



australia's aluminium



H U N T L Y
c e l e b r a t i n g 3 0 y e a r s

HUNTLY

celebrating 30 years



Thank you to everyone who shared their photos, memories and stories to help write this book. The amount of support I have received in bringing together the first 30 years of Huntly mine has been phenomenal!

Kate Doherty



Foreword



Huntly's first 30 years have been filled with stories of remarkable achievements – from 1976, the first year of production when a little over three million tonnes was mined, crushed and conveyed to Pinjarra – to 2006, when we produced over 22 million tonnes of bauxite.

The changes have been incredible – we've gone from slide rules to laptops, from 50 tonne trucks to 190 tonne trucks and from planting eastern Australian eucalypts to restoring Jarrah Forest ecosystems in rehabilitated areas.

The achievements in occupational health and safety are also noteworthy with a 10 fold reduction in the serious injury rates over this 30 year period.

But during this time there has always been one constant: the spirit of the people who make Huntly what it is.

From the very early days, Huntly employees came with a spirit of adventure like all pioneers taking up a new challenge. They set the standard for all that were to follow them over the hills to Huntly.

Huntly people have always been motivated by a challenge, proud of their workplace and supportive of their workmates. This spirit is the reason that Huntly is the world's leading bauxite mining operation. People come from all over the world to see our mining operations and rehabilitation.

Congratulations and thank you to all who have contributed to this remarkable story of success. I'm sure that when someone writes the 50 year tribute to the people of Huntly that the stories of achievement will continue to be an inspiration to all of us.

Bill Knight

WA Manager of Mines

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During the early and mid 1970s, the Pinjarra Refinery was adding new production units as it expanded rapidly to meet growing world demand for its high quality alumina. The Del Park Mine had, until 1976, been the sole provider of bauxite to Pinjarra.

A decision was made to establish a new mining region at Huntly. Not only did this meet the increased bauxite tonnage required at Pinjarra, it also provided an opportunity to blend Del Park and Huntly ore to further improve the performance of the Pinjarra refinery.

In 1976, Alcoa of Australia opened its third bauxite mine at Huntly, located close to the existing Del Park Mine in Western Australia's Jarrah Forest near Dwellingup. Cliff Harding was Huntly's first Mine Superintendent.

Following the closure of Del Park in 1987, Huntly became the sole supplier to Pinjarra. After the closure of Jarrahdale in 1998, Huntly also became Kwinana refinery's supplier of bauxite and the biggest bauxite mine in the world. Four hundred million tonnes of bauxite have travelled the overland conveyor to the Pinjarra refinery since 1976.

Huntly

The World's Largest Bauxite Mine

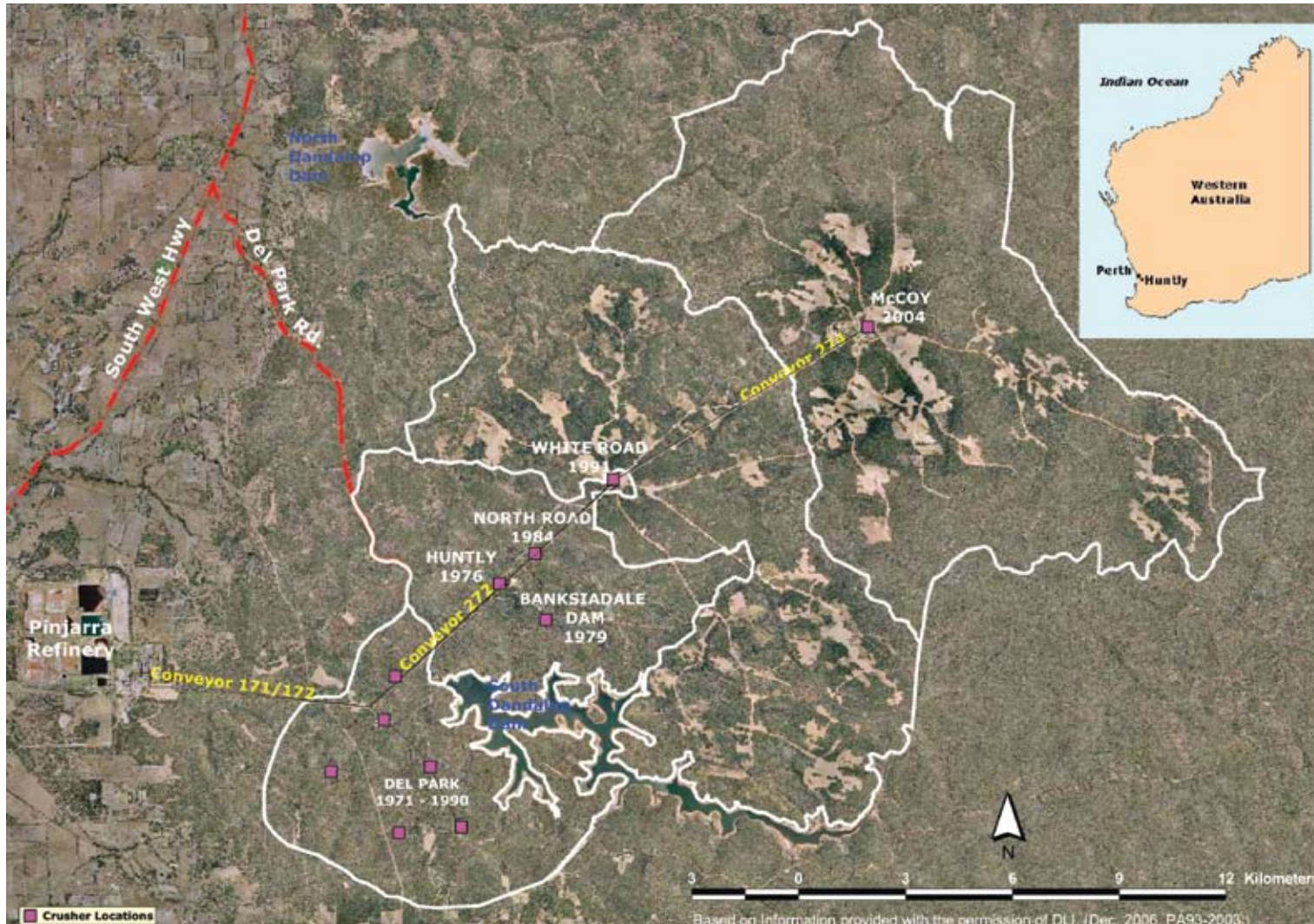


The original Huntly Mine entrance plaque

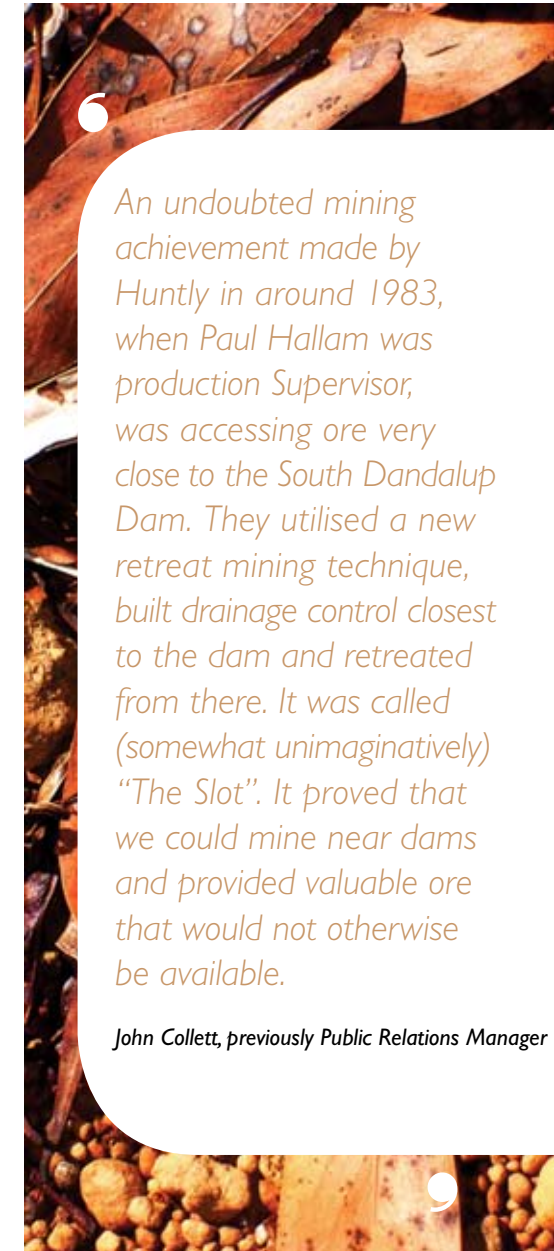


The first crusher on site at Huntly mine, 1976

Huntly crusher regions and major infrastructure



The location of the various Huntly crusher regions and major infrastructure



An undoubted mining achievement made by Huntly in around 1983, when Paul Hallam was production Supervisor, was accessing ore very close to the South Dandalup Dam. They utilised a new retreat mining technique, built drainage control closest to the dam and retreated from there. It was called (somewhat unimaginatively) "The Slot". It proved that we could mine near dams and provided valuable ore that would not otherwise be available.

John Collett, previously Public Relations Manager



loaldi Gamba

Ore Handling Systems Manager



loaldi Gamba had always aspired to be a motor mechanic, so on the 14th January, 1974, he began an apprenticeship at Del Park as a fitter. loaldi worked as a fitter in Fixed Plant for a while before moving on to mobile maintenance for 18 months. It was in mobile maintenance that loaldi began to climb the ladder, stepping up into a Foreman's role and then into a range of supervisory roles leading to his current position of Ore Handling Systems Manager.

"Turn the clock back and you had one mine feeding one refinery, then you had two separate mines feeding one refinery...today its one mine feeding two refineries, and it's such a significant change in security and infrastructure as well."

"One of the biggest changes at Huntly has been the production rate. Huntly began on 1530 tonnes per hour; today we're producing around 5000 tonnes per hour."

When asked how he has changed in his time at Huntly, loaldi says 'I've gone from being the youngest in the group, to being one of the older people in the group. I have never really had any great expectations, or intentions, but there have always been opportunities to step up to. There have been lots of people to model myself on. It's the sort of organization that you can take out of whatever you put in to it, and there was always a certain degree of being at the right place at the right time! I'm still having fun!'

'The best thing about working for Alcoa is the people, the sense of achievement and satisfaction. Alcoa is a great employer!'

Huntly North

Miners Write

THE NEWSLETTER FOR MINERS



Vol. 9 No 4, 21st December, 1990



HUNTLY WINS QUALITY AWARD



Holding the Quality Awards presented by Senator Button in Sydney, (from left) Angus Macquarrie, Peter Burgess, Graham Kemp and Leigh Dyson

It was an exhilarating moment for Peter Burgess when he stepped forward to accept the Outstanding Individual Quality Improvement Project award from Senator Button for the Huntly North Project. Peter, Angus Macquarrie, Graham Kemp and Leigh Dyson were in Sydney to represent Alcoa at the Enterprise Australia award presentations.

Peter said that he was honoured to accept the award on behalf of the W.A. Mining Group and the 400 employees at Huntly who made the Huntly North project a success, and who are continuing to improve the performance of the Huntly mine.

Huntly North was the name given to the project that combined the two Pinjarra mines — Del Park and Huntly, improving environmental, economic, quality and social aspects of the operation.

...continued on page 2

In 1987, a project was set up to combine the people from the Del Park and Huntly Mines following the closure of Del Park. This project was known as Huntly North. The project will always be remembered for its honesty and openness from both parties. The first transfers of Del Park employees to the Huntly Mine occurred in the later half of 1987. Once the merge was complete in 1990, the newly consolidated Huntly Mine (now with two crushers) was the sole supplier of bauxite to the Pinjarra refinery. At the time, 10% of the world's aluminium started as bauxite from the Huntly Mine. That was significant in both Australian and world terms.

Another significant milestone for the Huntly Mine occurred when an extensive feasibility study to provide bauxite to the Kwinana refinery from the Huntly Mine was undertaken in 1995. The project took two years and the decision was eventually made to transfer the Jarrahdale mining operations to Huntly. This decision was based on the continued high cost of operations at Jarrahdale, the inflexible crushing system based on a rail head and the long haulage distances for the ore. Over 100 of the 'Jarrahdalians' transferred to the Huntly Mine when Jarrahdale closed at the end of 1998.

Since the crusher first 'walked' from Del Park to its original Huntly location in 1975, the crusher has moved a further four times – to Banksiadale, North Road, White Road and then to McCoy in 2004.

Of course, the first 30 years of Huntly is marked by more achievements than just people and equipment relocations. By the end of Huntly's first rehabilitation season in 1977, 32 hectares had been rehabilitated. In the 30 years since, a total of 8643 ha have been cleared and 5392 hectares have been rehabilitated. This is all thanks to the many people that have worked in the various areas of the mine, and as a result, Huntly continues to be recognised for its outstanding benchmark standards in safety and environmental rehabilitation techniques.

H U N T L Y
celebrating 30 years





Peter Burgess

Previous Huntly Mine Manager



'I love the magic that always seems to arrive uninvited when a team of people who trust each other decide to do something together that they believe in....'

Having experienced many different teams in many cultures around the world over the years, a few get granted that magic and most do not. During my seven years at Huntly and Del Park I felt that magic much of the time and hope the current generation get to feel that often! Happy Birthday Huntly...'

Kim Horne

Previous Manager of Mines



'Huntly was a wonderful place to learn and develop. It seems to me that back in 1987 when I first joined the team at Huntly, there was a sense of excitement and a lot of 'can do' at all levels of the Organisation. It may have been a little rough but it was very ready to learn.'

The first major change was when it was decided to close Del Park. A task force was formed that developed both friendships and processes for change that still remain today. The Del Park people added a new set of skills and knowledge to Huntly. It was a very short time until the new Huntly North was up and running and back on the track to becoming World's best.

With the closure of Jarrahdale a new influx of people arrived to help work the new mine. These folks again added to the overall knowledge and skill set that we had available to us. Jarrahdale was a very different mine and the people had very different skills. Between 2001-2004, I think we really saw a world class operation producing world class results consistently.

I am sure that after 30 years we can claim Huntly has been very successful and that over the next 30 it will get even better.'

1976-1986

The Birth of Huntly

- Huntly Mine opens 1976
- 36 hour working week introduced 1981
- Winged tine was first used for contour ripping 1983
- First use of helicopter for broadcast fertiliser application 1986
- New survey technology 1989

The construction of the Huntly mine began in 1975, as 271 conveyor was constructed adjacent to the existing 171 conveyor initially used by the Del Park Mine. At the Sub 22 transfer station, 272 conveyor was constructed out to the new Huntly Mine. At first, the long and windy road up to Huntly would often take half a day to travel, however once the plans for the new crusher site were in place, construction began on a new access road up to the new mine site. The construction of Del Park Road and the 272 conveyor bridge soon followed. The first crusher site was located north of South Dandalup Dam adjacent to North-east Road. Workshops were constructed at Huntly administration where they still stand today. The first tonnes of bauxite were mined at Huntly in 1976.

For many, the opening of Huntly Mine was just a transfer from Del Park Mine. Though for some people, such as Gordon Moore, Barry Coates, Phil Fielder and Tim Scaife, the beginning of Huntly was the beginning of a career at a workplace that would expand over the next 30 years....



Huntly Production A Crew 1983. (L-R) Ken Milligan, Rob Rule, Garry Leach, Dennis Cronin, Jack Reynolds, Bill Tonkin, Don Green, Ron Cowan, Gary Bawen, Gary Burton, Henry Moody, Kevin Hart, Stuart Sanders and Don Gregg

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Upon starting, John Koch remembers Barry Carbon telling him that "The important thing is to do a good job for the environment, and to be seen to be doing a good job. We're going to stick our head up and keep a high profile." This has always been carried through and is still the case today.

John Koch
Senior Research Scientist

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The best thing about working in my role as a full-time trainer is 'the interaction with different people'. Some advice to new people would be that if you keep out of the politics and do the job that you're required to do, it's a very rewarding place to work!

Steve Dicker
Site Trainer

Barry Coates

Rehabilitation Operator, Crew 2R



Barry Coates first started at Del Park in 1974, working as a "powder monkey" on the blast crew. He had come to Alcoa for a change of life style away from farming and intended on staying about 1 – 2 years...that was 32 years ago. The next stop was the workshop when Huntly was just getting established in 1975. Barry spent some time on both the blast crew and then worked in production for three years. Since then, he has worked in rehabilitation for 25 years now.

Having worked at Huntly from the beginning of its operations, Barry can recall the changes that he has seen over time. "The size of machinery has definitely changed. The amount of dirt we move in a shift now is phenomenal to what it was when we first started. It used to take us nearly three months to build a stockpile down the bottom. Also, it was more of a friendlier atmosphere back then and you'd know everyone by name. To start with there were only two shifts and there was no working weekends so you virtually mixed with the same people all the time."

"Perhaps in a couple of years I want to go back on the farm and retire there and also do as much travel as I can." After 32 years, Barry says that it is the job stability, a good wage and the location that has kept him here for so long. "You wouldn't get a better location – a job where you're home every night...or every morning!"

1976-1986

Slowly but Surely

In the first few years after Huntly had been established, production was slow. The mine was producing between 5000 and 7000 tonnes of bauxite every shift. Les Mudge, an Alcoa employee of 28 years describes the changes in production over the past few decades. 'When operating a loader, a truck would come; they'd fill the truck and then wait up to half an hour for the next truck. In the meantime they would tidy the area around where they were working. These days, the trucks come in one after the other and production is much higher. We use scratchies now, but for a while, we used a 'graddle' which was a truck and crane with a scoop on the end. This would reach out and grab all the overburden. Gee that was a rough job! We stopped that and just used scrapers... And now we have gone back to using scratchies again, in conjunction with scrapers.'

Les adds, 'Later on with the old 100 tonne haul trucks, I'd spend the whole night on a D9 dozer just pushing them out of the pit. The loader would load, then I'd get behind him and push him out of the pit, over and over throughout the night. The pit got so boggy! The loaders tended to work the floor up. But now, the machinery moves over the ground much faster.'

Compared to what we have today, those old 785 Komatsus were terrible – you weren't game enough to turn a corner; you just kept it straight. There'd be a little ridge right in the centre of the road, and one slight move and you'd be jumping over it all the time – just couldn't get the wheels to go where you'd wanted them to go. The truck would be darting from side to side. Compared to those, the Komatsu 730E's that we have these days are a dream to drive!'



*Tail end of Del Park Conveyor,
20th January 1975*



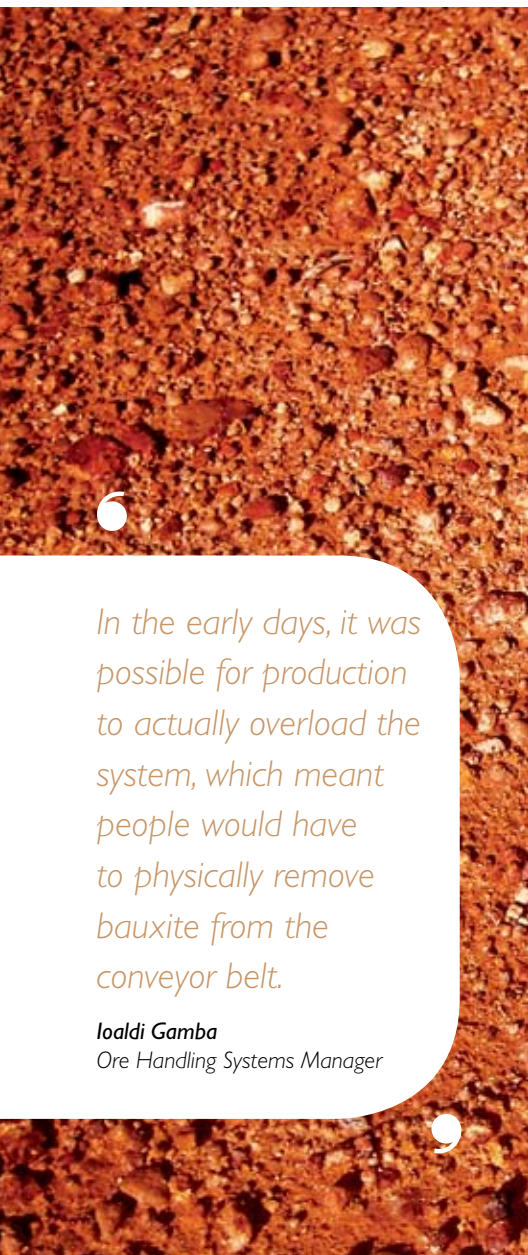
*Del Park Road bridge and
Conveyor bridge construction,
14th August 1975*



*Erection of No. 1 original crusher
at Huntly, 14th August 1975*

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In the early days, it was possible for production to actually overload the system, which meant people would have to physically remove bauxite from the conveyor belt.

Ioaldi Gamba
Ore Handling Systems Manager

Geoff Gray
Ore Handler



Geoff Gray began his career at Alcoa working as an assistant at Pinjarra farmlands on October 1st, 1976. Geoff then transferred to fixed plant and then went on to do conveyor patrol, later becoming part of the ore handling group.

Geoff can distinctly remember a stint of 13 nights straight changing the 272 belt when first transferring to the mine from the farm, 'and seeing a certain foreman of that time throw his hat down when things weren't going right!' One of the highlights of the job has been when 'patrolling the belts during the warm sunny evenings and watching the sun set!'

Some of the biggest changes that Geoff has seen over his time at Huntly has been the increased production, bigger machines and a faster belt...which also means more roller changes! Outside of work, Geoff's interests lie in woodwork, and he admits the biggest changes that have gone on over the last 30 years have been 'getting old! Also, my kids getting married and producing grandchildren.' Both of Geoff's sons have also worked at Alcoa.

1976-1986

Worries in the Workshop

Some of the first machinery operated at Huntly mine included the Fiat Allis dozers, CAT 631 and 637 scrapers, and CAT 769B (35 tonner) and CAT 773A (50 tonner) trucks. One of the first major maintenance problems that the workshops experienced in the late 1970s was the transmission on the CAT 773As.

At the time, production was getting no more than 3,000 hours out of the transmission on each truck. A specialist was flown over from Melbourne to inform maintenance that the problem was with the type of lubricant being used – apparently they had been using the wrong type of oil which is why eight clutches had already been burnt out.

Another problem experienced with the early truck fleet was that the trays were aluminium. Being much lighter, the initial benefit of having the aluminium trays was to hold more dirt (a couple more tonne per load). However, more dirt in the tray meant a higher amount of stress placed on the ribs on the outside structure of the tray. The product was just too malleable with the increased loads and so stress cracks appeared in the tray. Maintenance would spend forever welding up the cracks and so decided to switch to steel trays instead.

'Hey, how about the machines we used to drive with no cabs? We used to sit right alongside a motor; this was years and years ago. No air-conditioning... no windows... actually we even had machines without steering wheels!' says Gavin 'Nobby' Norwell, Rehabilitation Machinery operator. Gavin has worked for Alcoa for 32 years.

'A certain truck driver, who we won't even look at (Nobby),' adds Terry Doney, 'called up his foreman one night shift for a pair of sunglasses, because the sun was too bright. It was the moon.'

Gordon Moore, a rehabilitation operator, recalls: 'Huntly first began with 50 tonne trucks that were second-hand from Jarrahdale as well as second-hand loaders. The second lot of trucks that came were from Jarrahdale too – the new B12s. On an eight hour shift back then, we'd need 200 trips with 50 tonne trucks to move 10,000 tonnes, now we do about 40,000 tonnes on a 12 hour shift. That's a huge difference!'



Gordon Moore

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In the lead up to Huntly opening, the business started to grow, and Del Park very quickly moved from a day and afternoon shift pattern, to a day/afternoon/night eight hour shift pattern. Huntly was therefore established as a 24 hour a day operation.

In the early days at Huntly, a standard work week was 40 hours, Monday to Friday. Saturday and Sunday was overtime. When the 36 hour working week was introduced in 1981, the work roster became continuous.

“Some of the key people that spring to mind when I think back at my time at Huntly include people such as Leigh Dyson, Tom Bettridge and Ron Renton. Leigh was the Mining Group’s first Mine Planning Superintendent when the Huntly operations were first planned and commissioned. Tom Bettridge was Mine Superintendent of both Del Park and Huntly for a brief period after the commencement of operations at Huntly in 1976. Ron Renton was appointed the first Huntly Mine Superintendent around 1979 for about 6 months before he took over from Tom Bettridge at Del Park.

Bill Knight was one of the first Mine Environmental Scientists at Huntly. Peter Elliott, Glenda Pickersgill and Gordon Baird were also there at critical times in the mine’s development. From May 1985, I was the Mining group’s Environmental Manager involved in the medium and long-term planning and environmental approvals for the mine until John Gardner later took over,” says Graham Slessar.

There was a quick turnover of people in the Manager of Mines position around that time. Colin Agnew was probably in the chair at the time when the initial appointments were made. He was followed (briefly) by Max Webb and then by George White from late-1979 to April 1983. Graham Slessar, previous Mining Environmental Manager.

24/7

Mine Superintendents



Production B Crew



Rehab Crew, 1984- 85

1976-1986

We used Wings before Australia II

"We first started deep ripping our rehabilitated areas in 1971 because some of the first rehabilitation at the old Langford Park mine at Jarrahdale was showing windthrow of the trees. The ripping depth got deeper and deeper as we used bigger dozers."

"Although conventional tines were capable of achieving good ripping depths, the design of the tine meant that only a small portion of the ground was ripped, leaving a slot of ripped ground and blocks of unripped soil between the slots. This was worse in cases where the ground was wet while ripping. During the early 1980's at Huntly, Jim Croton and Eugene Tsykin experimented with different plough shaped tines to try and produce a better fracture pattern."

"The resultant tine had wings on it which resembled, and pre-dated the wings used on Australia II for its successful challenge for the America's Cup in 1984. Due to the extra power required, larger D10 dozers were purchased especially to do this task. The winged tine gave much greater break-up of the soil, especially between the rip lines. This produced better tree growth and also allowed more rainfall infiltration into the soil and hence less erosion. The large contour banks seen in the 1970s rehabilitation, which were insurance against erosion, were no longer needed. The winged tine was very successful and has since been copied by other mining companies." explains John Koch, Senior Research Scientist.



Stan Walsh and Barry Coates trialling the first winged tine in 1982



The winged keel of Australia II, developed in 1983



John Koch, Senior Research Scientist

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Good Memories of Huntly
In the mid-80s Huntly and Del Park fielded teams in an indoor cricket league in Mandurah. The 'Huntly Crushers', resplendent in their gold and white uniforms included Bill Knight, Vern Stanford, Peter Marriott, John Hawkes, Steve Smith, Dan Kirkwood and John Collett (and others?). We were never very good but had a very enjoyable time. Del Park also had a team.

John Collett
Previously Public Relations Manager



“However impressive these advances have been, the one thing that impresses me is the people who work in this industry.” says Bruce Brierly, electrician. “My most treasured memories will always be of the many people I have had the privilege to work with over the years, many of which I have formed lasting friendships with. Even though they may have moved on to other jobs in other locations and companies, the people I have worked with have always remained good friends.”

Bob Barbour, currently in ore development, recalls his past experiences as a surveyor:

“In surveying, there were no computers, calculators or GPS and there were many more people employed to do the jobs. Things ran a lot slower. . . making maps could take a day or more to make only one map, whereas now it can take about half an hour.”

Jim Kenneally first began working on the Huntly survey team in 1988. Prior to that, surveyors were using stadia pickups with a survey staff. ‘This is the method where you’ve got three crossings on the survey instrument, a main cross in the middle and two smaller ones up the top. They’re set so the surveyor can read the interval on the staff. There was then a multiplication factor to determine the distance, and then from the angle, determine the height difference – that was called stadia and you had to have a book with you to determine the height and angle.’ explains Jim. Dave Leith, Senior Mining Engineer adds “Over the years this changed to “Total Stations” capable of measuring the angles and distances and carrying out the necessary calculations.”

“Truck location and performance is constantly monitored by GPS systems which allow the rapid recognition and resolution of operating problems. The crushing and conveying systems can be remotely monitored via the scan systems which can be accessed remotely. Noise and stream turbidity levels are also remotely sensed with data available in real time. These and other data collection and reporting systems allow us to more rapidly and accurately measure and assess our performance in order to improve all of our activities”, explains Dave Leith.



Bob Barbour

Surveying the Technology

1976-1986

Helicopters Spreading Fertiliser: I'd like to see that

Helicopters were first used in 1986 to fertilise rehabilitated mine pits about two months after they have been established. This was generally done during late winter or early spring as the plants are just appearing. Before this time, fertilising was done by tractor; and before that, a fixed-wing plane.

A specialist team of two chopper pilots came especially from New Zealand to do the job. Pilot, Dave Snowman, is an ex-tradesman who also designed the hopper that is used to carry 500 kg of fertiliser at a time. The hopper takes up one 500 kg bag which is loaded as the helicopter hovers above. In 2002, rehabilitation areas at Huntly, Willowdale and Hedges were covered in just over three weeks. At Huntly alone, 435 hectares were fertilised, which meant 435 flights for the helicopter. Now we use less fertiliser (280 kg per hectare instead of 500 kg per hectare) so that means fewer flights.



Helicopter fertilising

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Phil Rance

Mine Control, McCoy



"I started on the 5th March 1974, driving the forklift in the main stores at Pinjarra. By May 1976, I had a job as Stores Clerk at Del Park. From here I was sent to the new Store at Huntly for six weeks...it was another six years before they sent me back to Del Park.

When I first started in Mining, it was like an extended family, everyone knew everyone. Computers were introduced into Stores in 1982 and initially they had very limited capability but we learnt to get along with them as they improved.

In 1988, I moved to Security, with two on each shift plus two reliefs so we really knew the site well. It's very different today. I suppose my biggest challenge would be when Kevin Pollard and I were Support Officers for the construction of the new McCoy mine. This was a very demanding but very satisfying job and gave me an insight into the new mine when my colleagues were suddenly faced with a new site that they were not familiar with.

Phil is married with two children, now 30 and 31. Over the years he has bred and showed Rough Collie dogs. Phil has been a member of both the Murray and Mandurah State Emergency Services for 24 years.

1987-1997

When Two Mines Became One

Huntly North project commences	1986
Del Park Mine closed	1987
Only native jarrah forest eucalypts are used in rehabilitated areas	1989
Alcoa's mine rehabilitation recognised by the United Nations Environment Program and included on the Global 500 Roll of Honour	1990
Del Park crusher moves to White Rd	1991
PC1600 trialled at Huntly and first payload meter installed on Komatsu 785 trucks	1992
Marrinup Nursery commissions the tissue culture lab to produce of recalcitrant plants for rehabilitated areas	1992
Production moves to White Rd	1992
Seed of all smoke responsive species in rehabilitation seed mix is treated	1996

The major event that occurred between 1987 and 1997 at Huntly mine was the closure of the Del Park mine making Huntly the sole supplier of bauxite to the Pinjarra refinery. There were several reasons that led to the closure of Del Park in 1987. Peter Burgess, Manager of Huntly and Del Park mines at the time, noted that there was a high cost for moving to the south of Dwellingup, which was the only option open to the mine. This was compounded by the increased amounts of organic material found in the bauxite in the area, which would have caused problems at the Pinjarra refinery. The mining operation was also moving closer to Dwellingup and difficulties with blast noise were being experienced.

Kim Home, Pinjarra Mines Production Planning Supervisor at the time, was closely involved with the process and explains: 'We were building up the organisational effectiveness programme at the time and we used these principles to bring together the people from the two mines. 'No surprises' was the key when communicating with our people and with the union.'

John DeBurgh describes that the move was still tough on some though. 'Leaving Del Park, some people still wouldn't accept it, even up to the point where the crusher was on the truck on the way over to Huntly. Generally the majority moved over and fitted in, there were some that were lost though.'

Angus Macquarrie endorsed the sentiment, 'What made it so great was the openness from both parties, it was the start of getting away from the 'them and us' attitude. There were no hidden agendas – there was no 'too hard basket'.'

Huntly North was the name given to the project that combined the people from two mines – Del Park and Huntly – into one operation. The crushing and conveying system were still looked after by Del Park; rehabilitation was still underway at Del Park but bauxite was now being mined and transported from the now larger Huntly Mine.

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The mobile crushing, overland conveying and refinery stacking technology had been well proven with the strategic mine planning and development at Del Park and was therefore applicable for Huntly. The increased conveyor lengths were not of great concern because the operating and maintenance staff had done such a great job at Del Park and the extrapolation to Huntly was fairly straightforward.

I think everybody was concerned about the more significant problem of dieback management and control at Huntly, but the environmental group was confident they could address this issue - which proved correct.

Rex Baker
Previous Manager of Mines

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George Henderson lists some major conveyor belt events since Huntly's operation:

1980 271 Conveyor
Voith couplings disintegrated when loaded belt oversped due to brake failure.

1981 271 Conveyor
Belt broke on AMEC Hill due to splice failure.

1987 272 Conveyor
Belt change-out by piggy-back transfer from Pinjarra on 271 conveyor belt.

1991 171 Conveyor
Belt broke on AMEC Hill due to damaged cords within carcass. Belt replaced after 19 years of service.

2000 272 Conveyor
New splice failure discovered before belt separation. Wrong cement used in splicing operation.

laoldi Gamba, Ore Handling Systems Manager commented:

"Some of the most vivid memories of working at Del Park and Huntly are of the various people and characters that I have met over the years. Some people would go out of their way to help with their colleagues' best interest at heart. These include Joe Beer and George Gregson. Peter Burgess was one of the memorable characters at Huntly. Peter was a mentor. He was responsible for directing Huntly northward and the closure of Del Park."

"When Del Park closed in 1987, I moved to Huntly and it was just so much bigger and busier. The departments were in different places, so finding people became harder. However, strong friendships were made in mining, and there has always been a good network system within and across departments so calling on people is not hard. I have seen many changes take place. We have much bigger equipment, strong alliances with our equipment suppliers, our environmental practices are world class, the people are great, and I have loved all of the time that I have worked here." says Carole Claxton, Mobile Maintenance Analyst.



Carole Claxton



Del Park workshop being reconstructed at Huntly,
12th November 1996



1990 Production Crew E Huntly. Back Row (L-R): John De Burgh, Christopher Brown.
Middle Row: Colin Macquarrie, Lee Donker, Lindsay Holland, Ross Sharp, Bill Hughes,
Steve Lloyd, Wayne Mill. Front Row: Gerry Ryder, Brett Sims, Chris Roberts.

1987-1997

Seeding not Planting – and only natives please

One of the most visible changes to Alcoa's mine rehabilitation during in the late 1980's was the commencement of seeding eucalypts into rehabilitated areas rather than planting them. The implementation of direct seeding meant that the rehabilitation took on more of a natural appearance. This era also saw the end of using any Eastern States species in rehabilitation; only species native to the Jarrah Forest have been used since 1989. This change resulted from research that showed that dieback susceptible native species such as jarrah survived well even in rehabilitated areas that contained infested soil.

United Nations Recognition

Great strides have been made on the environmental front since mine rehabilitation commenced with the planting of exotic pine trees in the 1960's. Today Alcoa are at the forefront of mine rehabilitation and returning a fully self-sustaining Jarrah Forest ecosystem to all mined areas.

In 1990, Alcoa's mining operations received a very prestigious recognition – the United Nations Environment Program included Alcoa's WA Mining Operations on the Global 500 Roll of Honour. To this day, Alcoa remains the only mining company in the world to have received this recognition, confirming position at the forefront of mine site rehabilitation within the global industry.



Lee Donker planting trees in a rehabilitated area



Katie Simpson hand seeding in a newly rehabilitated mine pit at Huntly, 1995



United Nations Recognition

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From Alcoa's perspective, the trade-off for the closure of Del Park and concentration of all Pinjarra's mining operations at Huntly was gaining access to the Disease Risk Area at Huntly. Peter Elliot, Ian Colquhoun and John Gardner played key roles in developing and gaining CALM's (Department of Conservation and Land Management) acceptance of the dieback-free mining system at Huntly that allowed DRA entry to occur. I regard the development of the clean (dieback-free) mining system as one of Alcoa's greatest environmental achievements. It required an enormous cooperative effort by the environmental, mine planning, mine development and operations people.

Graham Slessar
Previous Mining Environmental Manager

A memorable moment for Bob was when Oakley Dam and a large section of the Darling Scarp above Pinjarra refinery were burnt out. As all shift workers were in the Fire and Rescue crew the workshops at Huntly were left empty. Bob's crew alone did two night shifts fighting fires instead of maintenance in the workshops at Huntly, pushing a fire break along the top of the scarp. 'We followed a CAT 988 loader in small water carts with flames that were tree-high - the heat and smoke was very scary!'

Bob Howson
Heavy Vehicle Mechanic
Mobile Maintenance

In 1992, the Komatsu PC1600 excavator was put on trial for the first time at Huntly Mine. The then, giant new excavator was towering above the current haul trucks. John DeBurgh, then a machinery operator, recalls:

'A team with myself, Clem Jessup, Lee Donker, John Dunne and Kevin VanDerBurg were trying to cut cycle time in the truck loading circuit. We were looking at mining options to improve productivity; we were hoping to increase production by 300 to 400 tonnes per hour without putting on a third loader. This PC1600 looked interesting: it could sit on top of the caprock, mine and even break oversize rocks. The trucks back in at 90 degrees to the mine face, giving the truck driver and the excavator operator excellent visibility.'

At the time, there were both positive and negative issues to be addressed. The excavator would perform well in the wet, high above the pit floor its performance would not suffer as the pit floor deteriorates in winter. However, as it was far less mobile than the existing loaders, it would require a low-loader to transport it from pit to pit. Helena Coles, Community Relations Officer, commented in 1992: 'The team will be evaluating the data in the near future, and who knows, perhaps excavators will one day be an everyday sight at Huntly.'



The newly assembled Komatsu PC1600 and



PC1600 Excavator operating at Huntly in 1992



WA900 Loader

Is Bigger Better?

Also in 1992, Huntly also saw the first of many technological advances on mining equipment when a 'payload meter' was installed in one of the Komatsu 785 trucks enabling the production performance to be monitored. Then in June 1997, a Global Positioning System (GPS) unit was installed onto loader 1053, and later installed on the other three loaders by January 1998. The introduction of GPS onto machinery became a major advance in mining and has had a large impact on the accuracy and efficiency of production and rehabilitation processes since. This was the first time in the world that GPS technology had been used on loading devices in the mining industry.

1987-1997

Huntly was still only a name on the map when Bob Howson began at Del Park Mine on August 11th 1975. 'I only intended on staying for 12 months and would then set off on a working holiday around Australia but I met my wife and got married so that was the end of that!' As a motor mechanic by trade, Bob began as a mechanical diesel fitter. In January 1988, he moved on to 'Huntly North'. In December 2004, Bob once again moved to the McCoy crusher site.

Bob Howson

Heavy Vehicle Mechanic, Mobile Maintenance



Bob has said that the key change over the years is the size of everything. 'Trucks have gone from CAT 769B (35 tonne payload), to CAT 773B (50 tonne), to Komatsu 785-3 (85 tonne), to Komatsu 985-5 (105 tonne) and to Komatsu 730E (190 tonne). Loaders have increased in size from CAT992A to 992B to 992C then to the Komatsu 800WAs to 900WAs to PC1600s to PC3000s. As a result, the workshops have also increased in size and area... not to mention the length of the overland conveyor belt and the size of stockpiles down at the refinery!'

Bob has also seen many improvements in safety over the years, with more resources and equipment invested to prevent damage to backs and joints. He believes that now due to a greater emphasis on safety, retirement can be enjoyed, rather than ending their career 'as an invalid!' 'It's generally your own experience and observing others that makes you realise how safe you have to be in and around the workshop.' Bob Howson, Heavy Vehicle Mechanic.



One of Huntly's first fleet - CAT 769B with a payload of 35 tonnes



Huntly's latest fleet - Komatsu 730E haul truck with a payload of 190 tonnes

HUNTLY
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There have been many changes in terms of the size of machinery. We've still got the same crushers...but the size of the machinery has definitely grown. We had 50 tonne trucks when I first started, but now we have 190 tonne trucks.

Steve Dicker
Site Trainer



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“
Excerpt from the Miners Write, Volume 8 – No. 3, 22nd September 1989: Bev started working for the mining group a few weeks ago. She should become a familiar face because she has the responsibility for all the mines and will be talking to all the crews. “I will place high priority on prevention,” explained Bev. “I really push self help and many aspects of everyday working life, like good posture and correct lifting procedure. Attention to points like these add up to a safer working environment for all of us.”

Bev Johansen



Bev Johansen - when she first began of Alcoa in 1989

Bev Johansen describes the change is Ergonomics in the mining group over the years...

“Huntly ergonomic/physio services started with the mining group's first full time physio in 1989. The physio worked under Dr. Ken Hay but also answered to the individual mine managers Ray Vitali, Peter Burgess, Bill Knight and mining services manager Gordon McKenzie.

Part of the role was to look at the workplace and identify and advise on any ergonomic problems. It was informal and took place where time allowed. The profile of ergonomics on site has now risen over the years, with the original physiotherapist's role having been more clinical focused. Each site has a site ergonomist to advise, set goals and oversee the programme as well as the departments taking responsibility for there own economic issues.

1987-1997

White Road: Here We Come

When Del Park was closing down in 1991, the original plan was to either get rid of the Del Park crusher or keep it in reserve in case of increased production. However, due to expansions and increased demand at the refinery, the decision was made to transport both Del Park and North Road crushers to the new site at White Road.

Because of its size, there was no way that the Del Park crusher was going to fit under Del Park Road bridge on its way up to Huntly. So, the crusher had to be partially dismantled, transported to the White Road crusher site and then re-assembled at the other end. Several months later, the second crusher was on the move, beginning its long two day walk from North Road crusher site to White Road. There was actually some uncertainty as to whether the tunnel covering the 272 conveyor would hold under the weight of the crusher; especially considering the crusher was travelling at a mere 0.5 km/hr! But low-and-behold, the second crusher made it from North Road and fitted very "snugly" next to the first. For the first time at Huntly, two crushers operated side by side.

As part of the move, fixed plant was eventually relocated to White Road from Del Park, whilst the mobile maintenance workshops remained at the original Huntly site.



Crusher No.2 walking from North Road to the White Road crusher site

The Giant walks with little steps, Miners Write, February 1992

Twin crushers in operation at White Road

HUNTLY
celebrating 30 years

When the Crusher was 'walked' to the White Road site from North Road, two Wesehütté engineers came from Germany to provide technical expertise. A relay in the hydraulic system kept getting stuck and interrupted the walk. One of the engineers, named Ziggy, attached a lanyard to the relay and walked alongside the crusher for the last few hundred metres, and from a distance looked like someone taking a very oversized mastiff for a walk!!!

John Collett
Previously Public Relations Manager



Where there's Smoke?

Understorey species such as acacias were first seeded in rehabilitated areas in 1976. Since then, a large amount of research has been conducted at Marrinup Nursery investigating how to break the dormancy of seeds. Seeds of some species only require addition of water to germinate but others are dormant and require treatment before they will germinate. Early research focussed on heat treatment of hard-seeded legume species. In the early 1990's, Alcoa was informed of pioneering research being undertaken in South Africa investigating smoke as a treatment to break seed dormancy. The environmental research group then commenced a collaborative research project with Kings Park to investigate whether smoke treatment increased germination of species used in rehabilitated areas. The research showed that the germination of many of the 50-80 species included in rehabilitation seed mixes could be increased by treating the seed with smoke prior to application. In 1996, those seeds known to be responsive to smoke treatment were treated for the first time, before being added to the rehabilitation seed mix.



Bill Freeman, Technical Officer, overseeing one of the original trials involving smoke application to seed and soil at Marrinup Nursery

Recalcitrants are Welcome!

Many of the dominant understorey plants in the Jarrah Forest are slow growing species that rely on vegetative growth for spreading, do not produce viable seed, or if they do, the seed is difficult to collect or does not readily germinate. These plants were named recalcitrants. These difficult 'recalcitrant' plants have important roles in the jarrah forest ecosystem. Until the early 1990s, these plants had been absent from our rehabilitation. Marrinup Nursery and the Mining Environmental Research Department developed new techniques to grow these plants so they could be planted in rehabilitation areas. In 1992, the Marrinup Nursery Tissue Culture Laboratory was commissioned and production of recalcitrant plants for mine rehabilitation commenced, as did the production of Dieback Resistant Jarrah. In 1994, field trials to assess the survival of planted recalcitrant species in the mine rehabilitation were undertaken. Recalcitrant plants have routinely been planted in rehabilitated areas since 1998, with more than 250,000 plants produced in some years.

1998-2006

When Two Mines Become One...Again!

Production ceases at Alcoa's first mine at Jarrahdale	1998
First 500 tonnes of Huntly Mine bauxite leave Pinjarra bound for Kwinana Refinery	1998
First of three Komatsu PC1600 excavators together with the first of 11 new 105 tonne Komatsu 985 dump trucks arrive at Huntly Mine	1998
Global Positioning Systems installed on excavators to improve precision of extraction of bauxite	2001
Air-Seeder is developed for spreading the rehabilitation seed mix at the back of ripping bulldozers	2001
100% forest species richness target reached!	2001
Rehabilitation and decommissioning of Jarrahdale Mine completed	2001
McCoy construction project begins	2002
First crusher moves to McCoy in August and the second in December	2004
730E trucks introduced	2004
First community endorsed Environmental Improvement Plan was implemented	2006

The most significant event that has occurred in the last 10 years at the Huntly Mine was the closure of the Jarrahdale Mine and a doubling in the amount of ore being mined at Huntly each year. This also meant that Huntly was the sole supplier for two of the three refineries in Western Australia. Production ceased at Jarrahdale in 1998 and the site was fully decommissioned and rehabilitated by 2001. During its operating life, 168 million tonnes of bauxite were extracted from Jarrahdale over a 35 year period and 4090 ha of cleared land was rehabilitated. The closure of the oldest bauxite mine in Western Australia was a significant event for Alcoa's operations in Western Australia; as was the decision to make Huntly the biggest bauxite mine in the world.



Huntly Production Crew, 2002

H U N T L Y
celebrating 30 years



Graham remembers the good times of working on production at Del Park...

"On the 8-hour shifts, we had to get 5-7000 tonne of dirt moved out in that time. On the loader, we would load the truck then sit for half an hour beautifying the joint – very laid back!"

Graham Hunter (1968-present)
Operator, Crew 1P McCoy

Graeme Roberts

Blasting/ Environmental Group Leader



Graeme 'Grumpy' Roberts began working at Jarrahdale mine in 1969. In 1970, he transferred from Maintenance to Survey at which time he was travelling with the other surveyors to peg the mining area of Del Park. Graeme also spent time bush pegging and pegging road alignments to Huntly and Willowdale mines. In 1986, Graeme transferred into production (at Jarrahdale) where his job involved noise monitoring, relief environmental work and relief foreman. The last few years at Jarrahdale were spent doing all of the pit work. When the Jarrahdale mine closed, he transferred to Huntly, where he officially started on the 1st of January 1999. The name 'Grumpy' was given to Graeme as a boy and is a name that has stuck with him since. Although, Grumps is still known to live up to his name!

'The best thing about the Jarrahdale Mine was the culture. The staff and people had a better relationship outside of work, and office buildings and infrastructure were very close because the crusher was fixed in the one spot. Now at McCoy, all the buildings are very spread out. Maintenance are 750 m down the road, so it is a bit of a walk to get there, and fixed plant are far away as well.'

Grumps explains, 'Some Alcoans chose to leave when Jarrahdale closed for various reasons. When the Jarrahdalians joined the Huntly crew, the Del Park people suddenly became 'Huntly' people, so the Jarrahdale people were then the 'newcomers'. Del Park and Huntly people were differentiated at first. Jarrahdalians found it difficult to let go of the past and it took a while for some to adjust. The work is the same though. The work was bigger (at Huntly), much, much bigger. In its last year, Jarrahdale produced about seven million tonnes, and at that stage Huntly was producing about 12 million tonnes each year.'

1998-2006

Jarrahdalians Relocate to Huntly

Jarrahdale was established using the technology of the early 1960's, which was a fixed crusher and rail loading facilities at the end of a railway track. This meant it was very difficult and expensive to move to a new crusher site when haul distances became too long. Ian Butland, the senior mining accountant at the time, costed out the various options for Jarrahdale, but they were all unviable. There was a lot of speculation for some time about the closure of Jarrahdale. By 1997, the employees of Jarrahdale were informed of the decision to close the mine. From then on, people slowly began to filter down to Huntly. The original last mining day was planned for 24th December 1998, with those that remained involved in decommissioning and rehabilitation activities.

The move from Jarrahdale to Huntly took place without much disruption to customers. In 1999, Russell Williams, Manger of Mines, said 'The disruption to our people, however, was in some cases quite significant, and it is a tribute to the support of all our people, particularly those that relocated and changed their personal lives, that this transition was achieved without fuss.'

Stephen O'Brien describes the transition period for Jarrahdalians: 'One thing was comforting – people began to speak of those who had seen the whole change as a challenge and had moved on to other sites – had learned new skills, learned new machines, had adapted and were successful. They were now just as comfortable in their new roles as they had been at Jarrahdale.'

'For the surveyors, the transition was easy' says Theo VanRaven, Grade Controller. 'Jarrahdale and Huntly surveyors had previously associated and worked together a lot. So, it was very easy for these Jarrahdalians when they came to Huntly to fit straight in.'

'I believe that the success of Huntly actually resulted in the closure of Jarrahdale,' explains Ioadi Gamba. 'You can look at the selection that was made for equipment in 1963, then it got to the point where because of the plant or infrastructure they had, together with the geographic distribution of the ore and the long haul distances - Huntly was bound to be a far more sustainable mine site. It had long overland conveyors, and it became much cheaper to supply the ore from Huntly to Pinjarra and Kwinana.'



Jarrahdale crusher and workshops in 1998 and then fully rehabilitated in 2003

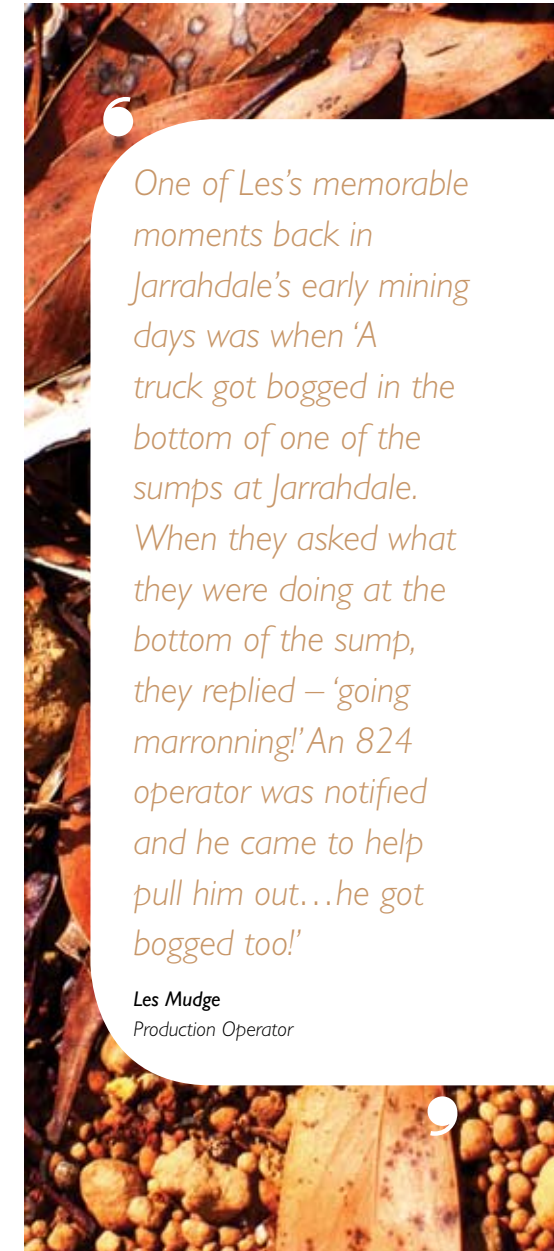


The last maintenance shift at Jarrahdale, 24th December 1998



The last production shift at Jarrahdale, 24th December 1998

HUNTLY
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“One of Les's memorable moments back in Jarrahdale's early mining days was when 'A truck got bogged in the bottom of one of the sumps at Jarrahdale. When they asked what they were doing at the bottom of the sump, they replied – 'going marronning!' An 824 operator was notified and he came to help pull him out...he got bogged too!'”

Les Mudge
Production Operator

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"We had just fuelled a service truck up in the original Huntly service bay and it was getting close to knock-off time. I see this 50 tonne truck go past out near the corner of the access road (at Huntly admin buildings) full of dirt – he was going home. He drove right down the access road before he realized and had to turn around and come all the way back again... If you knew the bloke you'd understand!"

Lee Donker

Project officer



Lee began working for Alcoa, first at Del Park on June 21st, 1976. He was only at Del Park for six weeks before moving to Pinjarra Refinery for nine years working on a 988, forklift and bobcats. One of the highlights of Lee's career was coming back to Del Park in 1986, because of the type of place it was - it was his type of work!

Lee was on the Environmental Crew at Del Park for another 12 months, and was one of the first ones to leave Del Park on 25th January 1988. Whilst Del Park was in the process of closing down, Lee transferred to Huntly. One of Lee's first major jobs at Huntly was getting Huntly North up and running. From there he joined Kim Horne and Peter Burgess in starting the three-shift continuous roster system.

In 1993 Kim Horne started a Cadetship program and Lee applied for a position as a cadet for Security for two years. "I started as a cadet at Huntly Security but in 1995 I changed to the foreman side. The Cadet Program was an excellent opportunity to obtain skills and view the roll of a foreman before taking the next step." Lee became a full time Group Leader in 1998 till 2004. Then the position of Production Project officer was created, which Lee filled and has been in since.

Alec Gibson once decided that he'd had enough for the day and headed off home...straight from work! "At the original Huntly workshop, where the old tyre bay is now, that was our where the trucks used to come in and get fuel," Gordon explains. "We had just fuelled a service truck up in the original Huntly service bay and it was getting close to knock-off time. I see this 50 tonne truck go past out near the corner of the access road (at Huntly admin buildings) full of dirt – he was going home. He drove right down the access road before he realized and had to turn around and come all the way back again...If you knew the bloke you'd understand!"

1998-2006

HUNTLY
celebrating 30 years

Dave Haddow

Supply and Stores at Huntly



"The first stores established when Huntly mine was set up was a satellite store which in time was supplied from Del Park and Jarrahdale. All purchasing was performed by Jarrahdale Supply on behalf of all mining. Additional people were employed to man up both Del Park and Huntly operations who included Bill Brookes, Phil Rance and Gary King, etc. Ray Kinsella was Del Park Supply Officer at the time.

"Around 1979, a full purchasing function was established at Del Park which also covered Huntly Stores. There were 21 supply people employed at Del Park and Huntly. Owen Trudgen, Bill Bailey and Ray Rudge were the purchasing people reporting to Dave Haddow who had transferred from Jarrahdale as Supply Officer. Gary Bick and Gary King moved to Huntly along with a group of Stores officers on continuous shift.

"In 1984, a decision was made to centralise the Mining buying and inventory management at Pinjarra. This effectively reduced the man power to about 14 initially. A subsequent amalgamation with Pinjarra Stores, and then the establishment of a central WA Supply Department at Booragoon, reduced the numbers even further to a Stores Coordinator and the buyers plus the Stores Officer at all mine sites. A core group including the Supply Officer and Administration Assistant remained at Pinjarra. Interestingly, even though the man power had reduced, work load had increased, and we were managing around 114 Service and Commodity Agreements on behalf of Mining and WA Operations.

"Huntly became the main mine and in 1989 the Mining Supply Core group relocated to site. People involved there were Paul Joy, Brian Young and Diane Rosco. This continued until 1997, when the Central WA Operations office was built at Pinjarra, and both Mining Supply Officer and Administration Assistant moved there. Subsequently, we then moved back to Huntly in 2001. Vicki Race had replaced Shirley Keane as Administration Assistant and Greg Johnson had become responsible for managing the Mining inventory as well as backing up the Purchasing function.

"Over my 32 years in Mining Supply, I witnessed many changes, from the old manual systems to the current Oracle platform, but my best memories are of the many fine people I was fortunate to have worked with, and are too numerous to list here," explains Dave Haddow, previously Procurement Specialist.



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One of Les's memorable moments back in Jarrahdale's early mining days was when 'A truck got bogged in the bottom of one of the sumps at Jarrahdale. When they asked what they were doing at the bottom of the sump, they replied – 'going marronning!' An 824 operator was notified and he came to help pull him out...he got bogged too!'

Les Mudge

The first 500 tonnes of Huntly bauxite left Pinjarra bound for Kwinana Refinery on Monday the 7th December 1998. The dispatch of 10 Westrail wagons from the Pinjarra train loading facilities was a critical milestone for the \$90 million project, which would result in the development of a 19 million tonnes of bauxite per year mining operation at Huntly in 1999.

Steve Pyburne, currently the Mining and Infrastructure Engineering Manager further explains how HOK (Huntly Ore to Kwinana) was established. "My first exposure to the WA Mining Group, was in the early nineties, when I led an engineering study team looking for a long term sustainable solution for Jarrahdale. We couldn't actually find a solution which met the company's criteria for major project expenditure!

In 1994 I joined the mining group. The Lead Team had continued searching for the Jarrahdale long term solution and had identified a possibility to close Jarrahdale and expand Huntly to supply Kwinana.

I was requested to lead this study. This time we identified this solution as very promising, and hence the HOK (Huntly Ore to Kwinana) Project was born. Although this project changed the life of many mining employees, Huntly has moved on to become the largest bauxite mine in the world and its performance, in all criteria, has also made it one of the best mining business's in the world."



450 HOK Train Loading Bin 1



450 HOK Train Loading Station at Pinjarra refinery



Members of the drill and blast team. Back Row (L-R): Stewart Sanders, Joe from Orica, John de Largie, Geoff Trindall, Brian Johnson and Randall Heaysman. Front Row: Kevin McIvena and Greg Watson. Miners Write 2000.

Huntly Ore to Kwinana

1998-2006

Big Boys Come Out to Play

As the production rate required to supply both Pinjarra and Kwinana was increasing after the closure of Jarrahdale, Huntly was in need of bigger and better machinery to keep up with higher production rates. After a successful trial in 1992, the first of three Komatsu PC1600 excavators arrived at Huntly Mine in November 1998, together with the first of 11 new 105 tonne Komatsu 985-5 dump trucks. Four second hand 105 tonne trucks were also brought from Jarrahdale. The new 105 tonne trucks replaced the ageing 85 tonne trucks. The trays of the new 985-5s were rubber-lined, as opposed to the old steel trays, to reduce the vehicle weight as well as increasing payload and preventing 'carry back'. In 2004, Huntly acquired the massive 730Es which could carry twice the load of the previously used 985-5 Komatsu's with a payload of 190 tonne. The move from the Huntly workshops out to the new McCoy facilities provided an opportunity to construct workshops that could facilitate the larger machines. 'The bigger tucks are good for moving dirt, but on the other hand are very costly to run and can chew up tyres quickly...' explains Graham Roberts.

Komatsu 730E Quick Facts:

Height:	6.3 m empty 12.5 m with tray raised	Motor:	Diesel electric
Length:	12.8 m	Fuel Consumption:	100 L/h
Width:	7.5 m	Fuel Tank Capacity:	3217 L
Haul speed:	55 Km/h	Tyre Weight:	2.2 tonnes each
		Tyre Cost:	\$28,000



Production then...



and now



The new 105 tonne Komatsu 985-5 truck arrives at Huntly, December 1998



Komatsu 730E 190 tonne haul truck

HUNTLY
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It seems that Barry Coates has always enjoyed the funnier side of working in rehab and production at Huntly. 'There was a year when Joe Green was towing a roller behind a Terex truck and at crib time some of the boys unhitched it. Joe then set off driving up and back and up and back along the road. The foreman pulled him up and said 'What are you doing?' Joe said, 'I'm rolling the bloody road what do you think I'm doing'... Well where's the roller then?' He'd been going for half a day!' laughs Barry.

Terry Doney

Mobile Equipment Trainer



Terry Doney remembers December 18th 1978 well. It was his first day at Huntly and he spent it emu-bobbing, picking up rubbish from Huntly workshops across to Del Park – a job which took him six months to get into. Trevor Ward the workshop foreman was the bloke that issued the job to him! He spent the next 22 years working in production, and then on trucks. He eventually found his way to become a Mobile Equipment Trainer where he works today.

'The equipment has improved a lot over the years, but we've still got some real old-looking equipment around,' laughs Terry. 'The 730E trucks are good, we have a couple of new graders now, four new DI IR's and five new scrapers. Some of the graders here though are still 25 years old. The place has gotten bigger so they've needed bigger trucks. The mine began using old cat loaders, 992A then to B's and then C's, then to Komatsu's. Back in the early days too, Huntly had air-track drills, where the guy walked along behind the drills. They've progressed now to the current drills which are HE2000's.'

'I guess the biggest changes have been going from day shifts and afternoon shifts, then day, afternoons and nights, and then to days and nights. Now the shifts are 12 hours long!' Having his private pilot's licence allows Terry to fly in his spare time. He also used to own a couple of Harley Davidson motorcycles and was into pistol shooting before he began work at Alcoa. In his spare time, Terry owns his own business videoing weddings. One of his greatest achievements has been giving up smoking... 'And taking up drinking', laughs Terry.

1998-2006

Moving Up in the World

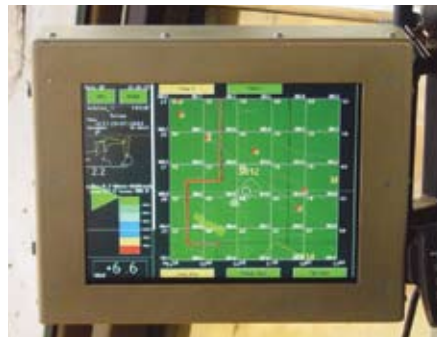
In 2001, Global Positioning Systems (GPS) were installed on to our excavators – another world first. There were some issues that had to be dealt with at the time, including the positioning of the antenna. Once the antenna was fixed to the back of the machine, it had increased the signal from 70% to 90%.

Theo Van Raven, Grade Controller at McCoy, recalls the changes in survey technology and the impacts it has had on surveying. 'Just ten years ago survey was still operating using EDM equipment stations, electronic satellites and computers as well and the work was much more physical. This has now all changed with the introduction of GPS and now there are more spreadsheets and more use of computer technology. The work has also become a little less physical in the field.'

As a further advance to GPS, the Leica Fleet Management System, was installed and commissioned at Huntly mine in October 2006 when they became part of the in-cab components of digging and mining fleet equipment. The Fleet Management System (FMS) is used as a tool to help manage and improve the productivity of the haulage fleet. The software enables both operators and supervisors to interact with the mining equipment whilst on board or from office-based computers. The software also consists of a GPS, pin-pointing the geographical location of the equipment and the radio telemetry which sends the information to a central location.

The FMS has since improved haulage fleet productivity by providing real time visual feedback to both operators and supervisors, thereby providing opportunities for immediate problem-solving and decision-making response. The improved statistical reports that are provided by the FMS also allow for successful haulage management and planning.

Rod McGregor, Short Term Mine Planning Engineer at McCoy was part of the FMS development team. "The system has a lot of potential to deliver positive outcomes to mining operations at McCoy in the future as the users of the system become more familiar with its capabilities and uses." commented Rod.



GPS screen inside an excavator



The Leica FMS screen shown inside a Komatsu 730E cab

H U N T L Y
celebrating 30 years



Ian says the biggest change that stands out for him over the last 30 years is the growth! "There is no end to it! I got involved with the mine relocation and expansion projects and the economics of these!"

Ian Butland
Senior Consultant – Mines Engineering

Brian Vergone
Exploration Surveyor



Brian Vergone began at Alcoa in April 1974 as a survey offsider, working in construction at the refinery. When the project was over, Brian continued in surveying at Huntly, working as a pit surveyor and then later as an exploration surveyor. Brian was one of the first surveyors at Huntly when operations began, 'One of the fondest memories I have is to have seen the mine start from scratch and to watch the first loads of ore go into the crusher! Since then, the biggest change I have seen would be the use of GPS in the way the ore is mined. Survey has completely changed over the last 30 years with the use of GPS....It used to be good in the early days, it was like a big family.'

The big changes in Brian's life over the last 32 years have been a move from Dwellingup to Mandurah, getting married and having four children, one of which is now married. Brian isn't the only Vergone that has worked at Alcoa. Other family are brothers Ray Vergone, John Vergone and Tony Vergone. Brian's sister-in-law also works at Wagerup, and his brother-in-law at Pinjarra.

Brian says that when he eventually retires, he'd like to 'travel, go fishing, rest and smell the roses!'

1998-2006

Production and Mobile Maintenance Re-unite at McCoy

In August 2004, the first crusher moved from White Road to the new crusher location at McCoy. The second crusher followed in December 2004. Planning for the move began in 1998 and, in 2002, clearing for the 8 km conveyor extension from White Road to McCoy commenced and major earthworks started later that year.

At the 2002 production rates, the McCoy area contained enough ore to produce bauxite for 10 years. The McCoy project team included Ray Vergone, Tony Passchier, Geoff Jones, Ian Cardilini, Iolani Gamba, Jeremy Hall and John Blay.

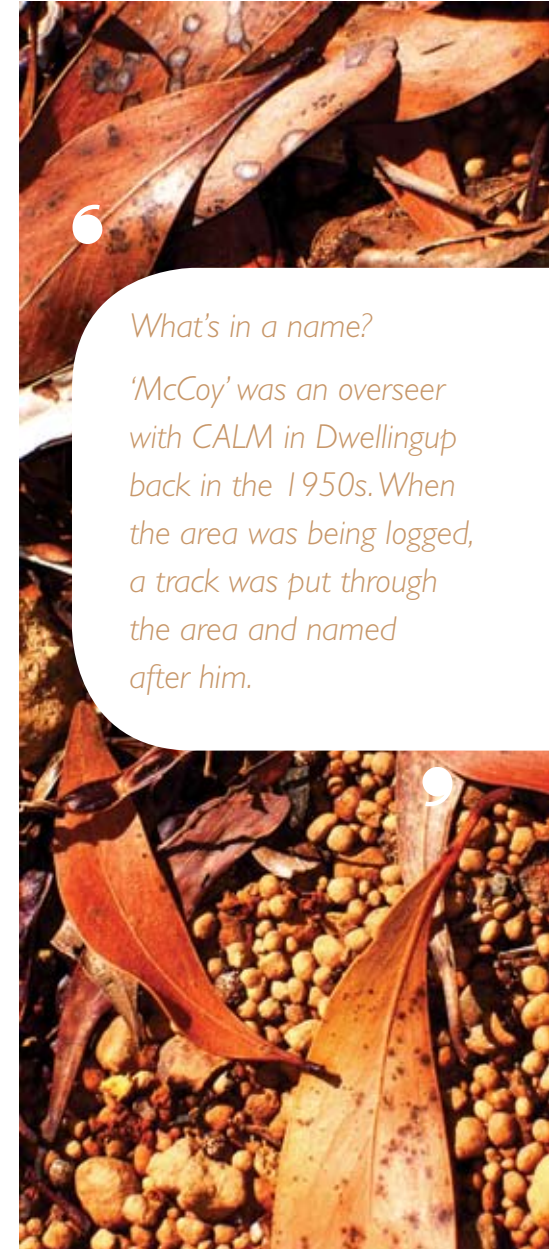
One of the first tasks to complete during the summer's construction program in 2002 was to temporarily relocate the existing fuel bay and fuel farm to allow for the construction of the conveyor extension to McCoy. The Fixed Plant workshop, crushers and sizers were moved to McCoy as part of the crusher relocation in 2004. A new heavy vehicle workshop and administration facility was built and a sealed access road linking Huntly to McCoy was constructed. Electrical, communication and water services were extended from the white road site and buried underground along the new conveyor route. The new McCoy site was also set to incorporate facilities for water harvesting and reuse. The construction of the McCoy facility has been nominated for a number of awards including the environmental Golden Gecko and an Engineering Excellence Award in 2005.

"I've seen a number of changes at Huntly in the 28 years I have worked in mining. In my early days I remember crusher moves taking many days. These days the process is much more effective and efficient, taking almost no time at all when compared to past history." Steve Smith, Health & Safety Manager.



160 crusher on a low loader being pulled by three semi-trailers in August 2004

H U N T L Y
celebrating 30 years



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What's in a name?

'McCoy' was an overseer with CALM in Dwellingup back in the 1950s. When the area was being logged, a track was put through the area and named after him.

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My involvement with Marrinup has spanned from its initial design until quite recently. David Lewis was the mine rehabilitation supervisor responsible for the project, and Alan Cransberg was responsible for the initial design of the building offices and house at Marrinup. We wanted to ensure that only the best dieback controls were installed so that plants taken to rehabilitation did not spread dieback disease.

John Gardner
Previously Mining Environmental Manager

In 2001, Glen Ainsworth, Craig Dixon and Gareth Davies developed a machine to improve the efficiency of seeding rehabilitated areas. 'It's the only seeder of its type in the world' says Glen proudly. Previously Alcoa had used the techniques of hand seeding and an older air seeder, neither of which were ideal. The old air seeder weighed half a tonne so was virtually impossible to move from dozer to dozer.

A benefit is that the seeder is computerised. The old seeder used a wheel and pulley system to distribute seeds according to how fast the dozer moved. This led to an application rate of 3 kilograms of seed per hectare which was too high. The new seeder originally distributed 1.5 kilos per hectare, and has since been calibrated to seed at an even lower rate.

Marrinup nursery was originally established to supply both seed and tree seedlings for our mine rehabilitation and dieback forest rehabilitation programs, when all the trees in rehabilitation areas were planted seedlings, mostly of dieback-resistant, eastern Australian species. A critical factor in Marrinup's success has been its dedicated and passionate operators. Their genuine commitment to nurturing of the plants in the nursery and planting them in the mine pits ensured excellent establishment of our rehabilitation,' said John Gardner, previously Mining Environmental Manager.

Seeding Full of Air



John Gardner



All seed used for rehabilitation is prepared at the nursery



Air seeder developed by Glen Ainsworth, Gareth Davies and Craig Dixon in 2001



All recalcitrant species are grown at the Marrinup Nursery

1998-2006

We scored 100% for our Rehabilitation

Alcoa has committed significant resources to ensure that its rehabilitation represents leading practice in the mining industry. This has included a dedicated environmental research department and the development of Marrinup Nursery.

Our rehabilitation practices have evolved over the 30 years of operation of Huntly from planting eastern Australian eucalypts, to seeding jarrah and eventually to re-establishing a jarrah forest ecosystem. The jarrah forest is located within a region that is recognised as one of the biodiversity hotspots of the world. The focus of our rehabilitation for the last 10 years has been on returning the high plant species richness of the unmined forest to our rehabilitated areas. In 1995, a milestone was established that by the year 2000: 'the average number of indigenous plant species in 15 month old rehabilitation is 100% of the number found in representative jarrah forest sites.' At the time, our rehabilitation areas were achieving about 70-80% species richness. Significant research was undertaken to develop and implement many innovative practices and technologies in the areas of seed treatment, seed application, topsoil handling, mine planning and native plant propagation. Incredibly, in areas rehabilitated in both 2000 and 2001, the milestone was achieved. This was the first time anywhere in the world that such a result was achieved and it was recognised with the Society for Ecological Restoration Model Project award in 2003.

HUNTLY
celebrating 30 years



Mine rehabilitation after 6 months



...at 2 years



... at 4 years



... The same site after 13 years



Environmental Improvement Plan

In early 2005, Alcoa made a commitment to the Western Australian government to develop Environmental Improvement Plans (EIPs) for its operations. An EIP is an agreement between a company, the community and the environmental regulator. It consists of a schedule of prioritised projects designed to achieve specific environmental objectives. Alcoa's operations in Victoria had been producing EIPs for a number of years and the challenge was to voluntarily develop them for Alcoa's operations in WA. A steering committee was established in April 2005 to develop mining's first EIP. More than 10 meetings, a site visit, and much vigorous discussion and drafting later, the first EIP was officially launched in 2006 covering a two year period.



The mining EIP Stakeholder Steering Committee. Back Row (L-R): Carl Grant, Margaret McKay, Louis Bursztyn, Robert Lambeck, (middle row) Roberta Mead, Professor William Stock, Colleen Sing, Deb Cronin, Max Davies, (front row) Robyn South, Peter Becker, Jeremy Hall, Joanne Abbiss.

1998-2006

Looking Back...

May Rennick

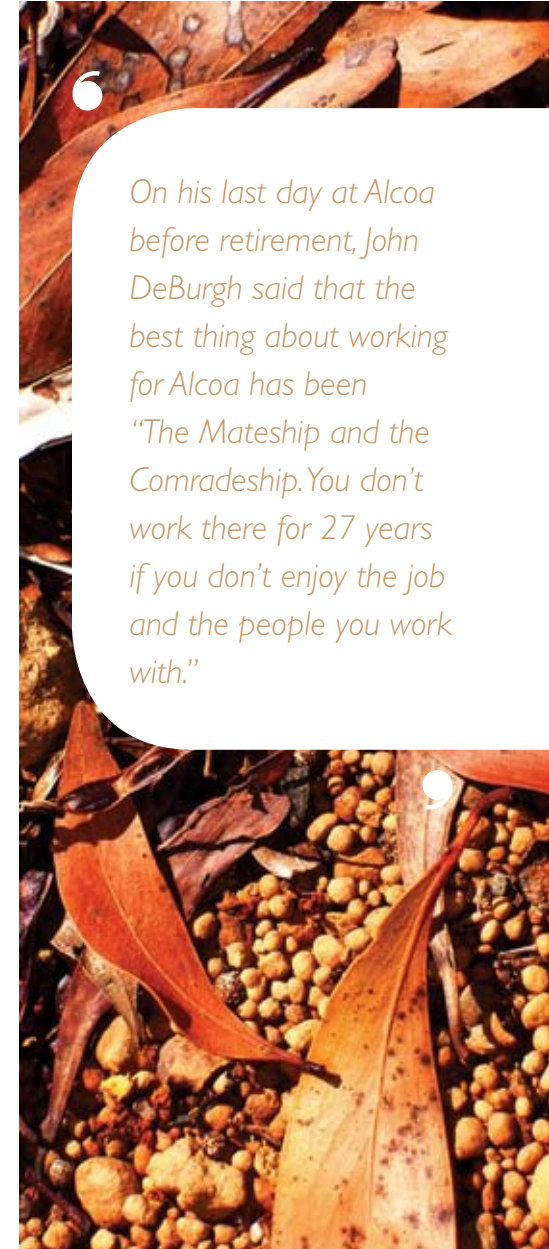
Executive Assistant - Mining



"I feel privileged to be asked to put down some thoughts about my years at Del Park and Huntly as part of the 30+ years of Huntly's history. I joined Alcoa in 1984 at Willowdale, then moved to Del Park in 1985 working for Dave Ingle who was the Mine Superintendent at that time. When Del Park and Huntly merged, I moved to Huntly to work for Peter Burgess, Huntly Mine Manager as part of his management team. My 20+ years at Huntly has seen many changes from people to mobile equipment to various crusher sites, to improved technology and on-line systems. Everything over this period of time has become bigger, better, more efficient and more productive.

The joining of the two mines was an eventful period for everyone. We shared feelings of anticipation, hope, fear, challenges, joy and sadness, to name a few; but we all seemed to stick together to achieve the same goal and I soon learnt that all of this helped cement a team for the future. Some years later, history repeated itself when Jarrahdale was closed with people moving to join Huntly once again. Again there was unrest and anticipation for a period of time, but Huntly as it is now is a benchmark mine not only in the Alcoa system but globally. It is the people that make this happen and I am happy to have been part of it all."

H U N T L Y
celebrating 30 years



On his last day at Alcoa before retirement, John DeBurgh said that the best thing about working for Alcoa has been "The Mateship and the Comradeship. You don't work there for 27 years if you don't enjoy the job and the people you work with."



"Alcoa's original philosophy was to exceed community expectations for environmental management, and to develop innovative rehabilitation practices. Today, our environmental management is regarded as best-practice, but the expectations communities have of our mining operations continue to grow. In the coming decades, we will need to work harder than ever to continually improve our environmental management practices, in order to stay ahead of community expectations." Said Anika Wall, Environmental Scientist – Community Liaison.

Carl Grant, Environmental Operations Manager, commented, 'The greatest challenge for the Huntly Mine over the next 10 years will be to continue to meet the ever increasing expectations of our key stakeholders. The greatest environmental challenge for us will be water conservation and the long term management of our rehabilitated areas. The greatest community relations challenge for us will be minimising our impacts on our neighbours when we move to the Myara crusher region located adjacent to residents on the scarp.'

"The major change I have seen over the years is the significant improvement in the positive safety culture of the workforce. I see culture as a journey of development and this can only be achieved with a stable workforce, and most employees have been with mining for many years." Said Steve Smith, Health & Safety Manager. Ron Stone, Mining Services Manager also commented, "It is important that we foster greater engagement of our workforce in identifying and solving problems. We have incredible talent in our people which must be tapped into to make the next 30 years as successful and enjoyable as the last."

'Without question, the accomplishments of Huntly mine over the last 30 years would not have been achieved without the input of a whole range of people, from the ore handler helping us to ensure the belt systems were maintenance friendly, to the Engineer helping us to design smart technology to control these systems.' Iaoldi Gamba, Ore Handling Systems Manager

In piecing together the first 30 years of Huntly mine, I have spoken to many people, most of whom begun working at Huntly in its first few years of operation – their profiles are featured throughout this book. I asked them, "What has been the best thing about working at Huntly". Their answer: "The people!".

Whilst writing this book, I have been fortunate enough to listen to many stories, memories and interesting facts about Huntly over the last 30 years and I have seen that the continued success of Huntly mine has obviously come from its most important qualities - friendships, laughter and team spirit...all which could never amount without the people involved.

Huntly seems to thrive on its unique spirit and culture and I would like to think this will continue for years to come. So if the next 30 years are just as eventful and entertaining as it seems the last 30 years have been, then I look forward to being a part of it!

By *Kate Doherty*

To the Future

Ken Phillips, Senior Mine Planner discusses the plans for future crusher moves at Huntly mine.

"Mining and crushing will continue at McCoy until the end of 2011. From here it will be shifting to Myara where we are expecting it to be for another 10 years. At this point we look to be mining part of the Lang area on the eastern side of Serpentine Dam – this might prove interesting though as we'd be mining on some fairly steep hills. After Myara, we will need to make a decision about whether we continue to go north and north-east into the Intermediate Rainfall Zone (IRZ) or head south to the east of Dwellingup."

"The interesting thing after 2020 if we move into the IRZ could be that a lot of the ore is more sparse so we would be trucking very long distances back to the crusher. This could potentially mean larger crusher sites as we'd be hauling greater distances than what we do now."

1998-2006

HUNTLY
celebrating 30 years



Celebrating 200 Million Tonnes of bauxite mined at Huntly, 1996.

Back Row (L-R): Hank Wykstra, Chris Boocock, Brett Hodges, Peter Hunter, Jeremy Hall, Bill Hill, Shirley Welch and Steve Smith.

Fourth Row (L-R): Keith Nancarrow, Geoff Martin, Alan Keane, Dave Haddow, Phil Curnow, Jim Patterson and Kelly Morris.

Third Row (L-R): Dave Dirckze, Marilyn Corbett, Shirly Keane, Michelle Ridgeway-Le_Gresley, May Rennick, Joan Martin, Geoff Barritt and Gordon Baker.

Second Row (L-R): Tony Pivac, Gavin Chalmers, Glen Ainsworth, Geoff Thomas, Jim Kenneally, Graham Kemp, Miranda Duncan and Greg Wellburn.

Front Row (L-R): John MacDonald, Bryan Young, Peter Byrne, Iolandi Gamba and Phil Fielder.

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Huntly has been the training and development ground for many of Alcoa's management group and due to its stability and professional management team, Huntly has been able to help many developing managers understand and feel a real part one of Alcoa greatest achievements, mining in the only Jarrah forest in the world.

When I look back on those years and think about why it was so special, it always comes down to the people - the guys who set that place up did something very different and created a very unique culture.

Huntly and the characters who have worked there will always have a special place in my memory.

Russell Williams

Previous Huntly Mine Manager

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australia's aluminium



H U N T L Y
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