



PACIFIC COAL

**CLERMONT COAL
PROJECT**

INITIAL ADVICE STATEMENT

August 2003



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EXECUTIVE SUMMARY

The Clermont Coal Project (the “Project”) involves the development and operation of an open cut mine producing 10 to 15 million tonnes per annum of thermal coal for the export market. The Project would be a conventional truck/shovel operation, with production commencing in 2008 and extending for approximately 20 years. The Project is located 10 km north of the township of Clermont, and approximately 15 km east of the existing Blair Athol coal mine in Central Queensland.

The Project Proponent is the Clermont Coal Joint Venture (CCJV), which comprises Queensland Coal Pty Limited (55%) and Mitsubishi Development Pty Limited (45%). The Project manager is Pacific Coal Pty Limited. Both Queensland Coal Pty Limited and Pacific Coal Pty Limited are fully owned subsidiaries of Rio Tinto Limited. The CCJV plan to make a decision whether to proceed or not with the Project in 2005 following a feasibility study.

The proposed Project is expected to:

- Add \$400 to \$500 million per annum to the State’s export earnings and maintain employment for over 3,000 people (direct and flow-on, full time and part-time).
- Employ an estimated 350 people, including contractors, during operations. The construction workforce is expected to peak at 450 and there will be opportunities for local employment in construction, transport, and the supply of goods and services.
- Require approximately A\$440 million of capital to bring it to full production.
- Pay \$100 million per annum in rail freight and royalties.
- Require inter-Departmental coordination for permitting and approvals. The Project requires an application for a new Mining Lease for infrastructure (overland conveyor), changes to the provisions of two existing Mining Leases, the realignment of State controlled roads, approvals under the *Water Act* and certain local government approvals. The Project may also be considered to have a potentially significant impact on two threatened ecological communities listed under the Commonwealth *Environmental Protection and Biodiversity Conservation Act* (Bluegrass Grassland and Brigalow Woodland). A referral will be made to the Commonwealth for a determination of whether the project is a “controlled” action or not.

The key environmental and physical impacts of the Project are likely to be associated with:



- The need to install bores to lower the water table in the vicinity of the open cut. The groundwater drawdown needed to allow mining to proceed may lead to a lowering of the watertable of 5 m up to 7.5 km away to the north and south and up to 2.5 km away to the east and west. Existing groundwater users mainly utilise the local basalt aquifer as a water supply source and it is likely that a number of these groundwater users may experience a reduction in groundwater levels.
- Release of water from the site. The volume of groundwater withdrawn will exceed mine water supply requirements and discharge of surplus groundwater to Gowrie Creek will be required.
- The diversion of Gowrie Creek. A section of Gowrie Creek will need to be diverted to allow mining to take place.
- Land clearing to allow mine development. Bluegrass and Brigalow communities, and species listed under nature conservation legislation (*Dichanthium queenslandicum* (King Bluegrass), *Trioncinia retroflexa* (Belyando cobblers pegs)) will be disturbed.
- The Peak Downs Highway diversion. The Highway will need to be diverted around the mining operation.



1 INTRODUCTION

1.1 PROJECT SUMMARY

The Clermont Coal Project (the “Project”) involves the development and operation of an open cut mine producing 10 to 15 million tonnes per annum (Mtpa) of thermal coal for the export market. A mine life of approximately 20 years is expected (given a production rate of 10 Mtpa). The Project is located 10 km north of the township of Clermont, and approximately 15 km east of the Blair Athol coal mine in Central Queensland (see Figure 1). Coal will be transported by overland conveyor from the mine to the existing coal handling and rail load-out infrastructure at the Blair Athol coal mine.

1.2 PROPONENT

The Project Proponent is the Clermont Coal Joint Venture, which comprises Queensland Coal Pty Limited (55%) and Mitsubishi Development Pty Limited (45%). The Project manager is Pacific Coal Pty Limited. Both Queensland Coal Pty Limited and Pacific Coal Pty Limited are fully owned subsidiaries of Rio Tinto Limited. The CCJV plan to make a decision whether to proceed or not with the Project in 2005 following a feasibility study.

Pacific Coal has been in operation since 1983 and is responsible for managing the Queensland coal interests of Rio Tinto and its joint venturers. Pacific Coal currently manages four coal mines in Queensland (the Blair Athol, Kestrel, Tarong and Hail Creek mines), and is Queensland’s second largest, and Australia’s third largest, black coal producer. Annual production reached almost 22 Mt in 2002, which is approximately 15% of Queensland’s current total annual black coal production (ACIL 2002). Pacific Coal’s Hail Creek mine is expected to add an additional 6 Mtpa of production for export when it is in full operation.

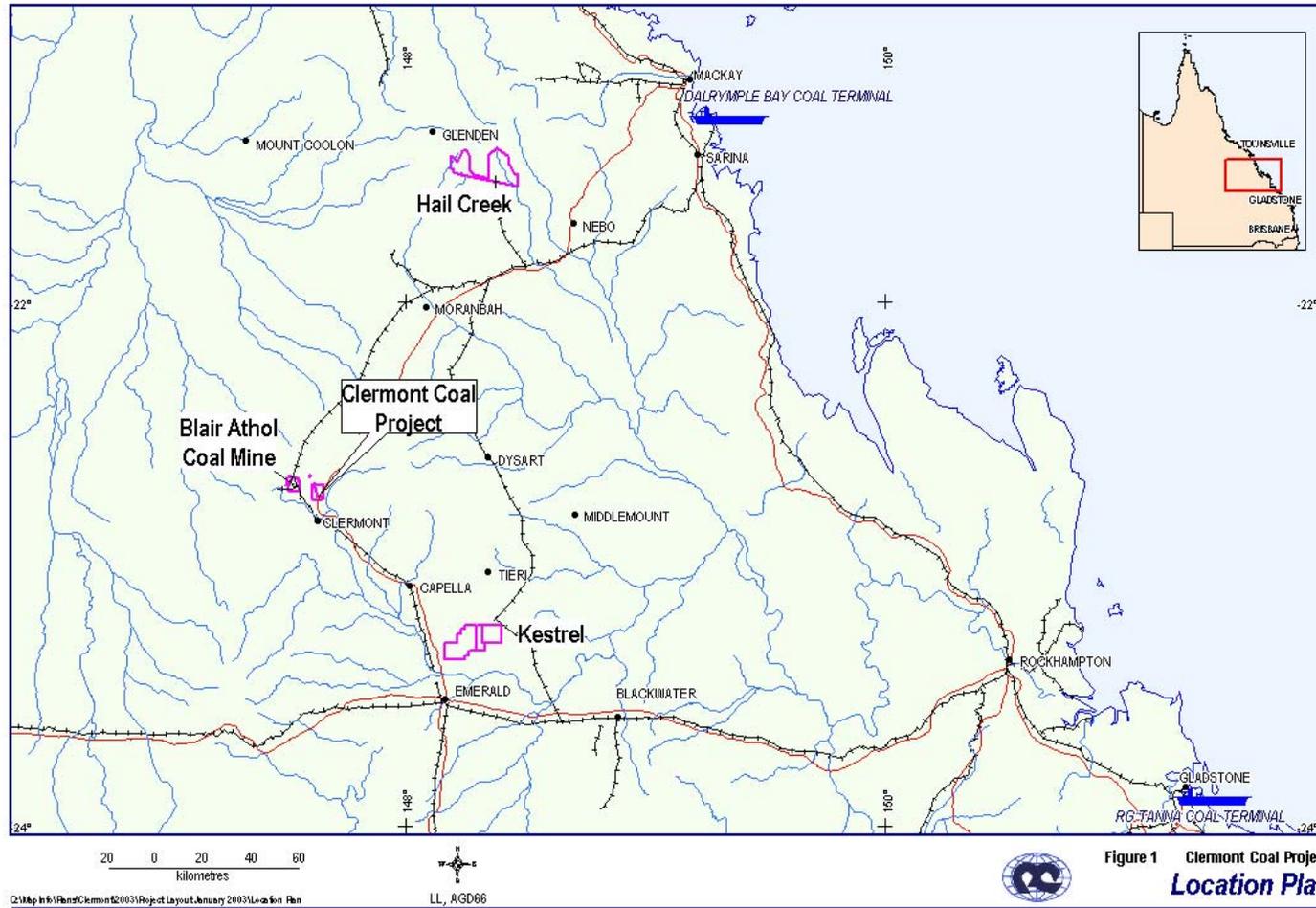
Pacific Coal’s mines contribute substantially to the economy of Queensland and its communities through income, employment, and payments to the Queensland government and government-owned corporations. The estimated net addition to State Product from Pacific Coal’s operations is over \$1.0 billion per annum. When Hail Creek becomes fully operational Pacific Coal will:

- contribute \$1.1 billion in export income per year;
- maintain employment for 7,740 people (direct and flow-on, full time and part time);
- pay \$64 million in state royalties per year; and
- pay \$200 million in payments to government-owned corporations per year.

(Source: ACIL 2002)



Figure 1: Location Plan





1.3 SCOPE OF REPORT

This Initial Advice Statement (IAS) has been prepared by Pacific Coal to provide information to:

- Enable the Coordinator-General to determine whether the Project meets the criteria for declaration as a significant project under the *State Development and Public Works Organisation Act 1971*; and
- Provide sufficient detail to enable advisory agencies and other stakeholders to have effective input into establishing a Terms of Reference (ToR) for an Environmental Impact Statement (EIS).

2 PROJECT DESCRIPTION

The Project description presented in this section is based on the pre-feasibility studies carried out by Pacific Coal.

2.1 THE RESOURCE

The Clermont coal deposit is a high quality coal resource of some 215 Mt with proven open cut reserves in excess of 190 Mt. The Clermont resource is contained within the Wolfgang Basin, a remnant Permian sedimentary basin located on the western margin of the Bowen Basin. The Wolfgang Basin is an elongate north-south trending basin, approximately 5 km long by 1.5 km wide. Five coal seams have been identified within the coal sequence - the Gowrie, Prospect, Wolfgang Upper, Wolfgang and Wolfgang Lower seams. The seams range from between 80 and 250 metres beneath the ground surface. The major component of the coal resource occurs within the Wolfgang Seam, which is approximately 40 m thick and contains some 168 Mt of coal.

2.2 PROJECT DESCRIPTION

2.2.1 Mining

The Project involves the development and operation of an open cut mine producing low ash, medium calorific value thermal coal for the export market. The commencement of operations at the Clermont mine is planned to coincide with the wind-down of operations at the Blair Athol mine. Current plans provide for production to commence in 2008 and build up to full production as production from the Blair Athol coal mine winds down.

A conventional open cut truck/shovel operation is proposed for the Clermont mine. The proposed mining plan commences operations with a box-cut in the north of the resource



and mining will progress from north to south. The overall strip ratio for the deposit is 3.7:1 bcm/ROMt. The conceptual layout at the end of the mine life is presented in Figure 2. The proposed final landform consists of a main waste rock dump in the north-west and a final void in the south. Depending on the final mine plan, a second smaller out-of-pit dump may be located either to the east of the main dump or to the south of the main dump (refer Figure 2). Approximately 650 Mm³ of waste will be disposed of in-pit and approximately 220 Mm³ will be external to the pit. Mine infrastructure will be located mid way along the deposit on the western side.

Current planning for the Blair Athol mine has mining ceasing in 2009, at which time the existing product stockpiles, stacker reclaimers and train load-out facilities will become redundant. Production at the Clermont mine is scheduled to start in 2008. Subject to the agreement of the owners of Blair Athol Coal, the otherwise redundant Blair Athol coal-handling infrastructure noted above could be used to handle the Clermont mine product. Initial discussions have been held with the owners of Blair Athol Coal and planning for the Clermont Coal Project is proceeding on this basis.

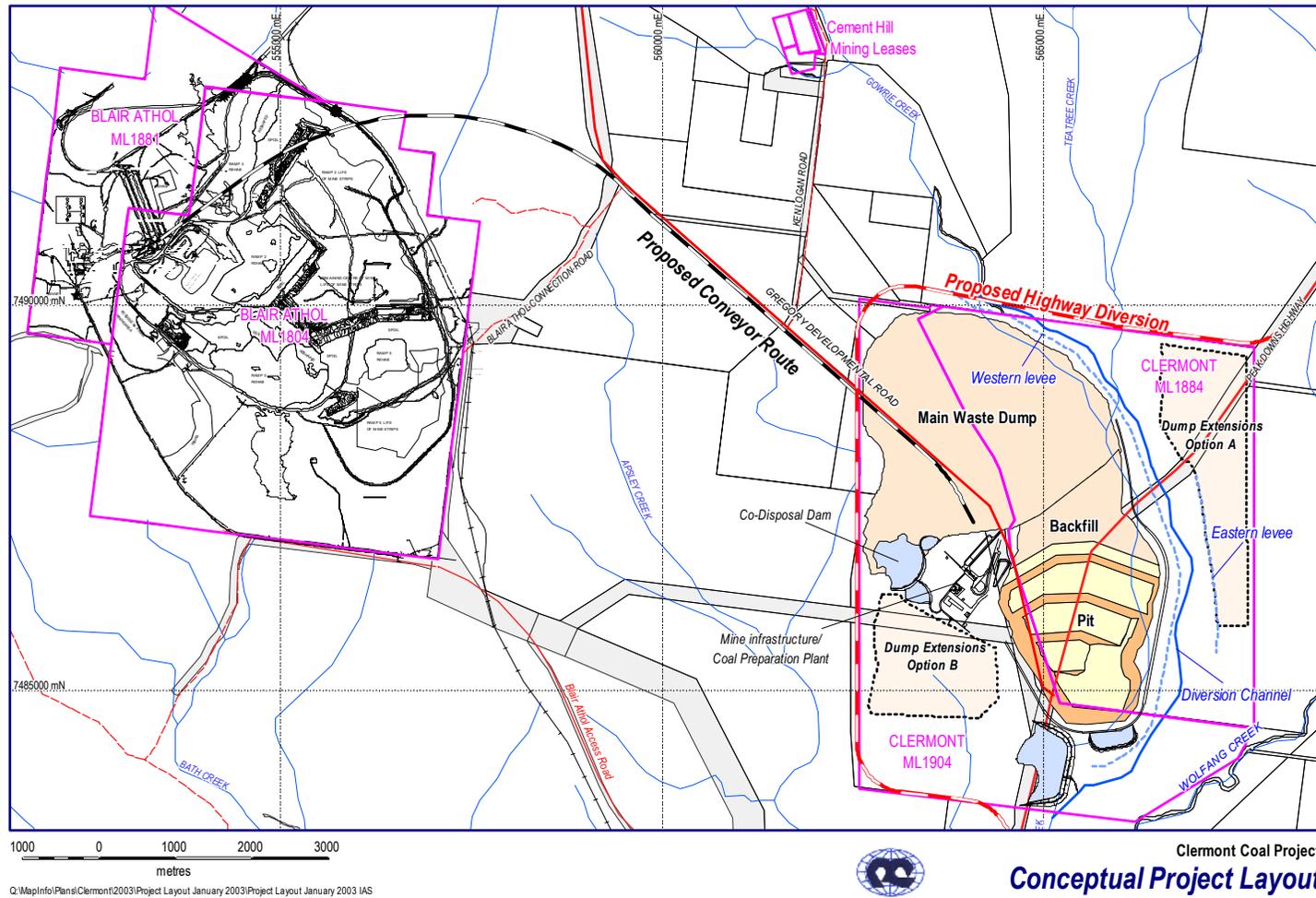
2.2.2 Coal Preparation and Handling

Most of the ROM coal does not require washing (the “by-pass” or “clean” coal) and will be crushed to minus 50 mm. However, between 10% and 20% of total ROM production is >15% ash ROM coal (the “dirty” coal) and requires washing in a Coal Preparation Plant (CPP). Coal from the CPP will be combined with the “by-pass” coal to produce a single product, which would be loaded directly onto a 2,500 tph overland conveyor belt for the 12.6 km trip to the Blair Athol coal handling and train load-out facilities. Product would be railed via the existing Blair Athol mine spur line to ship loading facilities at the Dalrymple Bay Coal Terminal.

Based on the commitment of the Joint Venture participants to the development of the Clermont Coal Project during 2005, the first shipment of thermal coal would occur in 2008.



Figure 2: Project Layout





2.2.3 Waste Management

The waste rock dumps have been designed to minimise haul distance and limit the size of disturbed areas. For the first three years all overburden would be dumped externally to the pit. From year four onwards, some in-pit waste disposal will be possible and will be used to advance in-pit waste rock dumps behind the operations. A combination of in-pit and ex-pit dumping then continues with the ex-pit dump eventually encroaching over the northern end of the in-pit dump.

A study is being undertaken in 2003 to assess the geochemical characteristics of overburden materials to identify any potentially acid forming, dispersive or saline materials and map their distribution. Management plans will be prepared for materials requiring selective handling or special rehabilitation techniques.

Coarse coal rejects will be co-disposed with coal tailings from the Coal Preparation Plant (CPP). A co-disposal dam is proposed to be located to the west of the CPP and has been sized to contain approximately 1.3 million cubic metres of material. After this initial volume is filled, in the first four to five years of operation, rejects will be co-disposed in the waste rock dumps. An investigation is being undertaken to determine the geochemical characteristics, including the acid forming potential, of coarse rejects and tailings. The outcomes of this investigation will be used to prepare a co-disposal management plan that minimises the potential for environmental harm.

2.2.4 Infrastructure Requirements

A construction camp with a peak capacity of approximately 300 will be provided on the mining lease for the construction workforce. During Project operation, the majority of the mine workforce is expected to choose to seek housing in the town of Clermont and surrounding districts. The supply of accommodation in the town of Clermont and surrounding districts is expected to be adequate for the combined operational workforce during the period when the Blair Athol mine winds down and the Clermont mine ramps up.

Power supply to the site will be via a 66kV overhead power line originating at the Copperfield substation located to the west of the Clermont township. A substation near the CPP will provide power distribution for the CPP, infrastructure facilities and the electric mine equipment. The 66kV connection will be provided into the site by the regional electricity authority via an existing easement. Site communications are proposed to be based on a contracted service.

Water supply will be sourced from site, which is expected to be self-sufficient. Groundwater dewatering of the deposit will be continuous and will provide water for use in



the various process and operational areas. The overall site water balance will be positive and water storages will be required for the temporary storage of surplus water. A water treatment plant will be required for the production of potable water. A gravity sewerage reticulation system will be required to service the CPP, workshop and office area and will discharge to a sewage treatment plant. The construction camp will be equipped with its own water and sewerage treatment plants.

Site infrastructure includes roads, dams, administration and change-house buildings, and a workshop/warehouse complex.

The Project will not interfere with existing electricity transmission lines, or any existing water pipelines. A fibre-optic cable along the western boundary of ML 1904 will be affected by the Peak Downs Highway diversion.

2.2.5 Road Diversions

Both the Peak Downs Highway and the Gregory Developmental Road pass directly over the coal deposit and therefore both of these State-controlled roads will require relocation. The alignment of the currently proposed diversion of Peak Downs Highway is shown in Figure 2. Refinements to the alignment that increase the proportion of the highway that is within the Mining Leases will be studied in consultation with the Department of Main Roads (DMR), Belyando Shire Council and other stakeholders. The highway diversion will require major creek crossings at Tea Tree Creek and Gowrie Creek. Road and intersection design criteria will be reviewed in consultation with the DMR.

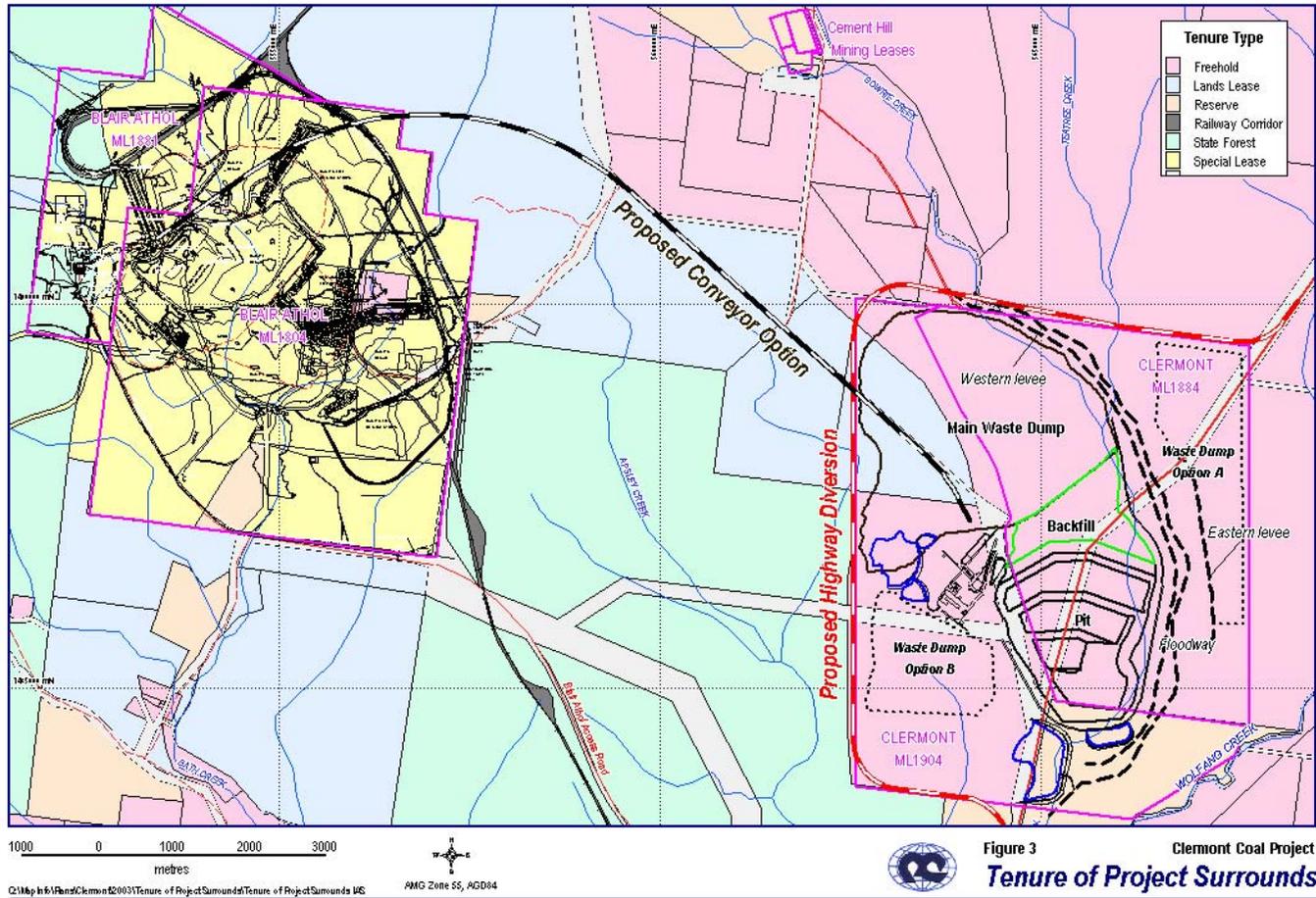
The Peak Downs Highway and the Gregory Developmental Road are both designated stock routes. The new roads will be designed to meet the Department of Natural Resources and Mines' requirements for maintaining them as stock routes.

2.3 PROJECT TENURE

The Project tenure details are presented in Figure 3. The Clermont Coal Project consists of the Clermont Mining Leases (ML 1884 and ML 1904), and the Cement Hill MLs (ML 1787, ML 1788, ML 1995 and ML 2355), which are approximately 3 km to the north of Clermont MLs. The Cement Hills MLs are part of the Project as there is an old final mining void located there that may be used as a balancing water storage within the overall Project water management system. The Clermont MLs and the Cement Hill MLs are all held by the Clermont Joint Venturers and managed by Pacific Coal.



Figure 3: Tenure of Project and Surrounds





ML 1884 and ML 1904 were both granted in 1983. ML 1884 is for the purposes of mining and ML 1904 is for the dumping of waste rock and certain mine infrastructure (excluding coal washing and rejects disposal). The current pit design encroaches on ML 1904. It is proposed that much of ML 1904 be conditionally surrendered and an application made for a new ML for mining purposes, thus allowing the use of the resource to be maximised and the location of mine facilities to be optimised. Part of ML 1904 would remain in the south-east (refer Figure 3).

The Project will require access to land outside the existing Clermont MLs for the overland conveying of coal to Blair Athol, and for the realignment of roads. Land access agreements will need to be negotiated for these areas outside the existing MLs and an application will need to be made for an infrastructure Mining Lease covering the conveyor route.

The property within ML's 1884 and 1904 is either freehold or leasehold tenures held by the Clermont Joint Venturers, with smaller areas covered by Reserve (Stock Trucking), and road reserves. The current proposed highway diversion is largely outside the Clermont MLs and is covered by various freehold, leasehold, State Forest and road reserves. The current preferred conveyor route commences within Clermont ML 1904 and terminates within the Blair Athol coal mine. The route in between covers various leasehold land and road reserves. An amendment to Blair Athol ML1881 will be required to allow the handling of coal from the Clermont Coal Project on the Blair Athol mine tenement.

2.4 EMPLOYMENT OPPORTUNITIES

At full production the Project will directly employ approximately 350 people, of which about 50 will be contractors. Apart from direct employment, many more people will be employed indirectly as a result of flow-on effects.

The construction phase will provide opportunities for local employment in construction, transport, and the supply of goods and services. The construction workforce is expected to peak at approximately 450 (both off-site and on-site). The construction period from the start of the box-cut until initial coal production is expected to be approximately 30 months.

2.5 INVESTMENT AND PROJECT SIGNIFICANCE

The preliminary estimate of the capital cost to take the Project to full production is approximately A\$440 million.



It is envisaged that coal from the Project will essentially replace product from the Blair Athol mine in the same markets. Therefore, the economic significance of the Clermont Coal Project to the economy is expected to be similar to that of the Blair Athol mine. The Project is expected to:

- Contribute \$400 to \$500 million per annum to the State export earnings;
- Pay \$100 million per annum in rail freight and royalties
- Maintained employment for over 3,000 people (direct and indirect, full time and part-time).

Given the level of income earned by Pacific Coal employees, local expenditure by employees is a significant factor in supporting local communities (ACIL 2002).

3 EXISTING ENVIRONMENT, POTENTIAL IMPACTS AND MANAGEMENT STRATEGIES

3.1 GROUNDWATER

There are substantial amounts of groundwater in the vicinity of the Clermont Coal deposit, particularly in the Tertiary basalt and Tertiary sedimentary sequences. Advance dewatering prior to mining in the area of the initial box-cut is required to reduce the risk of slope stability failures and to allow the deposit to be mined safely. While withdrawal rates will be highest at the start of mining, continuous dewatering will be undertaken over the life of the mine to manage groundwater infiltration into the active mining area. Preliminary studies indicate that initial groundwater withdrawal rates of the order of 370 L/s may be required to dewater the box-cut area. This groundwater is expected to have a Total Dissolved Solids concentration in the range 310 – 1220 mg/L (median 550 mg/L). During mining, the withdrawal rate is likely to decline from about 250 L/s to about 70 L/s.

Dewatering is expected to have an impact on groundwater resources in the area. Groundwater drawdowns of up to 5 m are expected up to 7.5 km away to the north and south and up to 2.5 km to the east and west. Existing groundwater users mainly utilise the basalt aquifer as a water supply source and it is likely that a number of these groundwater users may experience a reduction in groundwater levels. The effect on each existing water supply bore will depend on the aquifer accessed, depth of pump and type of pump. Depending on the extent of this drawdown, pumps may require re-seating to lower levels within bores, or the installation of new bores may be required to maintain supply. Any adverse impact on existing groundwater supply of neighbouring landholders will be “made good” by the Clermont Coal Project. Once dewatering ceases, the groundwater level will slowly recover. A groundwater model has been prepared for the Project and it will be used to develop the dewatering programme and predict groundwater impacts.



3.2 SURFACE WATER

ML 1904 and 1884 generally slope to the south-east and are drained by four watercourses – Apsley, Tea Tree, Gowrie and Wolfgang Creeks. All watercourses on the site are ephemeral. The majority of the site is drained by Gowrie Creek, which flows in a southerly direction through ML1884 and discharges into Wolfgang Creek 1.5 km downstream of the lease boundary. Wolfgang Creek is the largest watercourse in the vicinity of the site and is located outside the south-eastern boundary of ML 1904. The Wolfgang Creek catchment has been largely developed for grazing and cropping.

The key Project activities that are likely to affect surface water flows are:

- The diversion of a section of Gowrie Creek to allow the development of the main pit and the main out-of-pit waste dump;
- The construction of a western flood levee to prevent floodwaters from Gowrie Creek entering the pit and an eastern flood levee to direct floodwaters to the south;
- The need to release surplus groundwater into Gowrie Creek.

Potential impacts on surface water quality at the site include:

- Run-off from disturbed areas;
- Discharge of surplus mine site water to the Gowrie Creek diversion; and
- Discharge of surplus groundwater to the Gowrie Creek diversion.

The following mitigation strategies will reduce potential impacts on surface water flows and quality:

- The Gowrie Creek diversion will be designed and constructed to provide a stable channel compatible with the local hydrological regime;
- Implementation of a “clean water – dirty water” system to divert clean runoff around disturbed areas and direct run-off from disturbed areas to retention dams;
- Beneficial uses will be sought for surplus groundwater where practicable; and
- Discharges for surplus groundwater will be managed to minimise impact on channel integrity.

3.3 LAND RESOURCES

Within the Mining Leases, the area east of the Gregory Developmental Road generally consists of near flat to gently undulating basaltic and alluvial plains with overall slopes mostly less than 1%. Black cracking clay soils occur in this area and vegetation has been extensively cleared to allow cropping and the sowing of improved pastures for grazing. The area west of the Gregory Developmental Road is undulating to low hilly terrain with maximum local relief of about 30m and slopes mostly within the range of 5 to 10%. This



area is grazed and supports significant stands of native vegetation. Limited timber extraction, including removal of rosewood for fence posts, occurs on ML 1904.

The likely impacts on land resources from the proposed activities include:

- landform change;
- changes in land capability and suitability;
- changes in land uses.

The proposed pit and waste rock dumps would reduce the area available for rain-fed cropping on the mining lease. The topsoil resources present are more than adequate for the rehabilitation of the waste rock dumps. A number of options for rehabilitating disturbed areas will be evaluated, including rehabilitation to native species woodland, improved pastures for grazing, and to native bluegrass.

3.4 FLORA

Several floristic surveys of the Project area have been carried out. Although a substantial proportion of the Project area is cropped, remnant communities of native vegetation occur in ML 1904 and within the existing roadside reserves. Vegetation on the hilly terrain to the west of the Gregory Developmental Road consists largely of Narrow-Leaved Ironbark woodland and two associations of Dawson Gum woodland with Brigalow. Although this area has been subject to varying degrees of disturbance by grazing and timber harvesting, the Ironbark and Dawson Gum dominated associations retain a relatively high degree of integrity. The Brigalow dominated association is more heavily disturbed.

The regional ecosystems identified on the site and their conservation significance are summarised in the Table 1. In addition to the regional ecosystems of conservation significance, the following species of conservation significance have been identified:

- *Dichanthium queenslandicum* (King Bluegrass) which is listed as Threatened (Vulnerable) under the *Environmental Protection and Biodiversity Conservation Act 1999* (EPBC Act 1999), and Vulnerable under the *Nature Conservation (Wildlife) Regulation 1994* (NCWR 1994); and
- *Trioncinia retroflexa* (Belyando cobblers pegs), which is listed as Endangered under the NCWR. There are approximately 13 known populations of this species in Central Queensland. The population found within the Project area is the largest single recorded population of this species.



Table 1: Regional Ecosystems and their Conservation Status

RE Code	Description	VMR Status ¹	EPBC Act 1999 Status ²
11.11.1	Narrow-leaved Ironbark with Rosewood	Not of concern	Not listed
11.11.2	Lancewood with Narrow-Leaved Ironbark	Not of concern	Not listed
11.5.3	<i>E. melanophloia</i> Open Woodland with scattered <i>E. populneae</i>	Not of concern	Not listed
11.4.8	<i>E. cambageana</i> with <i>A. harpophylla</i> (Dawson Gum and Brigalow)	Endangered	Threatened (Endangered)
11.8.11	Bluegrass grassland	Of concern	Threatened (Endangered)
11.3.3	<i>E. coolabah</i> woodland	Of concern	Not listed
11.8.5	<i>E. orgadophila</i> Open Woodland with Bloodwood (<i>C. erythrophloia</i>)	Not of concern	Not listed

¹ Status under the *Vegetation Management Regulation 2002*.

² Status under the *Environmental Protection and Biodiversity Conservation Act 1999*.

Locations of significant flora communities and species are shown in Figure 4. A comparison between the mine footprint of disturbance and locations of significant flora species and communities indicates that:

- Of the four patches of *Dichanthium queenslandicum* on the Mining Leases, two patches would be cleared for construction of the pit and waste rock dumps, one patch would be mostly cleared for a water dam and the fourth would be substantially disturbed if the option of a waste rock dump in the east is adopted;
- Of the two patches of *Trioncinia retroflexa* (which occurs with *Dichanthium queenslandicum*), one patch would be cleared for construction of the pit and the other patch would be mostly cleared for construction of a water dam; and
- Areas of Brigalow in the western portion of the site will be cleared.

Pacific Coal commissioned research (commencing in 1996) to establish the means of conserving *Trioncinia retroflexa* through a better understanding of its reproductive biology and ecological processes. Transplant experiments have shown that, in the absence of grazing, the species will grow, propagate and establish self-sustaining communities.



Dichanthium queenslandicum occurs within *Dichanthium sericeum* grassland communities. Trials have successfully re-established *Dichanthium sericeum* on disturbed areas at the Blair Athol mine. Investigations aimed at refining revegetation techniques for *Trioncinia tetraflexa* and bluegrass grasslands will continue.

Remnant vegetation outside the required footprint of disturbance will be protected from disturbance by mining activity.

3.5 FAUNA

Fauna surveys of the Project area have recorded or observed a total of 170 fauna species. These included 11 butterflies, 8 amphibians, 23 reptiles, 98 birds and 30 mammals.

Three species of conservation significance have been identified in the Project area during fauna surveys. These are:

- *Chalinolobus picatus* (Little Pied Bat) [Rare, (NCWR 1994)];
- *Lophoictinia isura* (Square-Tailed Kite) [Rare, (NCWR 1994), Migratory species, (EPBC Act 1999)]; and
- *Geophaps scripta scripta* (Squatter Pigeon, Southern Race) [Vulnerable (EPBC Act 1999)].

The Little Pied Bat is found in a wide range of vegetation communities both inside and outside the Project area, including adjacent State Forest (see Figure 4). There will be some local loss of habitat, however extensive area of suitable habitat will remain in the vicinity of the project area. The Square-Tailed Kite is found in eucalypt woodlands and the species utilises major creek vegetation for foraging and migratory movement. This species is unlikely to be adversely affected by the Project. The Squatter Pigeon was recorded once in 1983 and has not been recorded since. Given the infrequent level of utilisation of the site by this species, the Project area is unlikely to support an important population of Squatter Pigeon.

A total of 34 bird species listed as Migratory Species under the *Environmental Protection and Biodiversity Conservation Act 1999* have been previously recorded on the Project site. All species observed are considered common throughout Queensland, with the exception of *Lophoictinia isura* (Square-tailed Kite), [Rare, (NCWR) 1994]. The proposed activities are unlikely to have a significant impact on the migratory bird species identified on the Project site.



3.6 NOISE, VIBRATION AND AIR

The principal sources of noise include heavy mining equipment, blasting, the CPP and the overland conveyor. A baseline noise survey of the mine site and conveyor corridor areas will be undertaken in 2003 and will include identification of noise sensitive receptors in the vicinity of the Project area. Investigations, including predictive modelling if required, will be undertaken to assess potential noise and ground vibration impacts at sensitive receptors. The nearest neighbouring residence is approximately 3 km from the edge of the pit.

The principal dust sources include heavy mining equipment movements, topsoil stripping, overburden removal, waste rock dumping, blasting activities in the pit and coal handling. An investigation will be undertaken in 2003 to assess existing dust levels and identify potential sensitive receptors. During operations, dust generation will be managed by the use of water carts for haul road watering, spays on crushers and conveyor transfer points and, if appropriate, changes to work practices during adverse meteorological conditions.

3.7 IMPACTS OF NEW INFRASTRUCTURE

The proposed alignment for the overland conveyor follows the southern boundary of the Gregory Development Road reserve for the first half of its length to minimise the dissection of existing properties. The alignment then deviates westwards to the existing Blair Athol mine stockpile area. The conveyor will predominately be located on leasehold land and will cross one local government controlled road. Landholders will be fully consulted about the provision of suitable access across the conveyor.

The proposed alignment of the Peak Downs Highway diversion also aims to minimise the dissection of existing properties. There will be an increase in travel-times for through traffic on the Highway, as the deviation will lengthen the Highway by approximately 6 km. The stock route associated with the Highway will also be lengthened.

3.8 AESTHETICS

The physical features associated with the Project that are likely to have aesthetic impacts include the waste rock dumps, dams, the CPP, the co-disposal dam, the conveyor and the Gowrie Creek diversion. The Peak Downs Highway diversion will be close to the main waste rock dump. Tree plantings will be established between the Highway and the waste rock dump to reduce the visual impact.

3.9 CULTURAL HERITAGE VALUES

A preliminary assessment of the cultural heritage values of the mine site identified evidence of both European and Aboriginal settlement or activity. Further investigation of Aboriginal cultural heritage values is proposed to be undertaken in consultation with



relevant traditional owners. The outcomes of the cultural heritage investigation and consultation will be used to prepare a Cultural Heritage Management Plan. Further work is also proposed to evaluate the remnants of European settlement.

3.10 Socio-Economic Conditions

The area surrounding the Project supports broad-acre agricultural activities. Clermont, the nearest township, provides services to the agricultural community and is also the residential base for mine workers at Pacific Coal's Blair Athol mine. The district supports a mature and declining population. The maintenance of Clermont's infrastructure and services will, in part, depend on the maintenance of population and viable local industry.

The development of the Clermont Coal Project will occur in conjunction with the wind down of Blair Athol mine operations. This development schedule should maximise stability for the local economy. The EIS will assess the social impacts of the Clermont Coal Project on the local community. The Clermont community has a long history of exposure to the coal mining industry.

4 ENVIRONMENTAL MANAGEMENT

The EIS will contain a series of Environmental Management Sub-Plans describing the measures that will be taken to prevent or mitigate adverse environmental impacts on surface and groundwater, land resources, air quality, cultural heritage, and flora and fauna of conservation significance.

Environmental management requirements for operations will be stipulated in the regulatory documents that are prepared as part of the approvals process prior to mining (e.g. Environmental Management Overview Strategy (EMOS), Environmental Authority, Plan of Operations).

5 LOCAL, STATE AND COMMONWEALTH GOVERNMENT REQUIREMENTS

The Commonwealth, State, and local government requirements relevant to the Clermont Project are described below.

Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act)

The EPBC Act requires assessment and Commonwealth approval for any activity that will have, or is likely to have, a significant impact on a matter of national environmental significance. The Act identifies six matters of national environmental significance, of which



“nationally threatened species and communities” and “migratory species protected under international agreements” have some relevance to the Clermont Coal Project (refer to Sections 3.4 and 3.5). The potential impact on matters of national environmental significance mean that a referral will need to be made to the Commonwealth for a determination as to whether the proposed relevant action would be a “controlled action” under the EPBC Act.

Queensland *Mineral Resources Act 1989* (MR Act)

The Clermont Coal Joint Venture holds two mining leases covering the deposit, both of which are required to be renewed during 2004. ML 1904 does not allow mining, only the dumping of waste rock and construction of certain mine infrastructure (excluding coal washing and rejects disposal). The current pit design encroaches on ML 1904. It is proposed that much of ML 1904 be conditionally surrendered and an application made for a new ML for mining purposes, thus maximising the extraction of the resource and the location of mine facilities to be optimised. Part of ML 1904 covering the Stock Trucking reserve would remain in the south-east (refer Figure 3).

An application will be made for an infrastructure Mining Lease covering the conveyor route. Blair Athol ML1881 shall need to be amended to allow coal from the Clermont Coal Project to be handled, stockpiled and loaded out on that particular lease.

Queensland *State Development and Public Works Organisation Act 1971* (SDPWO Act)

The Coordinator-General may declare a project to be a “significant project” under s26 of the SDPWO Act. An EIS is required for a significant project. The matters considered by the Coordinator-General before making such a declaration are set out in s27 of the act. Pacific Coal is seeking declaration of the Clermont Coal project as a significant project and has prepared this Initial Advice Statement in support of this application.

Queensland *Environmental Protection Act 1994* (EP Act)

It is proposed to conditionally surrender part of ML 1904 and make a new application covering the same area for a Mining Lease that permits all the mining activities currently permitted under ML 1884. An application for a Mining Lease over the conveyor corridor will also be made. The granting of a Mining Lease application under the *Mineral Resources Act* is contingent upon the issuing of a non-standard environmental authority (mining activities) under the EP Act. The granting of an application for a non-standard environmental authority (mining activities) typically cannot occur until (a) the relevant EIS process is complete (in this case the SDPWO Act EIS process), (b) an EMOS has been



submitted, (c) a Draft Environmental Authority prepared, (d) the notice of application is publicly advertised, and (e) any objections dealt with by the Land and Resources Tribunal.

Queensland *Integrated Planning Act 1997 (IP Act)*

Activities authorized under the *Minerals Resources Act* and activities authorized under an environmental authority (mining activities) under the EP Act are deemed to be exempt development under the IP Act. However, the Project will involve certain assessable development, such as operational works for (a) the construction of the Gowrie Creek diversion, (b) installation of dewatering bores, and (c) the construction of referable dams. The clearing of remnant native vegetation on freehold land, other than on the Mining Leases, would also be assessable development.

Queensland *Water Act 2000*

The *Water Act 2000* requires that a licence to take water be obtained before (a) water is taken from watercourses or groundwater aquifers, and (b) flow in a watercourse is interfered with. A licence to take water will be required for the dewatering bores and for the Gowrie Creek diversion. Dams above certain specified heights and volumes require failure impact assessment under the *Water Act*. A least one dam is likely to require such an assessment. A dam that has a category 1 or 2 failure impact rating would require licensing as a referable dam.

Cultural Record (Landscapes Queensland and Queensland Estate) Act 1987

This Act requires that a permit be obtained to undertake a cultural heritage survey and, if necessary, to disturb or salvage cultural heritage material.

Nature Conservation Act 1992 (NC Act) and the Nature Conservation (Wildlife) Regulation 1994 (NCWR)

The NC Act 1992 prohibits the taking or destruction, without authorisation, of certain listed flora and fauna species. The impact assessment process for the Clermont Coal Project will need to assess the extent of the impact on relevant species listed under the NCWR.

Land Act 1994

Opening new road reserves (including new stock routes) and closing of existing road reserves is regulated under the Land Act. All other land dealings in relation to changes in land tenure (e.g. sub-division of leasehold land, permit to occupy, easements) are



regulated under the Act, which is administered by the department of Natural Resources and Mines.

A permit to clear vegetation on State-owned land is required under the Land Act.

Transport Infrastructure Act 1994

This Act provides a strategic framework for management of the national and State road network. A permit is required to work in, or interfere with, a State-controlled road. Declaration of the new road reserves for the Peak Downs Highway and Gregory Development Road as State-controlled roads will be required under the Transport Infrastructure Act, which is administered by Queensland Transport.

Forestry Act 1959

A permit to extract quarry material would be required under this Act if such material were used to construct road diversions off the Mining Leases. The *Forestry Act* is administered by the Department of Primary Industries.

Department of Main Roads

Pacific Coal will need to negotiate with, and obtain approvals from, the Department of Main Roads for the part closure and diversion of the Peak Downs Highway and the Gregory Developmental Road.

Local Government Requirements

Pacific Coal will need to negotiate with the Belyando Shire Council and gain approvals for works in local road reserves and the Stock Trucking Reserve. Pacific Coal proposes to work closely with the Council throughout the Project to ensure that benefits to the Shire are maximised and potentially adverse impacts are prevented or mitigated.

6 REFERENCE

ACIL (2002). *Pacific Coal: Adding Value to the Community and the Economy*. ACIL Consulting report prepared for Pacific Coal Pty Ltd.



7 GLOSSARY

bcm	bank cubic metres
CPP	Coal Preparation Plant
DMR	Department of Main Roads
EIS	Environmental Impact Statement
EMOS	Environmental Management Overview Strategy
ML	Mining Lease
Mm ³	million cubic metres
Mtpa	million tonne per annum
ROM	run of mine
tph	tonne per hour

8 CONTACT DETAILS

For further information concerning the Clermont Coal Project, please contact:

Alan Irving
Manager Environmental Services
Pacific Coal Pty Limited
Telephone (07) 3361 4215
Email alan.irving@pcpl.riotinto.com.au

For further information about Pacific Coal Pty Limited, please refer to:

www.pacificcoal.com