcoa Mining Mobile Maintenance Team.



With the nest fixed in place Alcoa's Lee Goodall, puts his mark on the 'Cockatube'

The on-site 'bucket truck' was used to access the tree tops and fix the cockatubes to the mature marri trees around the Huntly rehabilitated areas.

Alcoa's Environmental Research Scientist - Ecologist - Dr Vicki Stokes is heading up the operation and said, "we know that red-tailed black cockatoos will use the nests from trials that have been conducted by the WA

museum and the Serpentine-Jarrahdale Landcare Group, so far we have successfully installed 6 of the 10 nests"



A new home ready and waiting

If you would like to know more about Alcoa's Fauna rehabilitation programme, check out our website...

www.alcoa.com.au/bauxitemining

Why not book a seat on our weekly minesite tours (08) 9530 2400

Partnering Stronger Communities

Alcoa aims to maximise the positive impacts and minimise the negative impacts of its operations, so that the overall impact on the community is a constructive one. We are therefore committed to building a beneficial and lasting relationship with our neighbours in the community. Our partnership aims to build on the existing strengths of the areas in which we operate, leading to the development of stronger and more inclusive communities in which to live and work.

enthusiasm and support in the community.

The Munda Biddi Trail has been the focus of a number of events in the region during 2010. Alcoa has been in a position to support these events in attending and also financially —The Hotham Valley Endurance Ride, The Dwellingup 100 Mountain Bike Event, Perth Mountain Bike Club 12 Hour race. In addition, our focus has been to help and work with the North Dandalup and Dwellingup Primary Schools, The Dwellingup Community Village and the WA Axeman Association for their Dwellingup Annual Log Chop Event.



An absolute favorite event of the Community Team each year is the Dwellingup RSL Christmas Luncheon for the local Seniors, a fun packed day filled with good cheer and laughter... our team is looking forward to being involved in a jovial 2010 event.



To date, by far the most successful event that the Alcoa mining team had involvement with for 2010 were the super organised Serpentine Primary P&C Group, they programmed a 'ladies expo' morning which raised over \$6000 for their school and had guest speaker Ros Worthington of the Breast Cancer Foundation for WA —what a remarkable group they are!



Sculptures by the Sea is an important partnership for Alcoa, and presents us with an opportunity to involve your children...

We are proud of our involvement and the assistance we give to the community, helping where we can...Alcoa Mining is Premier Sponsor to the Munda Biddi Trail Foundation. Alcoa also provides funding to the Department of Environment and Conservation Alcoa Forest Enhancement (DECAFÉ) Program. This funds a range of initiatives, including projects in the Northern Jarrah Forest that enhance nature conservation, recreation, landscape or heritage values of the land and engender inter-



Alcoa has contributed towards the finishing touches for the newly built Dwellingup Volunteer Bush Fire Brigade premises and assisted the 'GrassRoots' and Jarrahdale Community Associations with the upgrade to their children's play areas.



October is **Alcoa's World-wide Month of Service...** throughout the month you may see Alcoa volunteers taking part in events in your area, Alcoa promotes participation for each and every employee, allowing them a half day during working hours to 'get involved'... *give them a wave if you see them out and about.*

the next generation of truckies

May and June saw the arrival of a number of day trippers to Alcoa Huntly Central Services Department from our local primary and high schools.



Pinjarra Senior High School

Pinjarra Senior High School spent the day with the Alcoa Mining team.

Alcoa had the good fortune to provide the children with a first hand experience in driving the state of the art Haul Truck Simulator.

Each visiting child enjoyed a 10 minute session on the Simulator, they were



Dwellingup Primary School

set the task of driving the fully loaded Komatsu 730e Haul Truck to a stockpile and then tipping the

load.

The container that houses the simulator includes a drivers seat and all the controls, set out exactly as they would be in a real Komatsu 730e Haul Truck. The walls of the container are visual screens which mimic the front wind-screen and side windows of the truck, including those all important mirrors.



The whole system is linked to a computer that calculates the amount of errors that the driver makes, these include many tasks such as, sounding your horn before starting the truck, which to most people may not seem important but every process carried out is designed to make others aware that **you are there and that you intend to 'do something' with the vehicle...as always, safety first!**

Some of the children had the opportunity to visit the Heavy Vehicle Workshop and take a look at a

real sized truck, whilst others took part in our safety poster competition.

The high school students were treated to a career expo by a number of Alcoa employees including... Fauna Ecologist, Engineering & Operations Manager, Environmental Research Manager and a group of Apprentice Heavy Duty Fitters, including Tahila Riley, a young lady currently in the second year of her apprenticeship.



A number of the children showed a real interest in the careers being showcased. In time, they may even become a valuable member of the Alcoa Mining Team.

North Dandalup Primary School



Students and Head Teacher from the North Dandalup Primary School

SOBR – Secondary Overburden Removal

We have been following the mining process from beginning to end and our last edition covered the process for 'top soil and overburden removal and stockpiling'... Once this stage is complete the next progression is to remove the *secondary overburden*.

SOBR assists in reducing the organic material in the ore to be mined

Due to the uneven nature of the caprock, the scrapers are unable to remove all of the overburden layer.

Scrapers leave behind the overburden material in the concave pockets of the caprock and so the process for removal of the secondary overburden is required; this process can be likened to you 'flossing your teeth' after cleaning them.

SOBR is a critical phase of the Ore Development schedules at both Huntly and Willowdale

mine sites. This function follows the stripping of the primary overburden material (40 cm depth) which exposes the undulating surface of the lateritic caprock

The pockets of SOBR material are typically removed using excavators creating windrows of material which is picked up by the

Analysis has shown that the secondary overburden layer is high in chemicals that greatly decrease the efficiency of the alumina refining process and prevents contamination of the valuable bauxite found in caprock below.

Removing this overburden saves the refineries millions of dollars each year.



scraper fleet and stockpiled in the appropriate areas in strict adherence to the on-site hygiene plan to protect against the spread of dieback.

In areas where there is no cap rock present or the cap rock has a smooth sheet like appearance (little/no depressions), scrapers can perform both the primary and secondary overburden removal operation.

The SOBR operation is complete when most of the caprock has been exposed and no pockets of secondary overburden remain.

At the conclusion of SOBR, exposed caprock is ready for the next stage of ore development.



WHAT ABOUT DIEBACK IN THE OVERBURDEN LAYERS ???

The segregation of dieback and dieback-free overburden is a critical part of the SOBR phase.

Research has shown that secondary overburden is highly infected with spores of the dieback pathogen.

Effects of Dieback

- Reduction of fauna inhabitants
- Yellowing of foliage
- Retention of dried foliage
- Darkening of root colour
- Wilting
- Mass numbers of flora dying, commonly called 'the graveyard'



SOBR is accomplished using small, tracked excavators. The excavators create windrows of the secondary overburden material. Scrapers are then able to collect and transport this material to the overburden stockpile.





alcoa in the community

40 YEAR ANNIVERSARY

Lets Spice things up a bit

BOB RHODES celebrates his Ruby Anniversary



Bob Rhodes, started work with Alcoa in April 1970, he remains as enthusiastic about Alcoa today as the day he started, he said "Alcoa is a brilliant place to work, anyone who leaves must be crazy, who would give up the chance to earn good money and go home at the end of each day, none of this fly-in and fly out nonsense?"



Bob Rhodes (3rd Right) with other crew members circa 1968

Bob is a Jarrahdale man, when he moved to Alcoa's Jarrahdale Mine in 1970 he was excited about his new career. Bob has many happy memories; he recalls how each year Alcoa would send a loader from No.2 Pit into Jarrahdale town to assist with the log chop celebrations.

In 1973 Bob moved to the Environmental Department, he recalls the original planting prescription in the Jarrahdale No.1 pit, "Alcoa planted Pine trees, and as soon as the wind picked up, they blew over like a house of cards", he knows that Alcoa has come much further in their rehabilitation process which now restores the Jarrah Forest to its natural state.

When asked what was the most noticeable change Bob has seen in mining, he replied – 'the blasting process', he recalls huddling with his colleagues under a steel hut for cover when blasting, and drill holes were made through the overburden and later a compressor would be used to blow the debris away in order to find the holes that had been made.

Congratulations Bob on reaching this historical achievement.

This Delicious recipe was kindly supplied by Bev Linning of 'Touch of Aroma' - 63 McClarty Road, Dwellingup. Bev said 'with all the limes around at the moment a Lime Relish would be nice to have with curries and can be spiced up with chili....

What you will need..

- 6 limes
- 1 onion
- 3 chillies
- 1/4 cup of sugar
- 3/4 cup of white vinegar
- 1 tablespoon of fresh root ginger (or 1 teaspoon of ground)
- 1 tablespoon of yellow mustard seeds



Peel the rind from the limes then peel the pith from limes and discard. chop up the flesh/rind and fruit. Peel and chop the onion. Place the rind, limes, onions, chillies and ginger into a food processor and process lightly (not smooth). Put mixture into large saucepan with the mustard seeds, sugar and vinegar. Bring this to the boil, then lower the heat and cook on medium until thick and pulpy - perhaps 1/2 hour, pour into jars - and seal while hot. Yum.



out and about



Picture content:

1. Willowdale Production Crew members receive their BRAVO Cheques.
2. Larissa Hackett with Bob Rhodes who recently celebrated his 40 year anniversary with Alcoa.
3. Alcoa ladies attend the Alcoa Women's Network meeting at the Pinjarra Visitor Centre.
4. Mining employees spend an afternoon working at the Mandurah Wildlife Rescue as part of the ACTION programme.
5. Mining representatives with SJ Shire President Sheila Twine at the Serpentine Women's Expo.
6. Machinery constructing the new Fauna Crossing at Huntly McCoy Facility.
7. Val Brown, Susan Craig & Barbara Stevens cut the 30 year anniversary cake at the Marrinup Anniversary Celebration
8. The Marrinup Nursery Staff join the celebrations for the 30 year anniversary
9. Some of this years entries at the Dwellingup Pumpkin and giant vegetable competition.
10. Phil Knight—Willowdale Operations Planner celebrates his lay days of freedom before getting married.
11. Ian Colquhoun—Alcoa's Environmental Research Manager with Tony Henniker of the Jarrahdale Heritage Society at the unveiling of the new signs at Langford Park.
12. Best Conditioned Horse—winner at the Pinjarra-Hotham Endurance Ride sponsored by Alcoa Mining.
13. Brett Hodges—Assistant Production Manager—presents Darren O'Brien with his BRAVO Cheque for the Waroona Bush Fire Brigade.

to find out more about alcoa's operations:

- Come on a Tour : (08) 9530 2400
- Contact our Neighbour Relations staff : Huntly Mine - Fran Luke (08) 9530 2527 : Willowdale Mine - Beth Butler (08) 9733 8942
- Visit our website : www.alcoa.com.au/bauxitemining

If our operations are having a negative impact on you, please contact security
 Huntly Mine (08) 9530 2800
 Willowdale Mine (08) 9733 8811
 24 hours a day, 7 days a week