



Department of  
**Infrastructure, Planning and Natural Resources**

**PROPOSED CHARBON COAL MINE SOUTHERN OPEN CUT EXTENSION**

REPORT ON THE ASSESSMENT OF A DEVELOPMENT APPLICATION  
(DA 122-3-2003) PURSUANT TO SECTION 79C OF THE  
*ENVIRONMENTAL PLANNING AND ASSESSMENT ACT, 1979*

FILE: S02/02820

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**1. SUMMARY**

Charbon Coal Pty Limited (CCPL) is proposing to an open cut extension to the existing Charbon open cut and underground mine through a new development application (DA 122-3-2003). Previous open cut development at the colliery has been the subject of several Council approvals. Approval is sought for production of up to 600,000 tonnes per annum (tpa) of coal over a period of up to 12 years.

The proposal has a capital cost of \$574,000 and would provide continued employment for 22 people. The mine currently expends approximately \$32 million annually on wages, services, transport, taxes and charges.

The proposal was referred to Environment Australia under the Commonwealth's *Environment Protection and Biodiversity Conservation (EPBC) Act 1999* on 22 April 2003. On 23 May 2003, the proposal was decided to be a "controlled action", requiring approval from Environment Australia in terms of "listed threatened species and communities" and "listed migratory species".

Under the *Environmental Planning and Assessment (EP&A) Act 1979*, the proposal is State significant, integrated and designated development. Consequently, the Minister is the consent authority.

The Applicant lodged a Development Application (DA) and Environmental Impact Statement (EIS) for the proposal with the Department on 24 March 2003. The Department subsequently notified and exhibited the DA and EIS in accordance with the relevant requirements of the *Environmental Planning and Assessment Regulation 2000* (the Regulation).

During the exhibition period, the Department received nine (9) submissions on the proposal: three (3) from Government agencies, one (1) from a special interest group and five (5) from members of the public. These submissions raised concerns about the potential impacts on:

- Safety on local roads used for access and domestic haulage;
- Indigenous heritage;
- Flora and fauna;
- Noise;
- Air quality; and
- Visual impacts.

The Department has assessed the EIS and submissions on the proposal and recommends that the Minister approve the DA subject to conditions.

## **2. CURRENT SITUATION**

Charbon Colliery is located approximately 10 kilometres south east of Rylstone (see Figure 1). Kandos State Forest lies immediately to the east and the remaining land has been cleared for grazing.

### **2.1 *Mining Lease and Reserve***

Underground mining currently occurs within Consolidated Coal Lease (CCL) 732 in the north and Mining Lease 1318 in the south. Both leases exclude surface extraction. The current underground leases total 5.98 million tonnes recoverable with 4.80 million tonnes marketable.

Reserves in the Third Entry Open Cut mine area are located in ML1384. Extraction of coal from these reserves was completed in late 2003. Mining contractors are currently employed in rehabilitation activities in the areas formerly subject to open cut mining.

### **2.2 *Major Infrastructure***

The current infrastructure at Charbon Colliery includes:

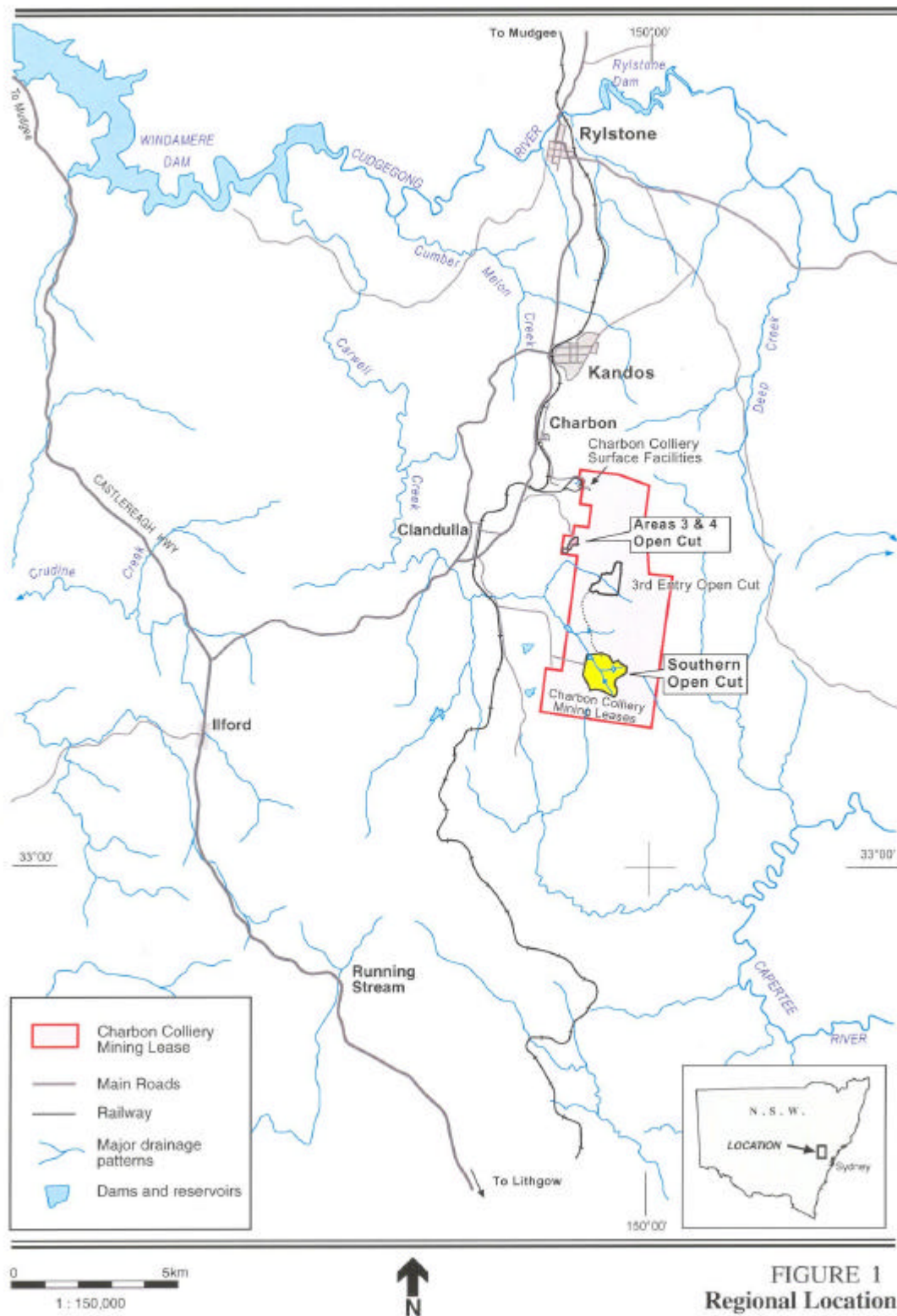
- A coal preparation plant;
- Rail loop;
- Loading/unloading facility;
- More than 6 kilometres of coal conveyor system;
- 10,000 tonne stockpiles;
- Bins for rejects, surge, rail and road;
- Sewage treatment plant;
- Fuel storages;
- Pollution control ponds and drainage works;
- Electrical substation and overhead power lines;
- Main fan and control house;
- Internal access and pit vehicle roads, car parking facilities;
- Offices, bathhouse, stores and workshops; and
- Hard standing areas for supplies.

### **2.3 *Mining Operations***

Mining operations commenced in 1920 and supplied the local Charbon Cement works.

A number of extensions to underground mining operations have occurred. The most recent consents are:

- A development consent by the Minister issued on 21 November 1985 for the coal washery, rail loop, loading facilities, modifications to the pit top and an increase in production from 180,000 tpa to 600,000 tpa; and
- A development consent by the Minister issued on 24 June 1993 for the construction and operation of a mine entry, coal washery rejects and tailings system and expansion of underground coal mining.



Recent open cut mining development consents, from Rylstone Shire Council, are:

| Area                                 | Consent                                                                                                                        | Consent Date | Mining Lease (ML)                                                                                                                                                                       |
|--------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|--------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Third Entry other than Areas 1 and 2 | Rylstone Council Lot 6, DP 259893 including a new underground entry, a small open cut and related infrastructure               | 21.12.1995   | ML 1318<br>CCL 732                                                                                                                                                                      |
| Areas 1 & 2                          | Rylstone Council 94/95 Lot 6, DP 259893, Lots 76 and 146, DP 755765 (MLA 207) as extension to the Third Entry open cut (above) | 25.6.2002    | <u>Area 1</u><br>ML 1384<br>ML 1524<br>CCL 732<br>ML 1318<br>(The 4 <sup>th</sup> trunk portal part of Area 1 is held under ML 1318 and CCL 732)<br><u>Area 2</u><br>ML 1524<br>CCL 732 |
| Remaining Third Entry Open Cut       | As above                                                                                                                       | 25.6.2002    | ML 1318<br>CCL 732                                                                                                                                                                      |

**Table 1: Recent Open Cut Approvals at Charbon Colliery**

The general sequence of mining in the open cut sections is:

- Overburden removal by ripping;
- Removal of coal seams by dozer ripping;
- Loading by front end loader; and
- Transport to coal stockpiles.

## **2.4 Operating Hours**

The current mine has approval to operate 24 hours per day, 7 days a week. However, the open cut generally operates from Monday to Friday 6.00 am to 6.00 pm with maintenance carried out from 6.00 pm to 10.00 pm. When production is required on Saturdays it is carried out between 7.00 am and 4.00 pm. If required, production does occur up to 10 pm from Monday to Friday.

## **2.5 Workforce**

The current workforce consists of approximately 22 staff associated with current open cut areas and 60 people associated with the underground operation. There are also 15 local contractors who are employed on a regular basis for earthmoving, trucking, equipment servicing and labour.

## **2.6 Coal Processing and Export**

All coal produced is steaming coal. Generally, the domestic product is transported directly to the adjacent Kandos Cement Works or, on occasion, to Delta Electricity and local industries. The domestic supply averaged 130,000 tpa over the last three years including approximately 16,000tpa trucked directly to the adjacent lime plant on private haul roads.

Coal destined for the export market is processed through the washery prior to being loaded onto trains and delivered to the Port Kembla Coal Terminal (PKCT). The current rate is 6,600 tonnes of coal per week.

## **2.7 Coal handling system**

Coal from underground operations is loaded onto the underground conveyor belt at the point of extraction.

The coal conveyor system extends, mainly underground, for more than 6 kilometres to the coal handling area. Two sections lie above ground: a section of approximately 900 metres to enable transfer of coal from the Third Entry Open Cut; and a section of approximately 600 metres between the West Entry and the second trunk portal (see Figure 2). The conveyor system discharges onto the reclaim Run-of-Mine (ROM) stockpile located adjacent to the washing plant. ROM coal is reclaimed and fed into a 90 tonne bin. This conveyor passes over the main access road to the mine office. A short conveyor then either delivers the coal into the washery or by-passes it to the domestic coal stockpile. Product coal from the washery is delivered by conveyor to the loading chute for the train loader.

Coal destined for the domestic market is loaded from the domestic stockpile for supply to power stations and the Kandos Cement Plant. Washed coal for Hyrock's Lime Plant is loaded by front-end loader into trucks from the export stockpile. No coal is hauled on the open cut access road (the Contractors' Access Road).

After leaving the mine's stockpile area, the trucks exit the mine via the access road and then travel on Charbon Road through Charbon Village. The route continues over the railway line onto Cooper Drive, then Ilford Road and onto the main Sydney/Mudgee Road. Domestic coal supplied to the Kandos Cement Plant is transported by a private road from Charbon village to the rear of the cement plant.

## **2.8 Water Management**

### *Water Use*

Current water demand is approximately 104ML per year made up of 78ML for the washery and 26ML for dust suppression.

### *Surface Water*

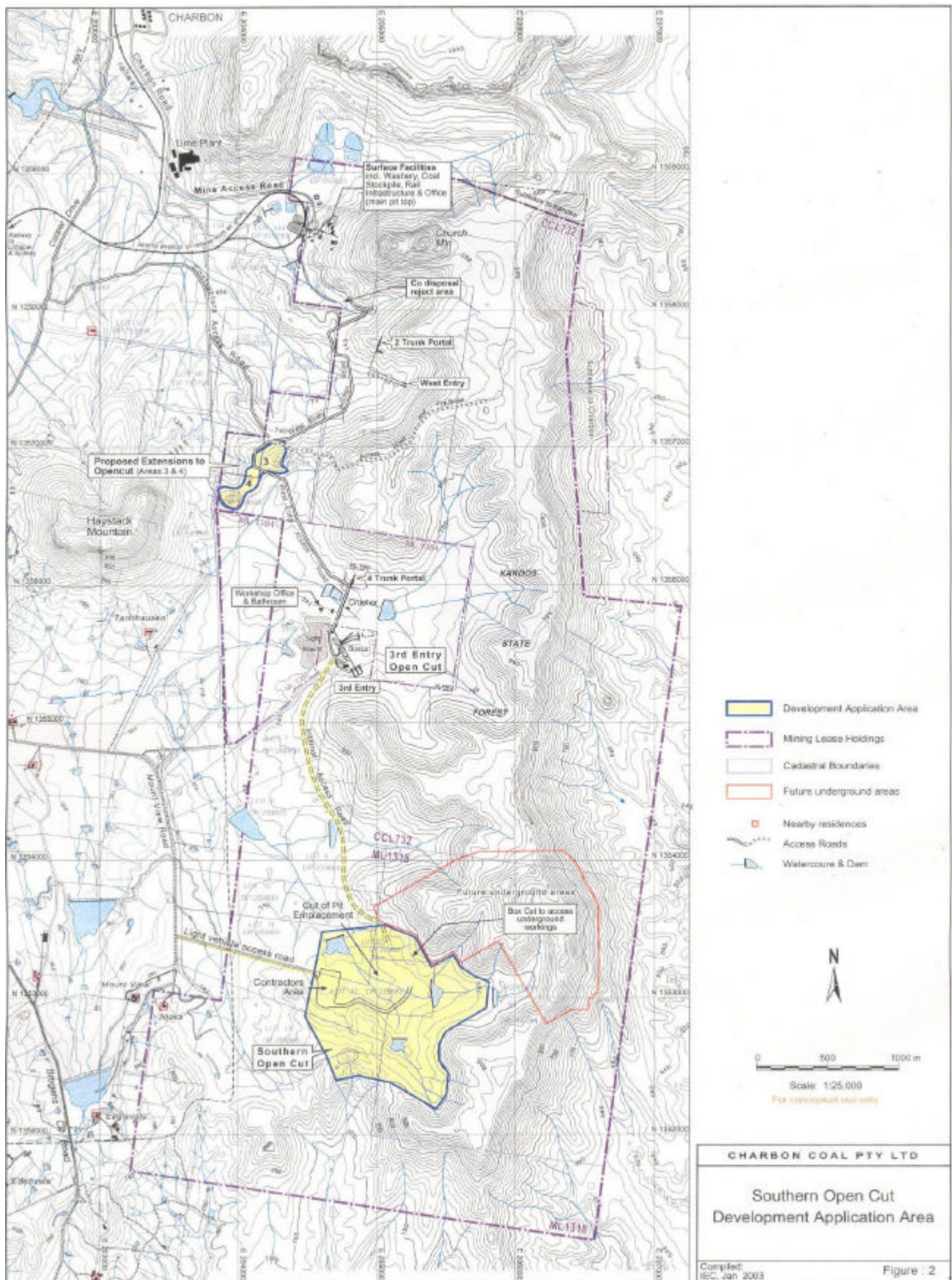
Existing pollution controls have been developed for previously approved areas to the south east of Areas 3 and 4 in the north.

In the proposed southern open cut area, farm dams above and below the extraction area have a maximum capacity of 46ML.

The existing co-disposal reject emplacement operates under nil discharge conditions. There is a concrete lined water channel leading around the emplacement. All dirty water from the emplacement is collected in a containment bund and pumped back to the washery. Water recovered from the tailings and coarse reject disposal area is pumped back to the washery.

A sewage treatment plant exists at the main pit top and the effluent is sprayed onto a paddock. A smaller system operates at the Third Entry Infrastructure site. This unit also uses a spray irrigation disposal system.





### *Groundwater*

The EIS indicates that bores at Charbon Colliery had not encountered stable groundwater levels and there is no record of sustained inflows during mining. The EIS does not identify any groundwater users in the district.

## **2.9 Road transport routes**

There are two vehicle access roads to the mine: The main entrance is adjacent to the rail loop and leads to the office buildings, washery and coal handling infrastructure; and the second entrance is off Cooper Drive and is used by employees as access to the Third Entry Open Cut and its extension.

The current average movement of trucks is:

| Destination               | One way truck numbers per day | Private/public road haulage |
|---------------------------|-------------------------------|-----------------------------|
| Cement works              | 12-15                         | Mainly private              |
| Wallerawang Power Station | 35                            | Public roads                |
| Hyrock                    | 5                             | Private                     |

**Table 2: Summary of coal road transport**

Truck loading is normally carried out Monday to Friday between 6.00am and 6.00pm.

## **2.10 Coarse and Fine Reject Disposal and Waste Management**

Charbon Colliery has a combined coarse and fine reject disposal system (termed co-disposal) in which coarse reject is mixed with tailings and water and the slurry pumped to the disposal site. Approximately 85% of the effluent water is pumped from the return water dam to the washery and re-used as clarified process water. The deposition site is enclosed within a one metre high earth bund. The first area of reject emplacement will be filled by 2005. The next approved site is located in the valley adjacent to the main access road and to the north of the washery.

The existing co-disposal area lies south of the rail loop and washery area and covers an area of 10 ha. Of this area, 1.5ha has been shaped and revegetated. The remainder is in use and will be revegetated progressively

## **2.11 Rehabilitation**

The Co-disposal area, Third Entry open cut and Access Road extension areas are being progressively rehabilitated as current open cut mining allows.

### **3. PROPOSED DEVELOPMENT**

The Applicant is proposing to extend operations at the mine to a new open cut which would operate for a maximum of 12 years. The rate of production from the open cut would be generally 300,000tpa with a maximum of 600,000tpa to cover any short fall in the underground operation. The proposal will not increase the overall production output of the mine or require additional processing equipment or transport arrangements.

#### **3.1 Mining Lease and Reserves**

The Applicant is proposing to extend open cut operations to the south and west of existing works. This proposal will require a new surface mining lease. It is anticipated that 3.5 million tonnes of coal would be extracted from an area of 90 hectares.

#### **3.2 Infrastructure**

The proposal would rely on the mine's existing coal washery plant for treatment of export coal. New infrastructure for the proposal includes:

- Light vehicle access road;
- Contractors' area;
- Offices, bathhouse, workshop, store, carpark, fuel and oil storages;
- Raw coal stockpile;
- Additional sewage treatment facilities;
- Extension to the existing conveyor system, hopper, crusher and erection of a bin feeder;
- Erosion and sedimentation control including dams, drains, pipes, culverts and banks;
- Fencing; and
- Sealing Mount View Road.

No hazardous or dangerous material will be stored on site and none will be required for the proposal.

#### **3.3 Mining Operations**

The proposal consists of:

- An area located west of the existing open cut mine in the northern half of the holdings (the "Western Area" Areas 3 and 4). This area lies within CCL 732 which currently does not include surface mining rights;
- An area located to the south of existing surface works which partly overlies underground workings (the "Southern Area");
- An internal access road from the southern open cut area to the Third Entry box cut; and
- A light vehicle access road to Mount View Road.

These areas are shown in Figure 2.

Mining methods would remain the same.

Overall coal extraction rates for the colliery (underground and open cut) would remain at approximately 730,000 tpa.



### **3.4 Coal Processing and Export**

Coal processing techniques would remain the same.

### **3.5 Coarse and Fine Reject Disposal**

The existing co-disposal area would be utilised for rejects from this proposal.

### **3.6 Water Management**

#### *Water Use*

The proposal is estimated to require approximately 26ML per annum. This was not estimated to be additional water consumption due to the closure of the existing open cut areas.

#### *Surface Water*

##### Western area (Areas 3 and 4)

It is proposed that these areas will utilise existing pollution controls. These areas lie adjacent to the proposal and adjustments to sediment and erosion controls should accommodate run-off in the development area.

##### Southern Area

A clean water diversion system will be progressively implemented as part of the proposal. Where possible, clean water diversion channels will be constructed up slope of disturbed areas and will be designed to contain a 1 in 100 year storm event. Grade stabilising structures will maintain a peak discharge velocities during design storm events to 2 metres per second (m/s) or less.

Dirty water from both areas will be pumped out of the pits. In the southern open cut area, existing farm dams will be used with the addition of two 3 ML ponds. The first pond will be at the base of the out of pit emplacement to collect runoff from the emplacement. The second pond will be located below the contractors' area and will contain runoff from the hardstand and oil separator. Both ponds will discharge into an existing 46ML farm dam which will have a licensed discharge point for the southern mine extension. This dam will also be used as a water supply for the open cut.

An estimated 9.6ML of dirty water would runoff in a 1 in 10 year, 72 hour storm event. The ponds, then the discharge dam, are proposed to contain this event.

An additional farm dam is located below the proposed discharge point and will remain for stock use. However, it is proposed that excess mine discharge water will be contained in this lower pond.

A sump will be constructed within the Box Cut of the southern open cut area to contain dirty water generated from the loading of coal onto the underground conveyor. Water contained in this sump, as well as any overflow will be transferred into the underground workings.

#### *Ground water*

Aquifer flows occur from the proposed mining of the Irondale Seam and from strata below it. The Irondale Seam would be mined as part of this proposal. The EIS indicates that impacts on groundwater are considered negligible.

### **3.7 Rehabilitation**

The area disturbed by the open cut operation will be progressively rehabilitated with:

- Application of gypsum at a rate of approximately 8 tonnes/ha;
- Addition of fertiliser below the seed; and
- Application of topsoil at a minimum depth of 10cm, and possibly up to 30cm.

The seed mixture will include seed collected from the local Capertee Stringybark. Both broadcast sowing and seed drilling will be used. Revegetation works will be monitored for two years and maintenance will be provided as required.

### **3.8 Operating Hours**

The proposed hours of operation would be:

- 6.00am to 6.00pm Monday to Friday with maintenance between 6.00pm and 10.00pm; and
- 7.00am to 4.00pm on Saturday.

Production hours are proposed from 6.00am to 10.00pm Monday to Friday to cover peaks in production.

### **3.9 Workforce**

The existing workforce of approximately 22 staff would be retained.

## **4. STATUTORY CONTEXT**

The proposal requires approvals under Commonwealth and State legislation.

### **4.1 *Environment Protection and Biodiversity Conservation Act 1999***

On 23 May 2003, Environment Australia decided that the proposal was a “controlled action” under the Commonwealth *Environment Protection and Biodiversity Conservation (EPBC) Act 1999* as the proposal may have a significant impact on matters of national environmental significance in terms of “*listed threatened species and communities*” and “*listed migratory species*”. Consequently, the proposal requires an approval from the Commonwealth Minister for the Environment.

### **4.2 *Environmental Planning and Assessment Act 1979***

#### **4.2.1 *State Significant Development***

The proposal is classified as State significant development, under section 76A(7) of the EP&A Act because it requires a new mining lease under section 63 of the *Mining Act 1992* and meets the criteria in the Minister’s declaration of State significance, dated 29 June 2001.

Consequently, the Minister is the consent authority.

#### **4.2.2 *Threatened Species***

The proposal has been assessed as not having a significant impact on any threatened species or community. Therefore, a Species Impact Statement is not required.

#### **4.2.3 *Integrated Development***

The proposal is classified as integrated development under section 91 of the EP&A Act because it requires additional approvals from the following agencies:

- Department of Environment and Conservation under the *Protection of the Environment Operations Act 1997*;
- Department of Environment and Conservation under the *National Parks and Wildlife Act 1974*; and
- Rylstone Council under the *Roads Act 1993*.

The Department has indicated that no water licences are required at this time. However, if de-watering is required, then the Applicant is required to contact the Department for its requirements.

#### **4.2.4 *Designated Development***

The proposal is classified as designated development under section 77A of the EP&A Act because it meets the criteria for an open cut coal mine in Schedule 3 of the EP&A Regulation.

#### **4.2.5 *Permissibility***

The proposal is permissible with consent under the Rylstone Local Environmental Plan 1996.

#### *4.2.6 Environmental Planning Instruments*

The following planning instruments were considered for their applicability to the proposal under section 32 of the EP&A Act:

- *State Environmental Planning Policy No. 11 – Traffic Generating Developments* (SEPP 11);
- *State Environmental Planning Policy No. 34 – Major Employment Generating Industrial Development* (SEPP 34); and
- *State Environmental Planning Policy No. 44 – Koala Habitat Protection* (SEPP 44).

The Department is satisfied that the requirement to notify the Roads and Traffic Authority of the proposal under SEPP 11 has been undertaken.

The thresholds for a development of \$20 million capital cost, or the continued employment of 100 persons, under SEPP 34 are not satisfied by the development and, consequently, SEPP 34 does not apply to the proposal.

Studies undertaken in the flora and fauna assessment of the EIS indicate that suitable habitat for koalas does not exist in the Southern Open Cut area and therefore SEPP 44 does not apply to the proposal.

## **CONSULTATION**

The Applicant lodged a DA and EIS for this proposal with the Department on 24 March 2003.

In accordance with the EP&A Act and Regulation, the Department subsequently:

- Notified all residents in writing who were identified as potentially affected by the proposal;
- Notified Rylstone Council and all relevant State Government agencies;
- Advertised the exhibition of the EIS in the Mudgee Guardian on two separate occasions; and
- Exhibited the DA and EIS at five locations between 16 April 2003 and 16 May 2003.

During the exhibition period, the Department received nine (9) submissions on the proposal, four of which objected to the proposal. In summary:

- 3 were from government agencies (Department of Mineral Resources (DMR), National Parks and Wildlife Service (NPWS), Department of Infrastructure, Planning and Natural Resources (DIPNR) (formerly Department of Land and Water Conservation (DLWC));
- one was from an interest group (Rylstone District Environment Society); and
- 5 were from members of the public.

These submissions raised several concerns about the proposal (refer to Table 3).

| <b>Issues</b>                | <b>Number of Times Issue Raised</b> |
|------------------------------|-------------------------------------|
| Soil and water               | 16                                  |
| Noise                        | 11                                  |
| Indigenous heritage          | 10                                  |
| Flora and fauna              | 9                                   |
| Light/visual amenity         | 7                                   |
| Air quality                  | 4                                   |
| Transport and safety         | 3                                   |
| Subsidence                   | 2                                   |
| Property value               | 2                                   |
| Consultation with landowners | 1                                   |

**Table 3: Summary of issues raised in submissions**

The Department has assessed these concerns in detail in Section 6 of this report.

During the assessment process, the Department consulted extensively with relevant Government agencies and the community.

### **4.3 Government Agency Submissions**

Of the submissions received from government agencies none objected to the proposal. Submissions were received from:

- DMR;
- NPWS; and
- DIPNR.

These submissions are discussed in detail below.

#### *4.3.1 Department of Mineral Resources (DMR)*

DMR noted that:

- Revegetation works should be monitored and maintained for at least 2 years;
- Stabilisation of topsoils and exposed areas may be difficult as grasses would not be sown between June and December;
- Site security should be maintained; and
- Coal reject disposal areas need to be revegetated to an acceptable level with runoff from these areas considered and monitored.

The Department is satisfied that these issues have been satisfactorily addressed through additional information provided by the Applicant and conditions of consent.

#### *4.3.2 National Parks and Wildlife Service (NPWS)(now DEC)*

The NPWS identified a requirement for the assessment of a portion of the DA area not previously surveyed, the need for consultation with Aboriginal groups and protection of an Aboriginal art site.

In response, the Applicant undertook further survey work, consultation and reporting through Therin Archaeological Consulting (2003) *Aboriginal Heritage Assessment for the Proposed Charbon Colliery Southern Open Cut, Charbon Colliery* which was provided to the Department and NPWS.

The Department is satisfied that the issues raised have been addressed.

#### *4.3.3 Department of Infrastructure, Planning and Natural Resources (DIPNR)*

The submission from the Department raised the following:

- Form of the proposed absorption banks;
- Design storms for estimating erosion and control;
- Redesign of piping for catchment runoff; and
- Dewatering of the pit.

The Department is satisfied that these issues have been satisfactorily addressed through additional information provided by the Applicant and conditions of consent.

### **4.4 Council Response**

Rylstone Shire Council (RSC) provided a response that identified a number of issues including:

- Road construction and maintenance requirements;
- Impacts from noise, dust, visual amenity, vibration and traffic;
- Adequacy of the proposed pollution control system; and
- Downstream impacts.

The response falls outside the formal submission period and was not counted as a submission. Nevertheless, these issues have been considered during the Department's assessment of the proposal and the Department is satisfied that these



issues have been satisfactorily addressed through information provided by the Applicant and conditions of consent.

#### **4.5 Interest group submission**

One submission was received from Rylstone District Environment Society. The following issues were raised:

- Visual impacts to housing and land development in the area;
- Salinity impacts from cleared ground;
- Flora and fauna impacts particularly for bird species;
- Change to existing rehabilitation practices;
- Local rainfall figures more appropriate than Mudgee data; and
- Indigenous heritage protection.

The Department is satisfied that these issues have been satisfactorily addressed through additional information provided by the Applicant and conditions of Consent.

#### **4.6 Private submissions**

Submissions were received from five local residents; four of these included an objection to the development. These submissions identified the following issues:

- Salinity in an area identified as “Very High Risk” in the “Central West Catchment Salinity Risk Assessment”;
- Impacts on Reedy and Cumbermelon Creeks from the continued use of the washery;
- Instability of soils in western area (Area 3);
- Rehabilitation of existing mining impact from subsidence;
- Opposition to long work hours (24 hours a day, 7 days a week);
- Creation of a “high impact zone” above the open cut to the mountain ridge (watershed);
- Future underground mining to north and east of the proposal will extend the high impact area and subsidence likely to occur in the watershed;
- Indigenous heritage site C-AS-1 is within the high impact zone and extremely vulnerable;
- Rainfall figures locally are higher than the presented Mudgee figures;
- Groundwater impacts not covered in the EIS;
- Increases in noise, dust and light pollution;
- EIS needs to provide a commitment to EPA Noise amenity criteria;
- Impacts on amenity and visual beauty;
- A requirement for a complaints hot line;
- Safety of Brogans Creek Road because of narrowness and blind corners; and
- Request for noise monitoring.

The Department is satisfied that these issues have been adequately addressed through additional information provided by the Applicant and conditions of consent.

## **5. CONSIDERATION OF KEY ISSUES**

The Department has assessed the proposal, EIS and submissions on the proposal and believes the following issues require further attention:

- Soil and water;
- Noise;
- Indigenous heritage;
- Visual impacts; and
- Flora and fauna.

### **5.1 Soil and water**

#### *5.1.1 Soil and Water Assessment*

Cumbermelon Creek is a tributary of the Gudgegong River. The assessment identified that the drainage pattern in the Southern Open Cut area would be altered during the development. The area would include approximately 16% of the catchment. Some clean surface water runoff from surrounding slopes would be diverted to dams below the out of pit emplacement. In below-average rain years there may be a loss of stock carrying capacity on the mine's current land holdings. The EIS indicates that there would be a potential for release of excess water to assist downstream water users. With adequate controls, water quality criteria for discharged waters would be met.

In pit drainage would be transferred to disused underground workings. Previous monitoring of groundwater has not identified steady flows over time. During normal rainfall years, minor water was encountered underground. This has been largely attributed to the absence of water-bearing strata above the seams and lack of connectivity between the seams at Charbon and other workings in the vicinity. However, the lower Irondale Seam, to be mined by this proposal, has been previously recognised as containing water-bearing strata.

#### *5.1.2 Issues raised in submissions*

The Department identified issues relating to:

- Absorption banks;
- Design storms;
- Culvert design criteria; and
- De-watering.

Private individuals' submissions identified:

- Proposal is in a very high salinity risk area, including salinity of groundwater;
- Impact on location of the east-west watershed;
- Local rainfall figures higher than those used from Mudgee, estimates for dam requirements may be inaccurate;
- Mitigation for Cumbermelon Creek (Gudgegong River), and
- Erosivity of fragile soils.

#### *5.1.3 Assessment of Key Issues*

The Department provided a summary of issues raised and has assessed the proposal. EIS, submissions to the proposal and the response to these and considers that the following issues require further attention.

The Applicant agreed with the Department concerning the replacement of absorption banks with graded banks with 1% fall or less and replacement of a pipe culvert with a box culvert. For the emplacement area, the Applicant has indicated banks will be provided for each lift (5 metres vertical). It was noted that a licence for the development would not be required unless de-watering was required. The Department considered that insufficient information was currently available regarding design storms and that this issue should be addressed through local data collection and design to avoid loss of water from the site.

In terms of salinity and water quality, including groundwater and water quality in Cumbermelon Creek, the Applicant indicated that discharges from the existing mine had low salinity levels ranging from 500 to 745µS/cm and that groundwater with higher salinity would not be intersected. As it is unclear whether salinity or groundwater levels would be impacted, provision is made in the draft conditions for the Applicant to carry out the development in a manner that prevents and/or minimises potential groundwater impacts.

An impact on the location of the watershed has been established. However, the Department considers that the change in location is unlikely to have a significant effect on the land uses and environmental conditions in the area.

With respect to meteorological data, the Applicant indicated that long term meteorological data were not available for the district. The Department considers that provision of local data is warranted and has provided a requirement to ensure activities on site are undertaken with reference to local information.

No subsidence impacts would occur from the open cut proposal.

Potential downstream impacts associated with proposed use of farm dams to accommodate 1 in 10 year, 72 hour storm events require management, as do impacts from the development on the erosivity of soils on slopes. Consequently, the Department requires that the Applicant manage the project so as to avoid these impacts.

#### *5.1.4 General Terms of Approval*

The DEC has granted General Terms of Approval to regulate discharge concentration limits (biological oxygen demand, total suspended solids, oil and grease and pH); the control of wastewater utilisation; and the control of soil erosion during construction and open cut operation. The Department has incorporated these General Terms of Approval into the proposed conditions of consent.

#### *5.1.5 Conclusion*

The Applicant should be required to:

- Prepare a detailed surface water monitoring plan for the development, which must be approved by the Director-General before it carries out any works in the development area;
- Establish surface water impact mitigation measures on the basis of surface water impact assessment criteria and DEC's discharge limits; and
- During, and immediately after large stormwater events, conduct an audit of all the dams in the development area and their adequacy in containing stormwater, with follow up work required when inadequacies are recognised.

To support the EIS in finding that groundwater would not be affected by the proposal, the Department considers the Applicant should be required to minimise all adverse effects on local landowners.

The Department is satisfied that the Applicant can comply with the criteria set out in the General Terms of Approval.

## 5.2 Noise

### 5.2.1 Noise Impact Assessment

Atkins Acoustics Pty Limited (AAPL) (2003) *Noise Impact Assessment Southern Open Cut Charbon* presents a detailed assessment of the noise impacts associated with the proposed extension to the Charbon open cut coal mine. AAPL (2003) is included in Appendix F of the EIS, while a summary of the noise assessment is presented in Section 5.3 of the EIS.

### 5.2.2 Issues raised in submissions

Concerns about noise have been raised in three submissions from private individuals. These submissions suggest residents are presently impacted by noise from the existing open cut coal mine and since the proposed open cut coal mine would be closer to residential locations, the potential noise impacts would be greater.

### 5.2.3 Assessment of Key Issues

AAPL (2003) presents the results of a noise impact assessment that has been carried out in accordance with the Environment Protection Authority's (2000) *NSW Industrial Noise Policy* (INP).

#### Identification of noise sensitive receptors

AAPL (2003) has identified potentially impacted noise sensitive receivers at seven locations around the proposed open cut coal mine and these are presented in Table 4.

| Reference | Location                                       |
|-----------|------------------------------------------------|
| R1        | Northwest of Areas 3 and 4                     |
| R2        | Tannhausen                                     |
| R3        | Southwest of Areas 3 and 4                     |
| R4        | Noika                                          |
| R5        | Mount View                                     |
| R6        | West of Southern Open Cut – Brogans Creek Road |
| R7        | Eaglevale                                      |

**Table 4: Potentially impacted noise sensitive receptors**

The Department agrees with the potentially impacted noise sensitive receivers.

#### Background noise assessment and project specific noise limits

AAPL (2003) presents the measured and assessed background noise levels at two locations in the vicinity of the site. The measured ambient  $L_{Aeq(Period)}$  and Rating Background Level (RBL) for each location are presented in Table 5.

| Location   | Ambient $L_{Aeq(Period)}$ |         |       | RBL $L_{A90}$ |         |       |
|------------|---------------------------|---------|-------|---------------|---------|-------|
|            | Day                       | Evening | Night | Day           | Evening | Night |
| Tannhausen | 52                        | 45      | 44    | 31            | 30      | 30    |
| Noika      | 52                        | 42      | 42    | 30            | 30      | 30    |

**Table 5: Measured ambient noise levels**

The measured ambient noise levels at the two locations appear to be reasonable and consistent with reported ambient noise levels in the area.

AAPL (2003) has developed intrusive and amenity criteria based on the ambient noise monitoring. The intrusive and amenity criteria are presented in Table 6.

| Location   | Intrusive Noise Criteria<br>$L_{Aeq(15\text{ minutes})}$ |         |       | Amenity Criteria<br>$L_{Aeq(Period)}$ |         |       |
|------------|----------------------------------------------------------|---------|-------|---------------------------------------|---------|-------|
|            | Day                                                      | Evening | Night | Day                                   | Evening | Night |
| Tannhausen | 36                                                       | 35      | 35    | 50                                    | 45      | 40    |
| Noika      | 35                                                       | 35      | 35    | 50                                    | 45      | 40    |

**Table 6: Intrusive and amenity noise criteria**

AAPL (2003) has adopted the intrusive noise criteria as the appropriate project specific noise limits (PSNL) for the development. The Department agrees with the PSNLs presented in Table 6. Table 7 presents the PSNLs for all sensitive receivers near the proposed open cut coal mine.

| Reference | Location                                       | Project Specific Noise Levels<br>$(L_{Aeq(15\text{ minutes})})$ |         |       |
|-----------|------------------------------------------------|-----------------------------------------------------------------|---------|-------|
|           |                                                | Day                                                             | Evening | Night |
| R1        | Northwest of Areas 3 & 4                       | 36                                                              | 35      | 35    |
| R2        | Tannhausen                                     | 36                                                              | 35      | 35    |
| R3        | Southwest of Areas 3 & 4                       | 36                                                              | 35      | 35    |
| R4        | Noika                                          | 35                                                              | 35      | 35    |
| R5        | Mount View                                     | 35                                                              | 35      | 35    |
| R6        | West of Southern Open Cut – Brogans Creek Road | 35                                                              | 35      | 35    |
| R7        | Eaglevale                                      | 35                                                              | 35      | 35    |

**Table 7: Project Specific Noise Levels ( $L_{Aeq(15\text{ minutes})}$ )**

#### Predicted noise impacts

AAPL (2003) has undertaken noise predictions from the development using the ENM noise model. The modelling methodology, including the assumed noise source levels, appears to be appropriate.

AAPL (2003) analysis of wind conditions at the site has found that there is no significant source to receiver winds in any season during the day and night. Temperature inversions were not found to be a significant feature at night. Consequently, noise predictions were conducted for calm conditions.

The predicted noise levels for the proposed open cut coal mine are presented in Table 8.

| Location                                            | Predicted Noise Levels (L <sub>Aeq(15 minutes)</sub> ) |         |         |                   |         |         |
|-----------------------------------------------------|--------------------------------------------------------|---------|---------|-------------------|---------|---------|
|                                                     | Initial Activities                                     |         |         | Normal Extraction |         |         |
|                                                     | Stage 1 + Area 4                                       | Stage 2 | Stage 3 | Stage 1           | Stage 2 | Stage 3 |
| North-west of Areas 3 & 4 (R1)                      | 31                                                     | <20     | <20     | 30                | <20     | <20     |
| Tannhausen (R2)                                     | 36                                                     | 28      | 29      | 35                | 28      | 27      |
| South-west of Areas 3 & 4 (R3)                      | 31                                                     | 27      | 28      | 28                | 27      | 25      |
| Noika (R4)                                          | 35                                                     | 33      | 35      | 30                | 33      | 29      |
| Mount View (R5)                                     | 30                                                     | 29      | 27      | 28                | 29      | 24      |
| West of Southern Open Cut – Brogans Creek Road (R6) | 32                                                     | 29      | 28      | 29                | 29      | 23      |
| Eaglevale (R7)                                      | 23                                                     | 18      | 21      | 23                | 18      | 19      |

**Table 8: Predicted L<sub>Aeq, (15 minute)</sub> Noise impacts (dB(A))**

AAPL (2003) has estimated that the noise contribution from the existing Third Entry infrastructure (conveyor, bin and breaker) was in the order of 25 dB(A) and would not contribute to an increase in the predicted noise levels presented in Table 7. The predicted noise impacts comply with the PSNLs.

The Department agrees with the predicted noise impacts.

#### 5.2.4 General Terms of Approval

The DEC has provided General Terms of Approval (GTA) to manage noise impacts during the construction and operation of the proposed extension to the Charbon open cut coal mine. The Department has incorporated DEC's GTA in the proposed conditions of consent.

#### 5.2.5 Conclusion

The Department is satisfied that the construction and operation of the proposed extension to the Charbon open cut coal mine would be able to comply with the EPA's project specific noise limits included in NSW EPA (2000) *Industrial Noise Policy*.

To ensure that the Applicant constructs and operates the proposed extension to the Charbon open cut coal mine according to commitments made in the EIS, the conditions of consent include:

- Operational Noise Limits consistent with NSW EPA (2000) *Industrial Noise Policy*;

- Noise monitoring at residential locations; and
- A detailed noise monitoring program.

### 5.3 Indigenous Heritage

#### 5.3.1 Indigenous Heritage Assessment

In 1999, Archaeological and Heritage Services conducted an archaeological survey to identify the potential impact on Aboriginal relics/objects as defined by the *National Parks and Wildlife Act 1974* and non-indigenous items as defined by the *Heritage Act 1977* and the *EP&A Act 1979*.

Field work was undertaken in May and August 1999 over the western area (Areas 3 and 4) and part of the proposed Southern Open cut. A representative from Bathurst Local Aboriginal Land Council (LALC) was present at both surveys.

The survey identified three indigenous heritage sites in the southern open cut area, one isolated artefact and two areas of potential archaeological deposit (PAD). No sites were identified in the western area. This work was reported in Mills (2000) *An Archaeological Survey for Proposed Extensions to Charbon Colliery, Near Kandos*.

Non-indigenous heritage items included the remains of an aerial ropeway and driving station associated with the transportation of limestone from the Brogan's Creek Quarry to Charbon Cement Works.

#### 5.3.2 Issues raised in submissions

A submission received from National Parks and Wildlife Service (NPWS) identified:

- Concern regarding a cave art site; and
- Likelihood of Aboriginal sites in the vicinity of a spring.

Additional information was requested including:

- A survey and full assessment, including the area not previously surveyed;
- A test excavation;
- Consultation with Aboriginal community groups;
- Assessment of the impacts on the site; and
- Consideration and mapping of conservation options.

In response to this request, the Applicant undertook further assessment work. A survey and assessment of areas not previously covered by a heritage assessment was undertaken by Therin Archaeological Consulting. The assessment is provided in *Aboriginal Heritage Assessment for the Proposed Charbon Colliery Southern Open Cut, Charbon Colliery* (September, 2003).

#### 5.3.3 Assessment of Key Issues

The further assessment work reviewed previous surveys over the area and included a survey of parallel transects over the southern open cut development area. One new Aboriginal site was located during the survey and the previous work of Mills (2001) was confirmed. The predicted that large artefact scatters would be likely to occur on level ground within 100 metres of creek lines with moderate scatters on relatively level ground within the same radius.

The survey recommended an archaeological test excavation at a minimum of two locations and protection of the Aboriginal art site. The location, extent and

methodologies for future archaeological excavation should be determined in agreement with NPWS.

#### **5.3.4 General Terms of Approval**

NPWS has granted General Terms of Approval to salvage Aboriginal artefacts along one creek line and provide for consents under section 90 of the NP&W Act for locations and deposits between several of the identified sites. Protection of an Aboriginal art site was also a condition of these general terms.

#### **5.3.5 Conclusion**

The Department has assessed the key heritage issues and has identified the impacts associated with this aspect of the proposal. To ensure that Aboriginal heritage issues are suitably managed, the conditions of consent require the Applicant to:

- Undertake salvage in areas identified for their potential;
- Fulfil NPWS requirements prior to applying for section 90 consents; and
- Protect an art site in a manner acceptable to Aboriginal groups.

### **5.4 Flora and fauna**

#### **5.4.1 Flora and Fauna Assessment**

International Environmental Consultants Pty Limited conducted initial surveys for flora and fauna in Spring and Autumn 1999. Mammals, amphibians, reptiles and birds were surveyed. No fauna species of conservation significance were detected in the area or considered likely to occur.

A field survey was conducted on 28-29 January 2003 to determine the applicability of the 1999 surveys and determine the presence of more recently listed rare and threatened species. Particular attention was given to the occurrence of Grassy White Box Yellow Box Blakely's Red Gum Woodland Endangered Ecological Community (EEC).

The EIS concludes that approximately 25 ha of Grey Gum Woodland and 0.6ha of the EEC would be removed. The Grey Gum Woodland is potential habitat for a number of species listed in the *Threatened Species Conservation Act 1995*.

#### **5.4.2 Issues raised in submissions**

Issues raised include:

- Impact on habitat in the vicinity of Area 3;
- Impact on bird species due to time of replacement based on current rehabilitation;
- Rehabilitation techniques;
- Information regarding surveys, including bat surveys;
- Justification that other stands of EEC have greater conservation significance;
- Details of assessment of koala habitat under SEPP 44; and
- Assessments under Section 5A of the EP&A Act.

#### **5.4.3 Assessment of Key Issues**

The Department is generally satisfied that the additional information provided by the Applicant addresses the request for information regarding surveys including bat surveys. In terms of koala habitat, potential habitat was recognised however, this



potential habitat was not identified as core habitat, as the Grey Gum was present as regrowth with no effective understorey and cover existing as pastureland.

In reviewing the information provided, the Department considered that a Species Impact Statement was not required. Notwithstanding this conclusion, the Department is still concerned about the land clearing impacts of the proposal.

The Applicant responded to the Department's concerns by identifying a large area of buffer land owned by Charbon Colliery that it was willing to dedicate for conservation purposes, in compensation for the temporary loss of native vegetation and habitat associated with the development.

The area of land to be dedicated is 80 ha and is predominantly covered by native woodland vegetation, as shown in Figure 3. The area contains:

- 54 ha of Grey Gum Woodland;
- 11 ha of scattered regrowth;
- 10 ha of Narrabeen Sandstone Woodland; and
- 5 ha of cleared agricultural land.

The Grey Gum Woodland is an important habitat for the threatened species, the Regent Honeyeater. The conservation area will preserve 54 ha of this habitat, more than twice the area of Grey gum Woodland removed by the development. This will result in a net benefit in terms of the preservation of this habitat and the species that depend upon it.

The Applicant proposes to enhance those parts of the conservation area that consist of regrowth or cleared land. These disturbed areas will be revegetated with species that include those found in the Grassy White Box Woodland Endangered Ecological Community. This is an attempt to replace some of the 0.6 ha of this community that will be cleared by the proposed development.

#### **5.4.4 Conclusion**

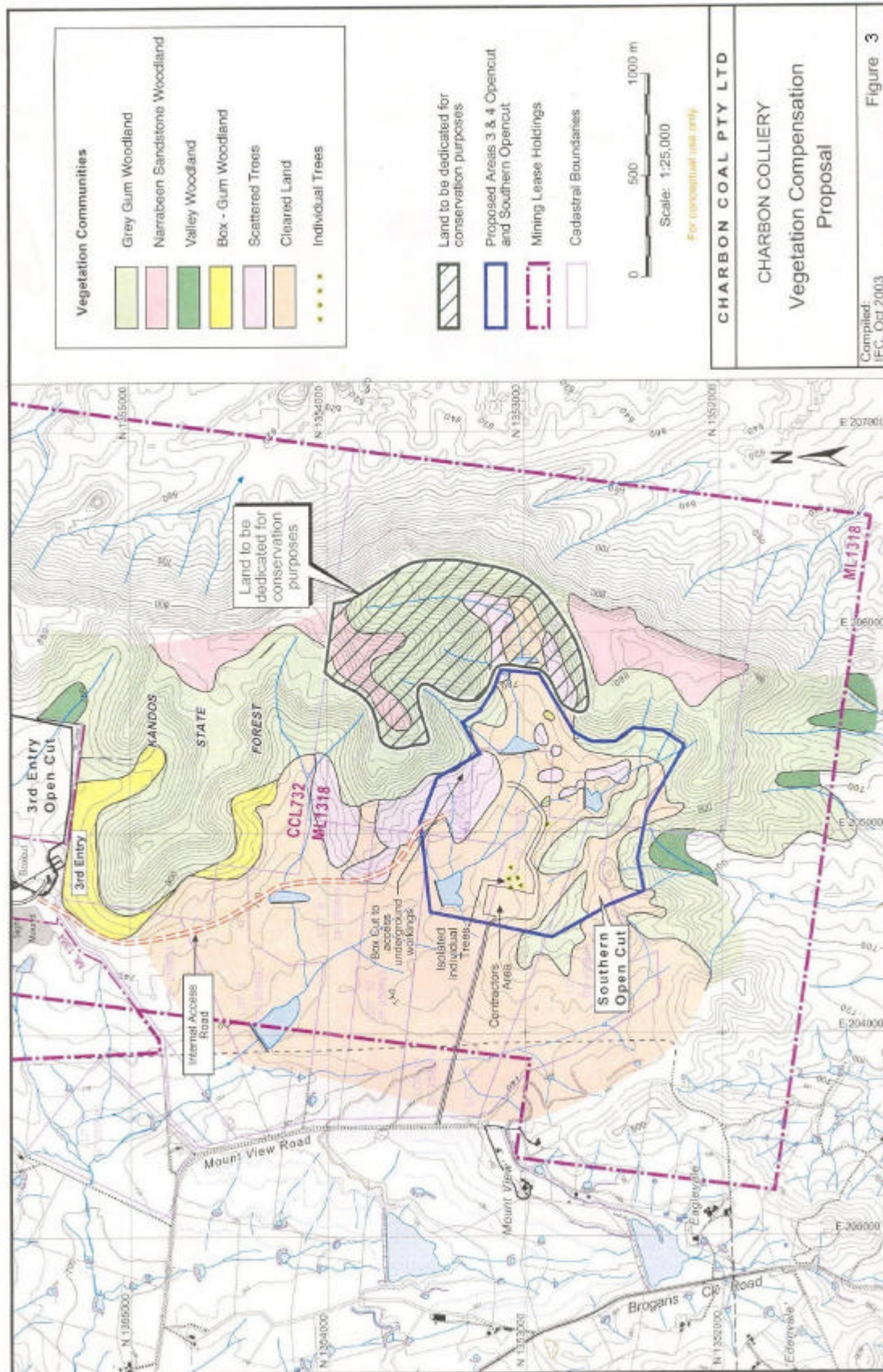
The Department has assessed the key flora and fauna issues and has identified the impacts associated with this aspect of the proposal. To ensure that flora and fauna issues are suitably managed, the conditions of consent require the Applicant to:

- Implement best practice flora and fauna management to minimise impacts of the development;
- Provide a Compensatory Habitat Area of at least 80 ha;
- Prepare and implement a detailed Fauna and Flora Monitoring Program; and
- Prepare and implement a detailed Compensatory Habitat Plan.

### **5.5 Air Quality**

#### **5.5.1 Air Quality Assessment**

Holmes Air Sciences undertook an air quality study that is provided as an appendix to the EIS. The assessment included detailed dispersion modelling that indicated that off-site dust concentration levels and deposition levels at all nearby residences would be below their respective air quality goals. The assessment relied, in part, upon dust deposition data that was gathered from the site of the development.



The air quality assessment predicted that dust levels would be highest during stage 3 of the development when mining operations will be closest to residences. Even at this stage of the development air quality criteria are predicted to be achieved.

### 5.5.2 Air Quality Criteria

The air quality criteria used to assess the impacts of particulate matter are listed in Tables 9, 10 and 11.

| POLLUTANT                                               | CRITERION                   |
|---------------------------------------------------------|-----------------------------|
| Total suspended particulate matter (TSP)                | 90 $\mu\text{g}/\text{m}^3$ |
| Particulate matter<10 $\mu\text{m}$ (PM <sub>10</sub> ) | 30 $\mu\text{g}/\text{m}^3$ |

**Table 9. Annual Average Particulate Matter Criteria**

| POLLUTANT                                               | CRITERION                   |
|---------------------------------------------------------|-----------------------------|
| Particulate matter<10 $\mu\text{m}$ (PM <sub>10</sub> ) | 50 $\mu\text{g}/\text{m}^3$ |

**Table 10. Twenty-four Hour Average Particulate Matter Criterion**

| POLLUTANT      | MAXIMUM INCREASE<br>IN DEPOSITED DUST<br>LEVEL | MAXIMUM TOTAL<br>DEPOSITED DUST<br>LEVEL |
|----------------|------------------------------------------------|------------------------------------------|
| Deposited dust | 2g/m <sup>2</sup> /month                       | 4g/m <sup>2</sup> /month                 |

*Note: Dust is assessed as insoluble solids as defined by AS 3580.10.1-1991*

**Table 11: Annual Average Dust Deposition Criteria**

### 5.5.3 Issues Raised In Submissions

Issues raised include:

- Impact of dust on general residential amenity; and
- Impact of dust on property values.

### 5.5.4 Assessment of Key Issues

The EIS predicts that the greatest impact on air quality will occur during stage 3 of the development. All residences are predicted to:

- Experience PM<sub>10</sub> concentrations below the 50  $\mu\text{g}/\text{m}^3$  goal for 24-hour average PM<sub>10</sub> concentration;
- Achieve an increase in annual average PM<sub>10</sub> concentrations of less than 5  $\mu\text{g}/\text{m}^3$ , compared to an increase of 17  $\mu\text{g}/\text{m}^3$  that would be permitted to remain within the DEC's goal of 50  $\mu\text{g}/\text{m}^3$ ;

- Achieve an increase in annual average TSP concentrations of less than 5 ug/m<sup>3</sup>, compared to an increase of 58 ug/m<sup>3</sup> that would be permitted to remain within the National Health and Medical Research Council's (NHMRC's) goal of 90 ug/m<sup>3</sup>; and
- Achieve an increase in annual average dust deposition of less than 0.5 g/m<sup>2</sup>/month, compared to an increase of 2 g/m<sup>2</sup>/month that would be permitted to remain within the DEC's goal of 4 g/m<sup>2</sup>/month.

The Department is satisfied with the air quality impact assessment and that the relevant air quality goals will be achieved by the development provided the mitigation measures proposed by the Applicant are implemented.

#### 5.5.5 Conclusion

The Department has assessed the key air quality issues and has identified the impacts associated with this aspect of the proposal. To ensure that air quality issues are suitably managed, the conditions of consent require the Applicant to:

- Carry out the development in a way that prevents and/or minimises air pollution;
- Ensure all vehicles carrying a load, that may generate dust, are covered;
- Establish air quality monitoring stations at the residences identified as Tannhausen and Mountview; and
- Establish and implement a detailed Air Quality Monitoring Program.

### 5.6 Visual Amenity

#### 5.6.1 Visual Assessment

International Environmental Consultants identified areas of high visual impact associated with both areas of open cut due to the topography of the mining areas and the proximity to these of relatively flat areas to the west and beyond these, of vantage points from such areas at Haystack Mountain. The assessment identified a number of measures that would be undertaken to reduce the impacts including construction of a sight mound, screening through minimising clearing and also through progressive rehabilitation and redirection of lighting away from areas of public access and private residences.

#### 5.6.2 Issues Raised in Submissions

Submissions from the general public raised two concerns:

- Effects of light pollution at night; and
- Visual effects of open cut mining on properties west of the mine.

#### 5.6.3 Consideration of Key Issues

##### Night Lighting

The issue of night lighting was raised directly with the Applicant during the assessment period. Night lights at the mine that were not required were turned off and it was indicated that effects would be minimised in the future.

##### Visual Effects from open cut mining

The open cut mine areas are located some distance from local roads. The Department considers that the visual impact at these roads is manageable through screening and bunding.

In relation to the visual impact at properties from the mine, mitigation measures provided by the Applicant would reduce the impacts at some locations. To provide measures to residents as mining progresses, the Applicant has agreed to undertake measures to minimise the visual impact of the development if requested to do so by a residence in the visual catchment.

#### **5.6.4 Conclusion**

The Department is satisfied the visual impacts of the proposal would be minimised. The Applicant should be required to:

- Avoid night lighting when unnecessary;
- Install vegetated bunds at strategic locations around the development; and
- Address residential impacts in agreement with the landowner.

### **5.7 Road Transport**

#### **5.7.1 Road Transport Assessment**

The mine transports, on average, approximately 100,000 tpa of coal to local markets by the use of trucks travelling on local and regional roads. The main destinations for local coal sales are the Kandos Cement Works, and on occasion, Delta Electricity and other local industries. Coal is also supplied to the Lime Works at Charbon, but the transport of coal is conducted entirely on private roads and does not impact upon the public road network.

The proposed development of the Southern open cut will not alter the tonnages of coal transported from Charbon Colliery to local markets, nor the routes taken by trucks transporting the coal. Impacts on local roads will remain unchanged, although the length of time of road transport of coal will be extended.

The Applicant proposes to gain access to the Southern Open Cut for its workforce by the utilisation of Brogans Creek Road and Mount View Road. This access route would be used by light vehicle only, with no heavy trucks to use the main entry to Charbon Colliery and internal access roads to gain access to the Southern Open Cut.

The Applicant proposes to upgrade 2 km of Brogans Creek Road and 2.9 km of Mount View Road to enable all weather and safe use of the route from Cooper Drive to the Southern Open Cut for employees and contractors and to allow safe use of the roads by existing landowners serviced by these roads.

#### **5.7.2 Issues Raised in Submissions**

One of the public submissions and Rylstone Council raised the issue of impacts to the local road system. The private submissions were concerned with the safety and amenity issues of the use of Brogans Creek and Mount View Roads by light vehicles accessing the Southern Open Cut and submitted that the Applicant should seal all of Mount View Road.

Council was raised the impact of the development as a concern in respect of both the use of light vehicles for a new access route to the colliery and the continuing impacts of the transport of coal from the colliery to local markets on local roads.

### 5.7.3 Consideration of Key Issues

The Applicant recognises the impact of creating a new access to the Southern Open Cut by the use of Brogans Creek and Mount View Roads and has made provision for the upgrade and maintenance of these roads as a component of the proposed development. Council has provided GTAs for these roadworks under section 138 of the *Roads Act 1993*.

Council has a Section 94 Developer Contributions Plan that calculate a contribution of \$1,425 from the Applicant for rural roads, \$4,427.50 for bushfire services and \$3,109.26 for community facilities. The Applicant has offered to provide an upfront lump sum contribution of \$15,000 to cover all of the section 94 contributions and an additional amount for the Council to apply at its discretion.

The Section 94 Plans provide for a contribution of \$0.035 per tonne per kilometre for coal transported on local roads. The contribution is to provide for the maintenance of roads impacted by the haulage of coal. The Applicant has agreed to make such a contribution.

Council has made strong representations to the Department that the Applicant should be responsible for the upgrading of all local roads used in the delivery of coal to domestic markets. Council has provided calculations of the costs involved to upgrade 1 km of Charbon Road, 6.85 km of Cooper Drive and 18 km of Bylong Valley Way. Council has indicated that it believes an upfront lump sum of \$300,000 is an appropriate contribution. It is Council's view that the lump sum contribution can form one of the General Terms of Approval of the section 138 approval under the *Roads Act 1993*.

The Department's view is that the request for a \$300,000 contribution is not a reasonable request as there will be no increase in the amount of coal to be transported on public roads, should consent be granted from the development. The Department's view that it is reasonable to seek contributions for the maintenance of roads used to transport coal to domestic markets and that this matter is dealt with under the section 94 contribution of \$0.035 per tonne per kilometre for use of local roads.

The Applicant has sought development consent for road works on Brogans Creek and Mount View Roads and it is appropriate that Council supply its GTAs for these roadworks.

The Applicant has not sought to undertake roadworks, as a component of this development, on Charbon Road, Cooper Drive or Bylong Valley Way. The Department's view is that it is not reasonable for Council to apply for an upfront contribution for works on these roads by the use of GTAs required under section 138 of the *Roads Act 1993*.

The Applicant has agreed to a condition of consent that requires the payment to Council of \$0.05 per tonne of coal transported on local roads. The Department's view is that this represents a reasonable contribution from the Applicant and has provided a condition that directs the payment be directed to the upgrade and maintenance of

the bridge over the railway line at Charbon Village, or towards other works agreed between the Applicant and Council.

#### 5.7.4 Conclusion

The Department has assessed the key road transport issues and has identified the impacts associated with this aspect of the proposal. To ensure that road transport issues are suitably managed, the conditions of consent require the Applicant to:

- Provide for the upgrade of Brogans Creek and Mount View Roads;
- Provide to Council a contribution of \$0.035 per tonne per kilometre for coal transported on local roads;
- Provide to Council a contribution for rural roads within an amount of \$15,000 for bushfire services and community facilities; and
- Provide to Council a contribution of \$0.05 per tonne for coal transported on local roads, to be utilised for the upgrade or maintenance of Charbon Road or Cooper Drive at Charbon Village.



## 6. **SECTION 79C EVALUATION**

### 7.1 *Matters for consideration - General*

In determining a development application, a consent authority is to take into consideration such of the following matters as are of relevance to the development the subject of the development application:

(a) *the provisions of:*

- (i) *any environmental planning instrument, and*
- (ii) *any draft environmental planning instrument that is or has been placed on public exhibition and details of which have been notified to the consent authority, and*
- (iii) *any development control plan, and*
- (iv) *the regulations (to the extent that they prescribe matters for the purposes of this paragraph), that apply to the land to which the development application relates,*

The Department's consideration of these matters is contained in Section 3.1 to 3.7 of this Report. The Department is satisfied that all relevant planning issues have been addressed and considered in the determination of the development application. The Department concludes that the proposal is consistent with the aims, objectives and provisions of all the applicable planning instruments, plans and policies.

(b) *the likely impacts of that development, including environmental impacts on both the natural and built environments, and social and economic impacts in the locality;*

The likely environmental impacts of the proposal are considered and assessed in Sections 4 and 5 of this Report. The Department has considered all the environmental, social and economic impacts of the proposal and concludes that the proposed development can be managed, subject to the imposition of the recommended conditions of consent. The recommended conditions of consent address performance criteria, environmental management plans, environmental monitoring and environmental auditing, which would apply to the development, if approved.

(c) *the suitability of the site for the development;*

The suitability of the site for the development is considered in Section 2.7 and Sections 3 and 5 of this Report. The proposal is consistent with land use objectives. The potential impacts of the proposal can be effectively managed. The location of the mine extension has been constrained by availability of near surface coal, flora and fauna habitat and existing land uses. The Department concludes, on the basis of this assessment, that the site is suitable for the proposal.

(d) *any submissions made in accordance with this Act or the regulations;*

A detailed discussion of the issues raised in submissions is contained in Section 4 and referred to in Section 5 of this Report. Submissions were received from government agencies and members of the public. The issues raised in the submissions have been addressed in this assessment of the proposal and/or appropriate conditions of consent have been incorporated to manage these concerns and potential impacts.



*(e) the public interest.*

The public interest of the proposal is considered in Section 1 through to Section 5 of this Report. It is considered that the proposal is consistent with State and regional planning objectives relating to environmental management, sustainable economic development and employment generation. The Department therefore considers that the proposal is in the public interest and all environmental, economic and social issues have been addressed in the assessment of the proposal

## **7. SCOPE OF CONDITIONS OF CONSENT**

The recommended conditions of consent at Attachment “A” have been prepared taking into consideration the General Terms of Approval and other issues raised by Government agencies, Council and all other submitters including land owners.

The recommended conditions of consent provide for appropriate management of adverse environmental impacts associated with the development, provide environmental criteria which define acceptable levels of performance; require environmental monitoring, reporting and independent review and set requirements for mine infrastructure provision.

The Department has undertaken extensive consultation with the Applicant concerning the content and intent of the conditions of consent.

## **8. CONCLUSION**

The Department considers that there are no environmental impacts from the proposed Open Cut Southern Extension of Charbon Colliery that could not be effectively managed through the recommended consent conditions. The proposal is consistent with State, regional and local planning objectives.

## **RECOMMENDATION**

It is RECOMMENDED that the Minister approve the development application (DA 122-3-2003) for the proposed Open Cut Southern Extension of the Charbon Colliery as submitted by Charbon Coal Pty Limited subject to the attached conditions of consent.

## **Endorsed**

Chris Wilson  
**Director**  
**Major Development Assessment**

Sam Haddad  
**Executive Director**