## **Muswellbrook Shire Council**

**ENQUIRIES** 

PLEASE ASK FOR

Chris Gidney

DIRECT

02 65493770

OUR REFERENCE

140.00

YOUR REFERENCE



MUSWELLBROOK SHIRE COUNCIL ADMINISTRATION CENTRE MUSWELLBROOK NSW 2333 ABN 86 864 180 944

19 December, 2001

2 0 DEC 2001

Mine Manager Muswellbrook Coal Pty Limited PO Box 123 Mt/SWELLBROOK NSW 2333

Dear Mr Duffy

Re: Planning Focus Meeting – 14 November 2001

I refer to previous discussions regarding the results of the Planning Focus Meeting held on 14 November 2001 and advise that Planning NSW has requested Council to indicate the progress being taken in the completion of the relevant development application and environmental impact statement (EIS) for the proposed extension of the Muswellbrook No.1 and No.2 opencut areas.

I have enclosed a copy of the summary sheet which lists the issues raised at the November Planning Focus Meeting (PFM). It is understood that your Company would be seeking the Director General's requirements for the preparation of the EIS after the PFM. Would you kindly contact the Department to resolve this matter.

I have taken the liberty of forwarding a copy of the summary sheet to the Agencies which attended the PFM.

Please contact me on 65493770 if you require any further information in this matter.

Yours faithfully

CA(Gidney \ MANAGER ENVIRONMENTAL SERVICES

Copy to:

HLA - Envirosciences

PO Box 73

HRMC NSW 2310

The Executive Director

Planning NSW GPO Box 3927

SYDNEY NSW 2001

E:\CHR!S\2001.12.19\_Muswellbrook Opencut extensions\_140.00.doc

## MUSWELLBROOK COAL COMPANY PLANNING FOCUS MEETING

#### **NOTES / COMMENTS:**

November 14.th 2001

#### **ENVIRONMENTAL PROTECTION AUTHORITY - Bob Karison**

Information concerning cumulative mining areas. Site specific and cumulative with other operations.

- MANAGEMENT PROGRAMS:
   Air quality, water, noise, spontaneous combustion. Heating effects of underground coal. Monitoring program limit bm 10
   WATER BALANCE:
   Flood flows Discharge into the Hunter River ( no guarantees )
   Tributary impacts
- □ NOISE: Industrial noise policy on / off site
- □ Predictions / Goals
- BLASTING: Impacts on surrounding rural environments to be monitored as well as Queen Street.
- □ Eg: Sandy Creek Road, Limestone Road at McCully's Gap.
- Networks and technology used for monitoring impacts.
- □ Ecological Sustainable Development, Ozone and Green House gases.

## □ DEPARTMENT OF LAND AND WATER CONSERVATION- Fergus Hancock

- □ Will be Integrated Development under Water Act Section116
- OPEN CUTS:
- Surface water and Underground water.
- Aspects of rehabilitation
- Pit implacements
- Segregation and mixing of overburden
- Affected inland structures eg: Crown Roads and / or road closures.
- Revegetation programs

### □ DEPARTMENT OF MINERAL RESOURCES - David Agnew

- □ Mining requirements and Mining leases
- Standard issues to be addressed in the E.I.S.:
- □ Issues concerning ground heating, dust, and soil movements
- □ Final landform details of underground / open cut mining
- Integration of ground movements and mixtures
- □ E.I.S. should address Integrated open cut issues
- Conceptional understanding in pit mine sequencing
- Details of final land form and post mining use

#### **DEPARTMENT OF AGRICULTURE – Glenda Briggs**

- Final Closure issues farming, rural properties, crops, studs etc.
   Linkage of mine rehabilitation areas
   Future Land use ie. Waste areas and their impacts on vineyard operations
- 2. Ecological issues rehabilitation programs and their relationships with vegetation areas in the locality

#### MINE SUBSIDENCE - Garry Moore

- Approval required for any new infrastructure
- Program for moving cyclone fence surrounding subsidence areas

## NATIONAL PARKS AND WILDLIFE SERVICE – Tania Koeneman

- Aboriginal involvement as part of the consultation processes
- □ Archaeological assessments to take place (Cultural Assessment)
- □ Subsidence to be researched and managed
- Requirements of Aboriginal assessments of over-all to be assessed
- Voluntary employment
- □ Section 90 Consent to Destroy to be considered (2 year process)

## ROADS AND TRAFFIC AUTHORITY - Greg Gola

Two main issues:

- 1. Traffic Impacts to be addressed -: Terms of New England Highway, Muscle Creek Road, and the Private Haul Road
- 2. Muswellbrook By-Pass
- Study taken on behalf of Government. Comments from this study have been taken into account.
- 2 options have been severed because of these comments
- The current preferred option may be impacted on by the proposal

## WONNARUA TRIBAL COUNCIL - Thomas Miller

- Archaeological assessment of areas of disturbance
- □ Employment: recognise as separate issue to E.I.S.
- □ Freehold Land Titles

## WONARUAH LAND COUNCIL - Noel Downs

- □ Habitat, particularly 'A' area: Habitat will disappear with open cut
- □ Trees: Defoliation occurance
- Recycling of timber
- □ Employment issues

### COAL COMPENSATION BOARD - Vicki Golin

- Asked about Mining Issues not relating to this development
- " "Anvil Hill" The viability of area 'B'

## MUSWELLBROOK SHIRE COUNCIL - Brian Gibson

- □ Synoptic Plan
- Upper Hunter Cumulative Impact Study
- □ Roads issue Co-ordination of roads authority
- Use of final land form ie: Expansion of waste fill areas

## Muswellbrook Shire Council

ENQUERES

PLEASE ASK FOR Chris Gidiney

DIRECT

was the house

OUR REFERENCE

KARRETERKE



MUSWELLEFORM SHIPE COLUNCIL ACHINISTRATION CENTRE MUSWELLEFORM MSW 2303 ASM BB 864 130 344

10 April, 2002

The Mine Manager
Muswellbrook Coal Company Pty Ltd
PO Box 123
MUSWELLBROOK NSW 2333

12 AFF and

Dear Sir.

#### Use of Proposed Void as Waste Management Facility – No. 1 Open Gut Extension Project

I apologise for the delay in replying to your letter dated 18 March, 2002 advising Council that the draft Environmental Impact Statement (EIS) for the subject development is nearing completion. It is understood that your Company will be making a presentation to Council's Environment Committee on Monday 6 May, 2002.

in response to your offer to use the remaining void after the project is completed for purposes of waste disposal would confirm that Council would be extremely interested in obtaining the void for waste disposal purposes. However, at this stage Council would not be in a position to estimate the volume of landfill air space required or the timing of landfilling as requested in your correspondence.

I have forwarded a copy of your correspondence to Council's Manager of Water and Waste for his attention and subsequent response. The information provided by Mr Hamilton will be noted by Council in its use and timing of the residual void after your project is completed.

Under the circumstances it may be beneficial for you to advise in the Draft EIS that the remaining void will be used for future waste purposes management by Council.

Thank you for your advice in this matter.

Yours faithfully

C.A. Gidney

MANAGER, ENVIRONMENTAL SERVICES

(cag.msh)

conception of a confidence of the confidence

ALL COMMUNICATIONS TO SE ADDRESSED TO THE GENERAL MANAGER PO SICK 122 MLSWELLSROOK NEW 2003 TELEPHONE: (92) 6549 3700 FAX: (92) 9549 3701 EMAIL: COMMUNICATION OF THE PROPERTY WEB: WWW.TUISWERDOOK.NEW.GOV.BU Amanda Payton 6549 3775

520/21



May 22, 2002

Mr Shane Duffy Mine Manager Muswellbrook Coal Company Limited PO Box 123 MUSWELLBROOK NSW 2333

Dear Sir,

### Re: Proposed Extension to the Muswellbrook No. 1 Open Cut

Thank you for your presentation to Council's Environment Committee on Monday 6<sup>th</sup> May 2002 in relation to the proposed extensions to the Muswellbrook No. 1 Open Cut Coal Mine. Council's Environment Committee undertook an assessment of the draft EIS for the proposal at a meeting on Monday 20<sup>th</sup> May 2002.

The Committee has raised a number of issues which should be included in the final EIS to be lodged with the development application. The issues raised by the Committee are detailed below:

#### Dust:

 The Committee requests advice from the consultants in respect of the applicability of the data from the Mount Arthur North meteorological station on Mcleans Hill being used as the weather data on which the noise and dust modelling was carried out. The appropriateness of this data should be explained in the final EIS.

Transport:

 The Committee requests MCC to hold further discussions with the RTA in relation to the proposed by-pass routes. This should be further examined in the final EIS.

<u>Lighting:</u>

 All lighting should be properly treated (eg shields / hoods) to minimise the impact of direct light off site.

#### Noise:

 MCC should consider the fitting of acoustical measures to mining equipment in order to reduce the impact of noise from mining operations, particularly in the first couple of years when the operations are closest to the North Muswellbrook residential area.

- MCC should ensure procedures are in place for the loading / unloading of vehicles to minimise noise impacts on nearby residential areas.
- In section 3.3.5, inversions are stated to occur for approximately 20 25% of mornings and evenings in winter. However, in section 3.10.1, they are stated as occurring greater than 25% of mornings and evenings in winter. The frequency needs to be clarified and consistent.
- Section 3.10.2 Table 3.6 details the measured ambient noise levels at a number of residences. Further details should be included in relation to the comparably higher levels measured at residence No. 17.

Appendix B of Appendix H dasis study Noise logger data are not in the EIS.

#### Water:

• There are concerns with the discharge of saline mine water under the HRSTS into an unnamed tributary of Muscle Creek, including the proposed increase in allowable discharge quantity from 1ML/day to 175ML/day. The EIS should further detail the potential impacts of this saline water on the aquatic environment of the unnamed tributary and on Muscle Creek, given the ability of the tributary and creek to dilute such saline water is more limited than that of the Hunter River

#### Heritage:

 MCC are advised that further information regarding the non-aboriginal heritage items may be obtained from the Muswellbrook Historical Society, including the year in which the domestic structure, culvert and stockyards were erected etc.

#### Rehabilitation:

Further information is required on the proposed rehabilitation of the No. 1
 Open Cut void, and the rehabilitation of the Extension A and Extension B areas of the proposal.

#### General Issues:

- The EIS does not seem to commit to the implementation of recommendations and actions to be taken to minimise impact on surrounding residences. For example, Section 7.7.4 states that "monitoring should be carried out....", Section 7.7.5 states "it is recommended that flow meters be installed ......". The EIS should commit to undertaking these works (and others as detailed throughout the entire report) by stating "monitoring will be carried out....." and "flow meters will be installed....".
- The EIS does not adequately address low frequency vibration.
- Appendix C and D have been reversed in relation to the information in the front of the document.
- MCC should consider making a commitment to providing their monitoring data on the company Internet site for the information of the public.

The above issues are subject to a report to the 17<sup>th</sup> June 2002 Council meeting recommending the above suggestions be included in the formal EIS. You will be advised shortly after the June Council meeting of Council's decision regarding this matter.

In the meantime, should you have any questions, please contact me on (02) 6549 3775.

Yours faithfully

Amanda Payton ENVIRONMENT OFFICER

## **Muswellbrook Shire Council**

20 JUN 2002

ENQUIRIES
PLEASE ASK FOR

DIRECT

OUR REFERENCE

Amanda Payton 6549 3775

520/021



MUSWELLBROOK SHIRE COUNCIL ADMINISTRATION CENTRE MUSWELLBROOK NSW 2333 ABN 86 864 180 944

June 18, 2002

Mr Shane Duffy Mine Manager Muswellbrook Coal Company PO Box 123 MUSWELLBROOK NSW 2333

Dear Sir,

#### RE: DRAFT EIS - MUSWELLBROOK COAL NO.1 OPEN CUT EXTENSION

I refer to the above and Council's previous correspondence dated 22<sup>nd</sup> May 2002. As you have been previously advised, Council's Environment Committee has assessed the draft EIS for the proposed Muswellbrook Coal No. 1 Open Cut Extension.

The matters raised by the Environment Committee were subject to a report to Council at the 17<sup>th</sup> June 2002 Council meeting. Council adopted the recommendations of the Environment Committee at the meeting and accordingly you are now advised that the following matters should be addressed in the final EIS for the proposed development:

#### **Dust:**

 The Committee requests advice from the consultants in respect of the applicability of the data from the Mount Arthur North meteorological station on Macleans Hill being used as the weather data on which the noise and dust modeling was carried out. The appropriateness of this data should be explained in the final EIS.

#### Transport:

 The Committee requests MCC to hold further discussions with the RTA in relation to the proposed by-pass routes. This should be further examined in the final EIS.

#### Lighting:

 All lighting should be properly treated (eg shields / hoods) to minimise the impact of direct light off site.

#### Noise:

 MCC should consider the fitting of acoustical measures to mining equipment in order to reduce the impact of noise from mining operations, particularly in

E:\Amanda\Coal Mines\Muswellbrookextensionltr180602.doc

- the first couple of years when the operations are closest to the North Muswellbrook residential area.
- MCC should ensure procedures are in place for the loading / unloading of vehicles to minimise noise impacts on nearby residential areas.
- In section 3.3.5, inversions are stated to occur for approximately 20 25% of mornings and evenings in winter. However, in section 3.10.1, they are stated as occurring greater than 25% of mornings and evenings in winter. The frequency needs to be clarified and consistent.
- Section 3.10.2 Table 3.6 details the measured ambient noise levels at a number of residences. Further details should be included in relation to the comparably higher levels measured at residence No. 17.
- Appendix B of Appendix H (Noise study) Noise logger data are not in the EIS.

#### Water:

• There are concerns with the discharge of saline mine water under the HRSTS into an unnamed tributary of Muscle Creek, including the proposed increase in allowable discharge quantity from 1ML/day to 175ML/day. The EIS should further detail the potential impacts of this saline water on the aquatic environment of the unnamed tributary and on Muscle Creek, given the ability of the tributary and creek to dilute such saline water is more limited than that of the Hunter River.

#### Heritage:

 MCC are advised that further information regarding the non-aboriginal heritage items may be obtained from the Muswellbrook Historical Society, including the year in which the domestic structure, culvert and stockyards were erected etc.

#### Rehabilitation:

Further information is required on the proposed rehabilitation of the No. 1
 Open Cut void, and the rehabilitation of the Extension A and Extension B areas of the proposal.

#### General Issues:

- The EIS does not seem to commit to the implementation of recommendations and actions to be taken to minimise impact on surrounding residences. For example, Section 7.7.4 states that "monitoring should be carried out....", Section 7.7.5 states "it is recommended that flow meters be installed .......". The EIS should commit to undertaking these works (and others as detailed throughout the entire report) by stating "monitoring will be carried out....." and "flow meters will be installed....".
- The EIS does not adequately address low frequency vibration.
- Appendix C and D have been reversed in relation to the information in the front of the document.
- MCC should consider making a commitment to providing their monitoring data on the company Internet site for the information of the public.

Council invites Muswellbrook Coal Company to finalise the EIS for the proposed development, taking into account the issues raised above, and to submit a Development Application for the proposal. Muswellbrook Council is the consent authority for the proposed development.

Should you have any questions regarding this matter please don't hesitate to contact me on (02) 6549 3775, or Council's Manager, Environmental Services Mr Chris Gidney on (02) 6549 3770.

Yours faithfully

Amanda Payton

**ENVIRONMENT OFFICER** 



## MUSWELLBROOK COAL COMPANY LIMITED

ABN 32 000 009 521

CN 000 009 521

Reference 4.910/sgd9342

REGISTERED OFFICE Administration Office No. 2 Open Cut Mine Coal Road Muswellbrook NSW 2333

POSTAL ADDRESS PO Box 123 Muswellbrook NSW 2333

TELEPHONE: 02 65432799

FACSIMILE: 02 65425010

17 June 2002

The General Manager Muswellbrook Shire Council PO Box 122 Muswellbrook NSW 2333

Attention: Ms Amanda Payton

Dear Sir

#### Proposed Extension to the Muswellbrook No. 1 Open Cut Coal Mine

We refer to your letter of 22 May 2002 to Muswellbrook Coal Company Limited (MCC) regarding the above. We wish to respond to the matters raised in that letter, being the matters raised by the Council's Environmental Committee. It is proposed to respond to the matters in the same order and under the same headings as those used in the letter of 22 May 2002.

#### Dust

The appropriateness of the use of meteorological data from Macleans Hill as the meteorological data set for noise and dust modelling was raised as an issue. This issue was also raised by way of questions on the night of the presentation by MCC to the Council's Environment Committee on 6 May 2002.

Mr C. Phillips of HLA-Envirosciences conveyed the request for a justification of the use of Macleans Hill data to Dr Nigel Holmes of Holmes Air Sciences on the following day, 7 May 2002. Dr Holmes considered the matter and provided the following information (verbally) during a discussion of the issue.

The first point made was that the dust modelling relies on access to hourly data of windspeed and wind direction for an entire year. The data should be as complete as possible with as few as possible times when data was unavailable due to equipment malfunctions. The data available from Macleans Hill for 1999/2000 was of a standard suitable for use in air quality/dust modelling.

The second, and main, point made by Dr Holmes was that the data from Macleans Hill are representative of the Muswellbrook district, including the location of the MCC No. 1 Open Cut Extension and the town of Muswellbrook.

U888/1 17 June 2002 Muswellbrook Shire Council Page 2.

Dr Holmes stated that there were at least 12 locations within 15 km of Muswellbrook where instruments were used to measure wind speed and wind direction. Without being a complete list of these sites they include:

- Drayton Coal Mine;
- Bayswater Colliery (two sites);
- Macquarie Generation site off Thomas Mitchell Drive;
- Bengalla Mine meteorological station;
- Bengalla Mine meteorological mast (measured at three elevations);
- Mt Pleasant Mine project;
- Dartbrook Coal's meteorological station; and
- Meteorological station on Roxburgh Road.

Dr Holmes is familiar with the data available from these sources and chose the Macleans Hill data as being representative. None of the data obtained from the meteorological stations varied significantly from one and other. All meteorological stations displayed the overwhelming dominance of northwesterly winds in winter and southeasterly winds in summer.

Attached to this response are a series of windroses sourced from EISs. The first is the data used in the assessment of air quality for the No. 1 Open Cut Extension and has been sourced from the meteorological station at Macleans Hill (Attachment A). Attachment B is from the Dartbrook Extended EIS and utilises data collected from the Mt Pleasant meteorological station. Attachment C presents windroses from the Bayswater Meteorological Station. Attachment D has been sourced from the Bengalla EIS and presents information from Jerrys Plains and Ravensworth South. All of the wind roses indicate the predominance of northwesterly and southeasterly winds. The winds from the north east are largely absent. The pattern is consistent at all meteorological stations and indicates that meteorological data from Macleans Hill is representative of the Muswellbrook district and the No. 1 Open Cut Extension of MCC.

The windroses for Jerrys Plains and Ravensworth South have been included to indicate that the predominance of northwesterly winds in winter and southeasterly winds in summer is a very strong feature of the entire Upper Hunter Valley and that Muswellbrook will experience these dominant wind patterns. Importantly, there is a consistent pattern of an almost absence of winds from the northeast.

The noise assessment did not use data from Macleans Hill but relied upon data published by the Environment Protection Authority on meteorological conditions in the Hunter Valley. There was no significant difference in the meteorological data used. The noise assessment relied more on statistical occurrence of winds and temperature inversions and did not require hourly meteorological data on wind speed and wind direction.

It is recognised site-specific meteorological data is preferable to data that, although representative of the district, is not obtained from the site of proposed operations. MCC are in the process of installing an anemometer to record wind speed and wind direction at a site adjacent to Bimbadeen homestead, which is at the approximate geographic centre of the No. 1 Open Cut Extension, and this data will be available prior to and during the proposed extension.

U888/1 17 June 2002 Muswellbrook Shire Council Page 3.

#### Transport

MCC were requested to hold further discussions with the Roads and Traffic Authority (RTA) in relation to the proposed by-pass routes.

C. Phillips attended a meeting with RTA Officers, Alan Bowditch and Greg Gola, at the Darby Street, Newcastle Offices of the RTA on 23 May 2002.

At that meeting it was explained by the RTA that three preferred routes for the by-pass had been placed on public display from December 2000 to February 2001 and public comment sought. Two of the preferred routes passed across the lands known to be affected by "potholing" subsidence and spontaneous combustion and these routes are no longer being considered by the RTA.

The proposed by-pass is totally dependant upon Federal roads funding. \$100,000 has been allocated for the 2002/2003 financial year. These funds will be utilised to produce a Route Investigation Report for a preferred by-pass road alignment which should be available by the end of 2002. This report, once drafted, will be submitted to the Federal Department of Transport and Regional Services for acceptance and approval before going on public display and seeking public comment. The routes that the RTA are currently examining do not impact upon the No. 1 Open Cut Extension proposal.

#### Lighting

#### All lighting should be properly treated to minimise the impact of direct light offsite.

This is a request that MCC is able to meet by a continuation of current procedures and practices. The greatest risk of direct light "spill" from the site is in respect of mobile lighting plant used to illuminate open cut mining operations. If this plant is located on the highwall, then it is important to ensure the light is directed down onto the working area. Whilst, at times, the lighting plant will be located on the highwall it is more effective to locate the lighting plant at the same level as the mining operations and behind the mining equipment so as to "back light" the mining face. This is often a safer way to conduct mining operations as it has the effect of reducing the glare of lights shining directly into the eyes of machine operators.

The overall effect is that mobile lighting will tend to be used within the mining pit where direct impact of light off site is eliminated. The existing spoil emplacement to the west of the No. 1 Open Cut void provides a barrier to light, noise and dust between the No. 1 Open Cut Extension and North Muswellbrook.

There will be no new infrastructure constructed that will require lighting. There will be no change to the lighting requirements or its location for infrastructure such as workers' amenities, workshops or the Coal Handling Plant.

#### Noise

1. MCC should consider the fitting of acoustical measures to mining equipment to reduce the impact of noise from mining operations.

MCC will undertake economically feasible measures to reduce noise from its mining equipment. To this end acoustical testing of its fleet of 11 Komatsu 730E (190 tonne (t) capacity) dump trucks has been undertaken by Komatsu. MCC are waiting on the recommendations from Komatsu in respect of potential modifications to the mufflers and are prepared to implement those recommendations.

U888/1 17 June 2002 Muswellbrook Shire Council Page 4.

In respect of noise impacts on North Muswellbrook in the early years of the proposal the following operational undertakings by MCC are just as important, if not more important, than acoustical modification of equipment in reducing noise levels:

- Always conducting mining operations below a 10 m working face in the north western "tongue" of the No. 1 Open Cut Extension;
- Minimising blasting operations in the north-western tongue; and
- All overburden dumping to be in-pit, behind the existing spoil pile to the west of the existing No. 1 Open Cut void.
- 2. MCC should ensure that procedures are in place for the unloading/loading of vehicles to minimise noise impacts on nearby residential areas.

MCC undertakes to develop procedures and train vehicle operators in working methods which minimise noise impacts. The use of hydraulic excavators will enable overburden to be "placed" rather than "dumped" into haul trucks as is the case with electric shovels. Overburden dumping with be "inpit" and noise from this operation will be shielded from North Muswellbrook by the walls of the pit and the existing spoil emplacement to the west of the existing No. 1 Open Cut void.

3. A discrepancy in the stated frequency of temperature inversions occurring in winter between Sections 3.3.5 and 3.10.1 was identified.

This was rectified by altering the words in Section 3.3.5 to be consistent with those in Section 3.10.1.

4. Table 3.6 in Section 3.10.2 indicates that higher ambient noise levels were recorded at the Colvin residence (No. 17) compared to the Collins and Tuckey residences of Queen Street.

The L90 (night) noise levels are of greatest interest/importance as they are utilised in the establishment of applicable noise criteria under the EPA's Industrial Noise Policy (INP). Table 3.6 indicates median noise levels of 30 dB(A) for Collins, 29 dB(A) for Tuckey and 37 dB(A) for Colvin. All residences are in Queen Street.

The higher levels at the Colvin residence are unexplained. The data recorded was relatively constant over the seven days of data acquisition with no skewing of the data due to one or two days of abnormally high noise levels. No electric transformers or other obvious noise sources were in evidence in the vicinity of the Colvin residence.

Data was initially obtained from the Collins and Colvin residences in December 2001. When the data were reviewed and the difference in noise levels between the north of Queen Street (Collins) and the south of Queen Street (Colvin) noted it was decided to obtain data from an approximate mid-point along Queen Street. Data was obtained from the Tuckey residence in February 2002 which was similar to the data obtained from the Collins residence.

The approach taken to the range of night-time background noise levels for Queen Street and the unexplained higher levels at the Colvin residence was a conservative one. The calculation of the relevant noise criteria for all of Queen Street (effectively all of the Muswellbrook residential area for

U888/1 17 June 2002 Muswellbrook Shire Council Page 5.

this study) was based upon the noise levels recorded at the Collins and Tuckey residences and **not** the Colvin residence. That is, a criterion of 35 dB(A) was used for all of Queen Street. The text of the EIS and the specialist noise assessment will be altered to clearly indicate the approach taken in determining the noise criterion for Queen Street residences.

#### 5. Noise logger data are missing from Appendix H - Noise Study

This omission will be rectified in the final version of the EIS.

#### Water

More details of the discharge of saline mine water to an unnamed tributary of Muscle Creek were requested.

The No. 1 Open Cut Extension proposal does not include the increased discharge of saline minewater into the Muscle Creek catchment.

MCC have been granted development consent for the proposed Sandy Creek Colliery. A component of that consent was the construction of a minewater discharge dam on an unnamed tributary of Muscle Creek. MCC have had discussions with the EPA concerning the potential construction of the discharge dam and the potential for minewater discharges. The minewater that potentially may be discharged would be sourced from underground mine workings that would provide access to the Sandy Creek Colliery. There are no underground mine workings that need to be dewatered to allow the No. 1 Open Cut Extension to proceed.

As part of the application process to gain approval from the EPA and Department of Land and Water Conservation for minewater discharges, MCC would need to undertake a Tributary Impact Study (TIS). The TIS would consider any impact on water quality, the geomorphology of the stream caused by increased flow rates and any impact on infrastructure such as creek crossings. Additionally, any approved discharge would be in accordance with the Hunter River Salinity Trading Scheme (HRSTS).

MCC is not seeking to modify its current EPA Environment Protection Licence as part of the No. 1 Open Cut Extension proposal. The current conditions which allow 1 ML/Day discharge under flood flow conditions will remain unchanged by this proposal.

#### Heritage

Advice was given that the Muswellbrook Historical Society would have additional information on non-Indigenous heritage items located to the south of Coal Road.

C. Phillips contacted Mr Rob Tickle of the Muswellbrook Historical Society by telephone on 24 May 2002. Mr Tickle was able to provide the following information:

- The heritage items south of Coal Road are located on a 3,000 acre parcel of land that was owned by the Bowman family until its subdivision in 1954.
- The land containing the heritage items was purchased by Alan Cowley who resided at Bayswater Station, located in the Ravensworth District. The Muswellbrook land proved to be difficult to work from the Ravensworth residential base and a stockman's hut was constructed in either 1954

U888/1 17 June 2002 Muswellbrook Shire Council Page 6.

or 1955. The hut was constructed of sawn wooden slabs with corrugated iron roof. This structure was referred to as a "former domestic structure" in the archaeological study. The construction technique of the slab hut is more reminiscent of much earlier times than 1954/55 which led to an earlier time of construction being assigned by the archaeologist undertaking the survey;

- The stockyard ruins mentioned by the archaeologist were constructed in 1956;
- The road culvert mentioned by the archaeologist was constructed by the PMG to help gain road access to the communications tower on Skeletar Ridge. Mr Tickle does not know of its date of construction, other than it was some time after 1954;
- Bimbadeen property was purchased by Ted Bromely in 1954 and the house known as "Bimbadeen" was constructed some time after 1954;
- The Muswellbrook Historical Society has an interest in any effects of the proposed mining activities on the nearby brickworks, located to the north of the No. 1 Open Cut Extension; and
- The Muswellbrook Historical Society would wish a photographic record to be made of historical structures that are to be demolished, should the proposal gain approval. For buildings this interest would extend to the preservation of plans of the structure.

The information obtained from Mr Tickle has been forwarded to the archaeologist who surveyed the lands of the No. 1 Open Cut Extension for inclusion in a revised report. The age of all the identified structures is under fifty years which will alter the statutory requirements to consult with, and obtain the approval of, the NSW Heritage Office prior to the demolition of any of the heritage structures within the path of the proposed mining activities.

#### Rehabilitation

Further information on the rehabilitation of the rehabilitation of the No. 1 Open Cut void and the No. 1 Open Cut Extension was requested.

Awaiting completion at the time of printing of the Draft EIS was Figure 5.6 (now Figure 5.8) which shows the treatment of the existing No. 1 Open Cut void, the final contours of the rehabilitated landform of the No. 1 Open Cut Extension, the location of habitat corridors (forested lands) and the location of the final No. 1 Open Cut Extension void. This void will be in a location and of a form that will allow for an alternative entry point to the underground workings that can provide access to the underground coal reserves of the proposed Sandy Creek Colliery.

The rehabilitation process will be very similar to that currently utilised by MCC and described in Section 4 of the EIS.

U888/1 17 June 2002 Muswellbrook Shire Council Page 7.

#### General Issues

1. It is requested that the EIS commit to actions by MCC rather than offer recommendations for commitment to action.

MCC are willing to commit to the recommendations of the specialist studies that form part of the EIS. Specifically, MCC are willing to undertake the monitoring recommended in Section 7.7.5 and to install the flowmeters recommended in Section 7.7.5.

2. It was assessed that the EIS does not adequately address low frequency vibration.

Additional information will be added to the EIS in Section 6.5.2 – Noise Impacts to address the issue of low frequency vibration.

Low frequency vibration is assessed as not being an impact from MCC's current or planned operations on the surrounding residential areas. The No. 1 Open Cut Extension proposal will not result in any new machinery or equipment being used on the site. The No. 1 Open Cut Extension proposal will not result in any new machinery or equipment being used on the site. If low frequency vibration is to be an impact of the No. 1 Open Cut Extension proposal it should be also an impact of the current MCC operations. MCC has received some complaints over the years in respect of vibration associated with blasting but has never received a complaint in respect of low frequency vibration.

Complaints in respect of low frequency vibration are most commonly encountered from mining operations that operate a coal preparation plant. A coal preparation plant building typically has walls of a massive surface area driven into resonance by vibrating machinery (screens, crushers) hard-mounted to the steel structure within the building. In effect, a coal preparation plant is an efficient bass-reflex speaker. (N. Pennington personal communication, 24 May 2002).

The frequency of these vibrations are quite low in the 31.5 Hertz (Hz) one-third octave band range and are capable of initiating standing waves within structures (rooms within houses) of the appropriate dimensions. This can result in the noise inside a room being much louder than the noise outside the room.

MCC does not operate a coal preparation plant and will not operate a coal preparation plant as a component of the No. 1 Open Cut Extension proposal. The only vibrating equipment employed by MCC are a Run-of-Mine coal crusher and a single coal screen. These items of equipment have been operational for over twenty years without giving rise to complaint in respect of low frequency vibration. There is no reason to believe that there will be any change to this situation.

3. Appendix C and D have been reversed in relation to the information in the front of the document.

This will be rectified in the final version of the EIS.

4. MCC should consider making a commitment to providing their monitoring data on the Internet.

MCC does not currently have an Internet site. Monitoring data are regularly provided to the MCC Community Consultative Committee (MCCCCC). The minutes of MCCCCC meetings with monitoring data appended are placed on public display at the Muswellbrook Shire Council Library as well as the initial provision of monitoring data to the community members of the MCCCCC.

U888/1 17 June 2002 Muswellbrook Shire Council Page 8.

MCC are extremely appreciative of the constructive comments made by the members of Council's Environmental Committee in the review of the draft EIS. It is particularly appreciated that the members of the Environment Committee undertook the review by giving up their own personal time.

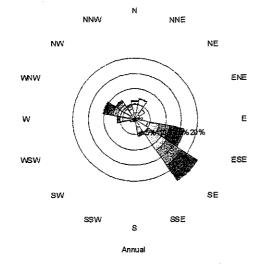
MCC looks forward to working with Council and the community over the life of the No. 1 Open Cut Extension, should it be successful in gaining development consent.

Yours faithfully

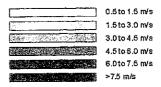
Muswellbrook Coal Company Limited

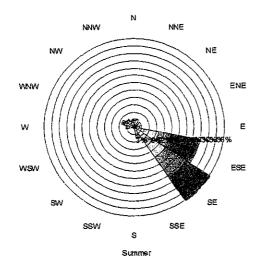
Shane Duffy

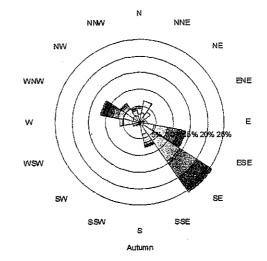
Mine Manager

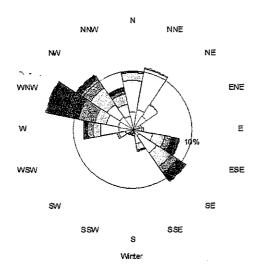


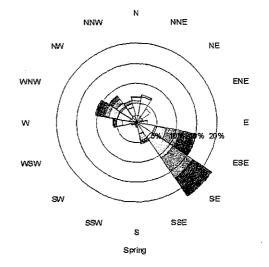
# Annual and Seasonal Windroses for Mt Arthur North Meteorological Station for 1999/2000













#### **HLA-Envirosciences Pty Limited**

18 Warabrook Boulevarde Warabrook, NSW (02) 4968-0044 ANNUAL AND SEASONAL WIND ROSES FOR MT ARTHUR METEOROLOGICAL STATION 1999/2000

3.1

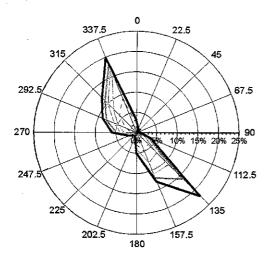
FIGURE

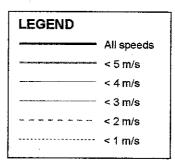
DRAWN PROJECT - TASK NUMBER U888

APPROVED

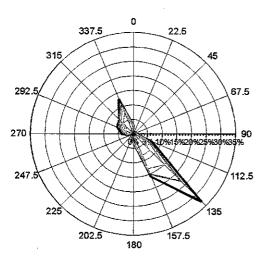
DATE February 2002

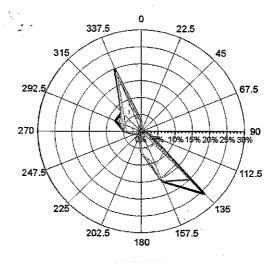




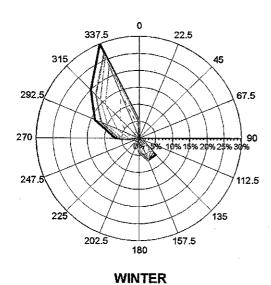


#### **ANNUAL**

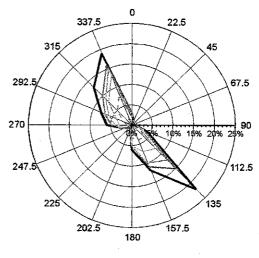




#### SUMMER





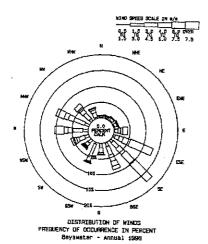


**SPRING** 

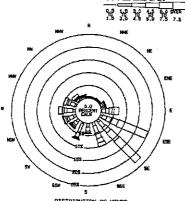


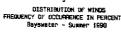
FIGURE 3.1

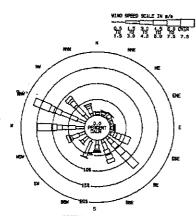
**ANNUAL AND SEASONAL WIND ROSES** 



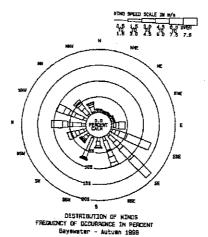
Seasonal and Annual Windroses for Bayswater Meteorological Station 1998







DISTRIBUTION OF WINDS FREGUENCY OF OCCUMPENCE IN PERCENT Bayswater - Winter 1998



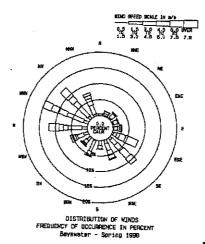


Figure 4

## **Muswellbrook Shire Council**

**ENGUIRIES** 

BRIAN GIBSON

PLEASE ASK FOR

(02) 6549 3772

DIRECT

DA 118/2002

**OUR REFERENCE** 

YOUR REFERENCE



MUSWELLBROOK SHIRE COUNCIL ADMINISTRATION CENTRE MUSWELLBROOK NSW 2333 ABN 86 864 180 944

6 June, 2002

Muswellbrook Coal Company PO Box 123 MUSWELLBROOK NSW 2333

Dear Sir/Madam

#### NOTICE OF PROPOSED DEVELOPMENT

A Development Application has been lodged with Muswellbrook Shire Council for the following work:

Proposal:

FORTY ONE LOT RURAL RESIDENTIAL SUBDIVISIONS

Premises:

LOTS 1 & 2 DP 798186, SANDY CREEK ROAD, MUSWELLBROOK

Development Application No: 118/2002

Applicant:

YVONNE BOYLE REAL ESTATE

If, after examination of the enclosed plans you wish to express your views, by way of a written submission on the proposal these will be taken into consideration when Council determines the application.

As Council is obliged to deal with applications within a prescribed period your objection must be received by 20 June 2002. If a submission is not received within the specified time frame, Council will assume that you have no objections in relation to this proposal. All submissions should be addressed to the General Manager, Muswellbrook Shire Council.

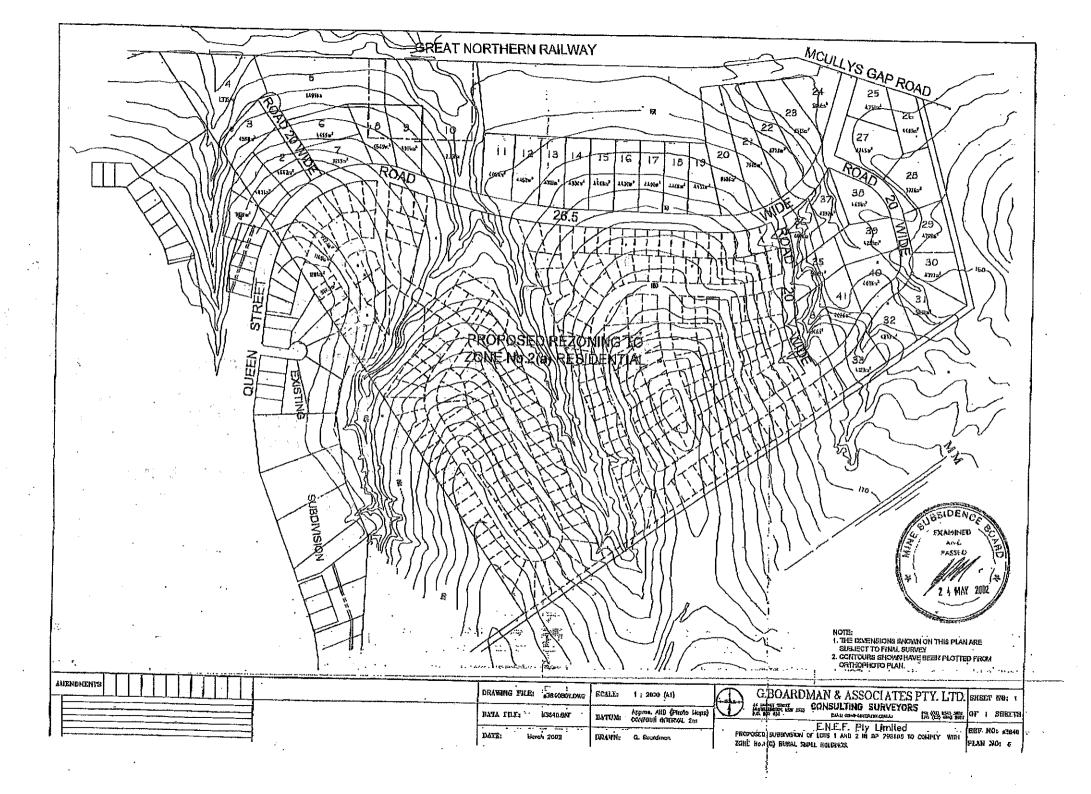
Under the Freedom of Information Act, the applicant may obtain copies of any comments you have made. As such, any comments you make can be released by Council upon the written request of the applicant or be used as part of a report to Council's monthly meeting.

Should you require further information in relation to this matter, please contact me on (02) 6549 3772.

Yours faithfully

BRIAN GIBSON SENIOR PLANNER

Documenti





## MUSWELLBROOK COAL COMPANY LIMITED ABN 32 000 009 521

ACN 000 009 521

REGISTERED OFFICE Administration Office No. 2 Open Cut Mine Coal Road Muswellbrook NSW 2333

POSTAL ADDRESS PO Box 123 Muswellbrook NSW 2333

TELEPHONE: 02 65432799

FACS!MILE: 02 65425010

1.195:msh/9347

27 June 2002

The General Manager Muswellbrook Shire Council PO Box 122 MUSWELLBROOK NSW 2002

Attention: Mr Brian Gibson

Dear Sir

Re: Development Application No. 118/2002

Lots 1 & 2, DP 798186, Sandy Creek Road, Muswellbrook

Forty One Lot Rural Residential Subdivisions

I refer to your letter dated 6 June 2002 (your reference DA 118/2002), and further to discussions between Mr Chris Gidney and Mr Shane Duffy on 25 June 2002, Muswellbrook Coal Company's (MCC) response is as follows.

#### Background

As you are aware. MCC has prepared a draft Environmental Impact Statement for the No.1 Open Cut Extension (The "Extension"), and is currently in the process of preparing the final document to lodge with a Development Application. The proposed Extension is planned to last for approximately nine (9) years, and during the first four years the Extension will move from west to east, away from the North Muswellbrook area. The greatest impacts of noise and dust are predicted to occur in Year 1 (around 1994/95), then reducing for successive years of operation. The predicted impacts are detailed below:

#### Noise Impacts (refer to Figure 6.4)

The northern portion of the proposed Subdivision is predicted to experience night time operational noise levels of up to approximately 42 dB(A), Leq in Year 1 of the Extension with the Excavator at ground level, most likely to occur in 2004. The NSW EPA criteria for noise is unknown, but it may be assumed to be 35 dB(A) based on other background monitoring undertaken in the existing North Muswellbrook residential area. Any residences constructed in the northern portion during Year 1 may be impacted to some extent by the Extension. Subsequent years of operations have a reduced impact as the Extension moves further away from the Subdivision.

Dust Impacts (refer Figure 6.12)

The northern portion of the proposed Subdivision is predicted to experience annual average dust deposition of up to approximately 1.7 g/m<sup>2</sup>/month in Year 1 of operations with the Excavator at ground level, most likely in occur in 2004 (the NSW EPA goal is  $2.0 \text{ g/m}^2/\text{month}$ ).

#### Conclusion

MCC appreciates that it is not in a position to oppose the development. However, MCC would like to minimise any possible conflicts between the proposed Subdivision and the proposed Extension. To achieve this, MCC would prefer to see a staged development of the proposed Subdivision, that is the south western half developed first, and the north eastern half developed from 2006, after which the noise and dust impacts are predicted to reduce as the Extension moves further away.

MCC thinks it is unwise for residential development to occur prior to 2006 for the combined area of the proposed Subdivision.

If you have any questions, please contact the undersigned.

Yours faithfully

Shane Duffy Mine Manager

2



Denotes Residence

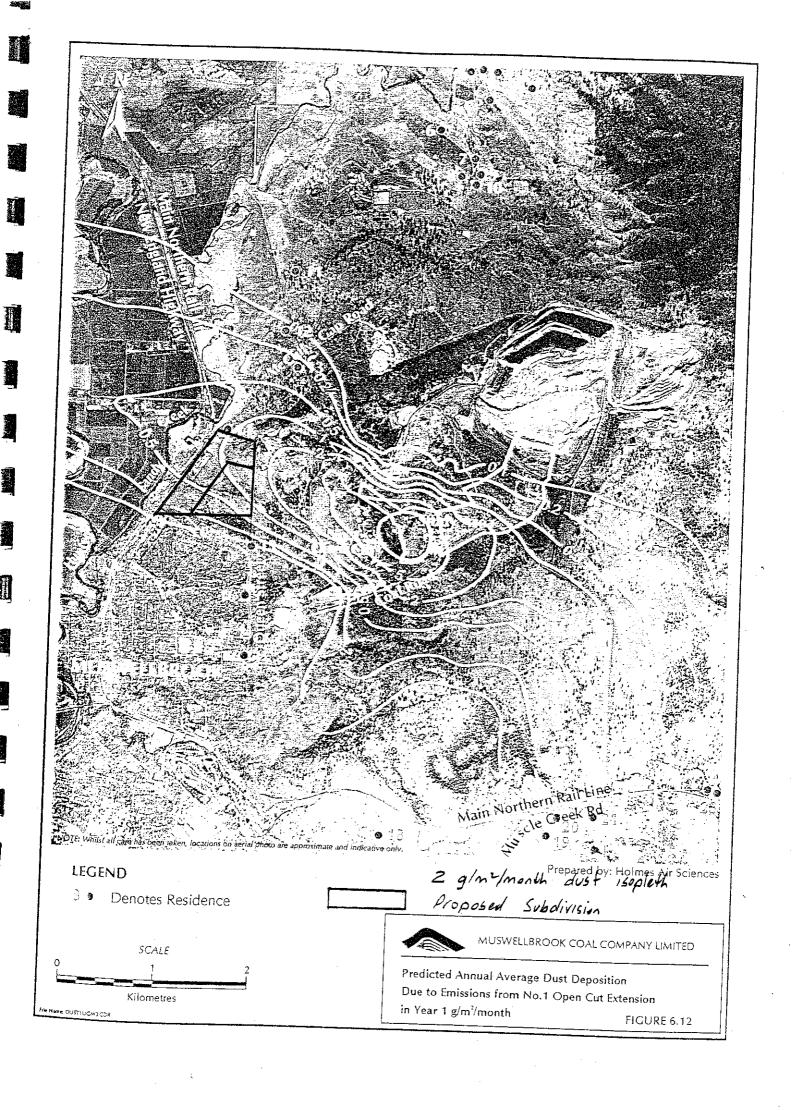
SCALE Kilometres Inne ATCREOZECOS

40 clB(A) isopleth Proposed Subdivision



MUSWELLBROOK COAL COMPANY LIMITED

Year 1 - Excavator at Ground Level Above No.1 Open Cut Highwall SE Wind FIGURE 6.4





Mr Chris Gidney Muswellbrook Council P O Box 122 MUSWELLBROOK 2333 NSW DEPARTMENT OF MINERAL RESOURCES
Level 1, 1 Civic Avenue
(P.O. 80x 51), Singleton, NSW 2330, Australia
INSPECTORATE: Phone (02) 6572 1899 Fax (02) 6572 1201
GEOLOGY: Phone (02) 6572 4200 Fax (02) 6572 1201
MINING TITLES: Phone (02) 6572 4200 Fax (02) 6572 1201
www.minerals.nsw.gov.au
LBN 53 CAD 286 3A7

Our Ref: C01/0581

Dear Mr Gidney

### Proposed Extension at Muswellbrook Colliery

Muswellbrook Colliery have put forward a proposal to mine coal by open cut methods in an area to the east of their old No1 void. Much of this area has previously been mined by shallow underground methods and is currently subject to the collapses of the surface.

Muswellbrook Coal Company presented a Conceptual Project Development Plan to the Department of Mineral Resources on the 24 August 2001. At the meeting the Department informed them that we were satisfied with the proposal as far as our responsibilities of; resource recovery, mining engineering, safety, rehabilitation and general environmental impacts were concerned. We however requested that they engage an environmental consultant to address the environmental impacts in more detail and ascertain who the consent authority would be. We have been informed that this has been done.

The Department of Mineral Resources therefore recommends that a Planning Focus Meeting now be held for this proposal. It should be pointed out however that in order for the Planning Focus process to maintain its authenticity, the meeting needs to be conducted under the auspices of the consent authority, DUAP or the Department of Mineral Resources.

Should you have any further queries, please contact me.

Yours sincerely,

David Agnew

Manager Coal & Petroleum

C.C. Colin Philips HLA Enviroscience Mark Howes MCC

Mr Geoff Noonan

Director

Development and Infrastructure Assessment

Planning NSW

**GPO Box 3927** 

SYDNEY NSW 2001



Dear Mr Noonan

1 0 DEC 2001

RE: Proposed Extension to Open Cut Coal Mine at Muswellbrook Coal Mine - 713 Coal Rd, Muswellbrook -

I refer to your request for the Environment Protection Authority's (EPA) requirements for the preparation of an environmental impact statement (EIS) for the above proposal. The EPA has considered the details of the proposal and has listed its requirements in Attachment 'A'.

Based upon the information provided to the EPA, the applicant may need to vary existing Environment Protection Licences No 656 for the Muswellbrook Coal Mine. The applicant will need to make a separate application to the EPA to obtain this licence variation.

Please provide 4 copies of the DA / EIS for the EPA when lodging its application. These documents should be lodged at the EPA's Hunter Office located at 117 Bull St Newcastle, 2300. If you have any queries regarding this matter please contact Peter Hughes on (02) 4926 9969.

Yours sincerely

MITCHELL BENNETT

Head Regional Operations Unit Hunter

## **Esteminanis**



## ATTACHMENT A - ENVIRONMENT PROTECTION AUTHORITY REQUIREMENTS FOR ENVIRONMENTAL IMPACT STATEMENT - MUSWELLBROOK COAL MINE

#### 1. EXECUTIVE SUMMARY

1.1 The executive summary should include a brief discussion of the extent to which the proposal achieves identified environmental outcomes.

#### 2. THE PROPOSAL

- 2.1 The objectives of the proposal should be clearly stated and refer to:
  - the size and type of the operation;
  - the anticipated level of performance in meeting required environmental standards and cleaner production principles;
  - the staging and timing of the proposal;-
  - the proposal's relationship to any other industry or facility.
- 2.2. A detailed description of the proposed development must be provided which includes, but need not be limited, to the following:
  - An overall description of the proposed development including the rail and conveyor systems and coal storage, handling and loading facilities supported by detailed site layout and locality maps.
  - Details of the coal handling arrangements during the initial development headings.
  - A description of the operation of the proposed washery rejects emplacement facilities.
  - Outline construction works including:
    - actions to address any existing soil contamination;
    - surface works including earthworks or site clearing; re-use and disposal of cleared material (including use of spoil on-site);
    - construction timetable and staging; hours of construction; proposed construction methods;
    - environment protection measures, including noise mitigation, dust controls and erosion and sediment control measures.

#### AIR

#### 3.1 General

The EIS should demonstrate that the mine will be able to operate within the EPA's air quality objectives which are to control, to the maximum extent practicable, the generation of air pollutants on-site, to contain any pollutants generated within the property, to minimize adverse effects of the operation on the amenity of local residents and sensitive land uses and to limit the effects of pollutants on regional air quality. The EIS should also include:

- A description of existing air quality and meteorology, using existing information and site representative ambient monitoring data. The use of particular meteorological monitoring data sets should be justified. This should include an analysis of representative data on the following meteorological parameters:
  - temperature and humidity;
  - rainfall and evaporation;
  - wind speed and direction.
- Provide a description of existing air quality, using existing information and site representative ambient monitoring data. This description should include the following parameters:

#### Environment Protection Licence - Protection of the Environment Operations Act 1997

## **BS-Regulications**



- dust deposition;
- total suspended particulates;
- PM<sub>10</sub> particulate matter.
- Identification and location of all fixed and mobile sources of dust/air emissions from the development, including rehabilitation. The location of all emission sources should be clearly marked on a plan for key years of mine development. Identify all pollutants of concern and estimate emissions by quantity (and size for particles), source(s) and discharge point(s).
- Details of the project that are essential for predicting and assessing impacts on air quality including:
  - the quantity and physio-chemical characteristics of materials to be handled, stored or transported;
  - an outline of the procedures for coal handling, storage and transport;
  - the management of activities and areas with potential for impacts on air quality.

#### Note: emissions can be classed as either:

- point (eg emissions from stack or vent) or
- fugitive (from wind erosion, leakages or spillages, associated with loading or unloading, conveyors, storage facilities, plant and yard operation, vehicle movements (dust from road, exhausts, loss from load), land clearing and construction works).
- A description of the topography and surrounding land uses.
- Details of the exact locations of dwellings, schools and hospitals. Where appropriate provide a perspective view of the study area such as the terrain file used in dispersion models.

#### 3.2 Impact Assessment

- Detailed dust emission inventory calculations showing the methodology and emission factors used. Suitable emissions factors may be obtained by a review of recent EIS's and reference to the following documents: 'Air Pollution from Surface Coal Mining: Measurement Modeling and Community Perception, National Energy Research and Development Council: Project No 921'; and 'Section 11.9 Western Surface Coal Mining, Section 11.10 Coal Cleaning and Section 13.2.4 Aggregate Handling and Storage Piles, AP-42, Volume I, Stationary Point and Area Sources, USEPA (or updated sections as appropriate)'.
- Estimate the resulting ground level concentrations of all pollutants. Use an appropriate dispersion model to predict ambient TSP and PM<sub>10</sub> dust concentrations and dust deposition levels. Reference should be made to the EPA's *Approved Methods and Guidance for the Modelling and Assessment of Air Pollutants in New South Wales*.
- A detailed description of the methodology used to assess the air quality impacts of the development. The use of a particular dispersion model and model parameters used should be justified and discussed. The dispersion model input/output files should be included.
- Air quality impact predictions should include plans showing projected incremental levels of 24-hour average PM<sub>10</sub> concentrations, annual average dust deposition rates and annual average total suspended particulate concentrations at jet years throughout the life of the mine.
- An assessment on the impact of the proposal on local and regional air quality. Reference should be made to the 'National Environment Protection Measure for Ambient Air' when

## ES Breduirements



assessing regional impacts. Local impacts should be assessed by considering background levels plus the predicted incremental impact with reference to the NHMRC total suspended particulate goal of 90 µg/m³ (annual average) and the following dust deposition criteria:

#### **Dust Deposition Criteria (Total Solids)**

Existing Dust Level g/m²/month (annual average)	Maximum Acceptable Increa g/m²/month (a) Residential Suburban	se Over Existing Dust Level mual average) Other
2	2	2
3	1	2
4	0	.1

- An assessment of cumulative air quality impacts and a description of the methodology used.
- An assessment of the potential impacts on air quality other than by dust, for example, nitrogen oxide emissions from diesel equipment.
- Greenhouse gas emissions :
  - using the methodologies published with the National Greenhouse Gas Inventory (1994) estimate the total annual volume of all major greenhouse gases that are likely to be emitted from all aspects of the proposed development.
  - Estimate the net increase or decrease in greenhouse gas emissions from the proposed development and compare it to estimates in the 1990 National Greenhouse Gas Inventory for total Australian emissions and for the energy and transformation industry sector.
  - Specific consideration should be given to measures to minimise the emission of all major greenhouse gases from the proposed development.
  - The use of coal bed methane or renewable energy technologies such as solar and/or wind energy should be considered for on-site power generation.
- Describe the effects and significance of pollulant concentration on the environment, human health, amenity and regional ambient air quality standards or goals.
- Describe the contribution (if any) that the development will make to regional and global pollution, particularly in sensitive locations.
- An assessment of the impacts on air quality of dust and any other pollutants generated during construction works. In this context, particular attention should be given to:
  - The nature, extent and duration of dust generating activities, e.g. earthmoving equipment, exposed surfaces, material stockpiles, unsealed trafficked areas, spillages etc.
  - Consideration of the location of dust sources, particularly their proximity to sensitive receptors and prior to finalisation of any acquisition or similar processes.
- Details of an investigation of the propensity of coal seams to self heat and the likelihood of spontaneous combustion occurring on site.

## **BS**Requirements



#### 3.3 Mitigation

- Outline specifications of pollution control equipment (including manufacturer's performance guarantees where available) and management protocols for both point and fugitive emissions.
   Where possible, this should include cleaner production processes.
- Specific consideration should be given to measures to minimise the emission of all major greenhouse gases from the proposed development.
- Describe consideration of stockpile alignment and optimum stockpile height to minimise wind erosion.
- If spontaneous combustion is likely, details of a management program to minimize spontaneous combustion and to manage any occurrence of spontaneous combustion.
- Include details of an air quality monitoring program to determine effectiveness of mitigation and to verify predictions, including provision for investigations in response to complaints. The air monitoring program should reflect advances in technology for monitoring systems such as real time monitoring systems.
- Control measures to be implemented to minimize dusi generation during construction activities.
  - Details of contractual arrangements between the applicant and construction contractors aimed at attributing responsibility for controlling the generation and emission of air pollutants.

#### 4. NOISE AND VIBRATION

#### 4.1 General

The EIS must assess the likelihood and implications of intrusive noise and loss of amenity due to noise. The proposal will be assessed in accordance with the EPA's *Industrial Noise Policy* (INP) (2000). The EIS should also include:

- Identify all noise and vibration sources from the development (including both construction and operation phases). Detail all potential noise generating activities and equipment including offsite rail movements and conveyor use.
- Specify the times of operation for the construction and operational phases of the development and for all noise producing activities.
- Provide details of the rail and conveyor corridors and land use (particularly residential) along the proposed routes. Diagrams should be to a scale sufficient to delineate individual residential blocks.
- Specify noise monitoring locations. Particular attention should be given to any areas likely to be affected by the operations.
- Identify any noise sensitive locations likely to be affected by activities at the site, such as residential properties, schools, churches, and hospitals.

## EIS Requirements



 Identify the land use zoning of the site and the immediate vicinity and the potentially affected areas.

#### 4.2 Impact Assessment

- Determine existing background noise levels at noise sensitive locations in the area in accordance with the INP.
- Determine the expected noise levels and noise characteristics (eg: tonality, impulsiveness vibration, etc) likely to be generated from noise sources during:
  - site establishment:
  - construction;
  - operational phases:
  - transport including rail and conveyor noise generated by the proposal;
  - other services.
- Determine the noise levels likely to be received at the most sensitive locations under both prevailing and adverse meteorological conditions. (These may also vary during construction and operational phases of the development).
- Note:- Computer modelling of noise impacts should be undertaken using a recognised computer model. Maximum noise levels during night-time period (10pm-7am) should be assessed to analyse possible affects on sleep. This should include the maximum noise levels due to rail traffic, the extent these maximum noise levels exceed ambient noise levels and the number of noise events from rail traffic during the night on an hourly basis for a 'typical' night. Noise predictions for individual receptors should be provided with one or more of the Lamax, Lat, Lato, Laeq, Laeq descriptors reported for noise from stationary sources. For rail traffic noise, descriptors may include Laq(19p), Leq(19pi), Leq(19pi), and maximum noise levels depending on the area classification and the types of land use involved. For the assessment of existing and future rail noise, details should be included of assumed rail movements by time of day; and details of the calculation process.
- Noise contours for daytime (7am-6pm), evening (6pm 10pm) and night time (10pm-7am) periods should be provided. Contours should include predicted noise levels under prevailing as well as "worst-case" scenarios during adverse meteorological conditions of wind and temperature inversions.
- Consider the influence of existing meteorological conditions such as winds and temperature inversions in the prediction model so as to provide a true representation of actual noise levels.
- Assess the effect of noise mitigation measures incorporated into the predictive modelling.
- Compare the predicted noise levels with the appropriate noise criteria for the phase of development or activity being considered (determine the appropriate noise criteria for the surrounding area using the INP. (For construction noise criteria refer to the EPA's Environmental Noise Control Manual (1994).
- The EIS must demonstrate that ground vibration and overpressure levels recommended by ANZECC will be achieved during blasting.
- The EIS must include a traffic noise assessment covering the expected movement of product off-site for the day, evening and night-time and proposed controls at the source and at affected

## **ESJEcomeman**ia



received locations along the coal transportation routes. Reference should be made to the EPA's Environmental Criteria for Road Traffic Noise (1999).

#### 4.3 Mitigation

- Discuss the findings from the predictive modelling and, where relevant noise criteria have not been met, recommend additional mitigation measures.
- Where relevant noise/vibration criteria cannot be met after application of all feasible and cost effective mitigation measures the residual level of noise impact needs to be quantified by identifying:
  - locations where the noise level exceeds the criteria and the extent of exceedence;
  - numbers of people (or areas) affected;
  - times when criteria will be exceeded:
  - likely impact on activities (speech, sleep, relaxation, listening, etc);
  - change on ambient conditions.
- Determine the most appropriate noise mitigation measures including both noise controls and
  management of impacts for both construction and operational noise. This will include selecting
  quiet equipment and construction methods, noise barriers or acoustic screens, location of
  stockpiles, temporary offices, compounds and venicle routes, scheduling of activities,
  community consultation, complaints handling/monitoring system etc.
- For rail noise impacts, provide a description of the ameliorative measures considered (if required), reasons for inclusion or exclusion, and procedures for calculation of noise levels including ameliorative measures. Also include, where necessary, a discussion of any potential problems associated with the proposed ameliorative measures, such as overshadowing effects. Appropriate ameliorative measures may include:
  - use of alternative transportation modes and alternative routes:
  - control of rail traffic (eg: limiting times of access or speed limitations);
  - use of noise barriers or bunds.
- Provide details of a noise and blasting (vibration) monitoring program with monitoring to be undertaken at noise sensitive locations subject to the agreement of the owners/occupiers of those properties. The noise and vibration monitoring program should reflect advances in technology for monitoring systems such as integrated blast monitoring. In addition, if noise levels for the premise are to rely on inversion conditions, and inversion monitoring program for noise assessment purposes must also be included in the monitoring program.

#### 5. WATER

#### 5.1 General

- Provide details of the project relevant to any water impacts of the development such as
  drainage works and associated infrastructure, general earthworks, working capacity of
  structures, and water resource requirements of the proposal.
- Outline site layout, demonstrating efforts to avoid proximity to water resources (especially for activities with significant potential impacts eg effluent ponds) and showing potential areas of modification of contours, drainage, etc.

# E SE CONTONO



- Outline how total water cycle considerations are to be addressed showing total water balances for the development (with the objective of minimising demands and impacts on water resources). Include water requirements (quantity, quality and source(s)) and proposed storm and wastewater disposal, including type, volumes, proposed treatment and management methods and re-use options.
- Describe the surrounding catchment including proximity of the development to any waterways and provide an assessment of their sensitivity/significance from a public health, ecological and/or economic perspective.
- Describe existing surface water quality. An assessment needs to be undertaken for any water resource likely to be affected by the proposal and for all conditions (e.g. a wet weather sampling program is needed if runoff events may cause impacts).
- Provide historic stream flow data for the catchment where available.
- Provide site drainage details and surface runoff yield.
- Describe the condition of the local catchment, eg erosion levels, soils, vegetation cover, etc.
- Outline baseline groundwater information, including, but not restricted to, depth to watertable, flow direction and gradient, groundwater quality, reliance on groundwater by surrounding users and by the environment.

### 5.2 <u>Impact Assessment</u>

- Determine any changes to hydrology (including drainage patterns, surface runoff yield, flow regimes, wetland hydrologic regimes and groundwater).
- Identify any potential impacts on quality, or quantity, of groundwater describing their source and significance.
- Identify potential impacts associated with geomorphologic activities with potential to increase surface water and sediment runoff or to reduce surface runoff and sediment transport. Also consider possible impacts such as bed lowering, bank lowering, instream siltation, floodplain erosion and floodplain siltation.
- Detail sewage effluent treatment and disposal arrangements. Effluent should be treated and used on the site. On-site effluent disposal should conform to the EPA's draft "Environmental Guideline for the Utilisation of Treated Effluent by Irrigation", 1995.

### 5.3 Mitigation

A water management plan and site water balance should be prepared which incorporates the following principles:

- Outline the stormwater management designed to control pollutants at the source and contain them within the site. Also describe measures for maintaining and monitoring any stormwater controls.
- Outline erosion and sediment control measures directed at minimising disturbance of land, minimising water flow through the site and filtering, trapping or detaining sediment. Also include measures to maintain and monitor controls.

# **ES/Requirements**



- Describe waste water treatment measures that are appropriate to the type and volume of
  waste water and are based on a hierarchy of avoiding generation of waste water; capturing all
  contaminated water (including stormwater) on the site; reusing/recycling waste water; and
  treating any unavoidable discharge from the site to meet specified water quality requirements
- Outline pollution control measures relating to storage of materials, possibility of accidental spllls (eg preparation of contingency plans), appropriate disposal methods, and generation of leachates.
- Describe hydrological impact mitigation measures including:
  - site selection (avoiding sites prone to flooding and waterlogging, actively eroding or affected by deposition);
  - minimising runoff;
  - minimising reductions or modifications to flow regimes;
  - avoiding modifications to groundwater;
  - preventing coal spillage entering waters at stream crossings.
- Describe groundwater impact mitigation measures including:
  - site selection;
  - retention of native vegetation and revegetation;
  - artificial recharge;
  - providing surface storages with impervious linings;
  - monitoring program.
- Describe geomorphologic impact mitigation measures including:
  - site selection:
  - erosion and sediment controls;
  - minimising instream works;
  - treating existing accelerated erosion and deposition;
  - a monitoring program.
- Describe management procedures that will be adopted to prevent pollution of waters by minewater, effluent, stormwater runoff etc. The water management plan should also include a monitoring program to assess the impacts of the operation on the quality and quantity of surface and groundwaters.

### 5.4 Hunter River Salinity Trading Scheme (HRSTS)

- If a wastewater discharge is proposed it must be justified and it must be demonstrated that controlled discharges can be managed in compliance with the requirements of the HRSTS.
- If a discharge under the HRSTS is found to be necessary and the discharge would be via a tributary of the Hunter River, the EIS must include a tributary impact assessment that addresses the following:
  - Impacts on downstream landholders, including:
    - A contact list of downstream landholder/tenants including a record of permanent or seasonal activities:
    - A description and list of all crossings, culverts and other in-stream structures.
  - Physical and biological impacts:

# EIS Recurrements



- Existing flow and stream characteristics, including current bank and bed profiles, potential flow volumes at key points of inflection within the stream course, stability of stream banks and beds and an assessment of soil types.
- Assessment of likely impacts of proposed discharge including the impacts on flow characterisics, potential for erosion of banks, aquatic biotic and riparian vegetation.
- Proposed measures to:
  - Minimise the impacts of discharge on downstream landholders, including a discharge notification procedure;
  - Reduce potential erosion hazards at vulnerable points in the stream banks, protect and maintain riparian vegetation and bank stability, and provisions for energy dissipation of discharge waters where necessary.
  - In cases where more than one mine discharges to a tributary, each discharger must also address the collective impacts of discharge to that tributary.

### 6. SPONTANEOUS COMBUSTION

### 6.1 General

- Provide details (including mapping) of the existing occurrence of spontaneous combustion on the premises.
- Explain the reasons for the historical occurrence of spontaneous combustion on the premises during the operational life of the project.

### 6.2 Impact Assessment

 Provide details (including mapping) of the potential occurrence of spontaneous combustion on the premises during the operational life of the project.

### 6.3 Mitigation

- Prepare a Spontaneous Combustion Management Plan that details the measures proposed to be taken to totally eliminate the occurrence of spontaneous combustion from the premises.

### 7. WASTE AND CHEMICALS

### 7.1 General

- Provide details of:
  - the quantity and type of all liquid wastes and non-liquid wastes likely to be generated at the premises;
  - the method for storing and disposing of any wastes or recovered materials at the facility.
  - Details of sewage effluent treatment and disposal arrangements. Effluent should be treated and irrigated on site. The EIS should include a description of the effluent treatment and disposal system. On sit effluent disposal should conform to the EPA's draft "Environmental Guideline for the Utilisation of Treated Effluent by Irrigation" (1995).

# ElS:Reduirements



### 7.2 Impact Assessment

- Identify potential impacts from the handling and storage of any wastes and/or chemicals.
- Measures to avoid, or minimize, the generation of waste and promote waste re-use and recycling.
- Identification of all wastes that cannot be re-used. Disposal options must also be identified in accordance with EPA Environmental Guidelines, Assessment, Classification and Management of Liquid and Non-Liquid Wastes.

### 7.3 Mitigation

- Outline measures to avoid the generation of waste and promote the re-use and recycling and reprocessing of any waste.
- Outline measures to support any approved regional, or industry waste plans.

#### 7. SOIL CONTAMINATION

### 7.1 General

- Provide details of site history if earthworks are proposed, this needs to be considered with regard to possible soil contamination.
- Identify any stream crossings.

### 7.2 Impact Assessment

- Identify any likely impacts resulting from the construction or operation of the proposal this should include the likelihood of:
  - disturbing any existing contaminated soil;
  - contamination of soil by operation of the activity;
  - soil erosion or instability;
  - disturbing acid sulfate or potential acid sulfate soils.

### 7.3 Mitigation

- Describe and assess the effectiveness or adequacy of any soil management and mitigation measures during construction and operation of the proposal including:
  - erosion and sediment control measures;
  - proposals for the management of any acid sulfate soils.

### 8. ESD

The basic principles of ESD should be addressed in the EIS.

### 8.1 The Precautionary Principle

- The proposal should include decision-making processes that are predictable and transparent.
   This should include:
  - Making information available at an early stage so that major issues can emerge and be addressed during the project planning stage;

## Environment Protection Licence - Protection of the Environment Operations Act 1997

# B Sareounemis



- Adopting consultative mechanisms between the proponent and the community as a means
  of minimising disputation at the formal environmental assessment stage;
- Establishing appropriate conflict resolution mechanisms for use during the project approval process.
- Discussion of Best Practice Environmental Management techniques including the potential use of environmental management plans and environmental audits.
- Ensuring that best practice monitoring and enforcement procedures are proposed.
- Identifying the responsibilities of the proponent and government agencies for environmental management and enforcement.

# 8.2 Inter and Intra Generational Equity

- Overall project management and investment in plant and equipment that minimises pollution and waste and is energy efficient.
- Ensure rehabilitation of land disturbed during construction.

# 8.3 Conservation of Biodiversity and Ecological Integrity

- The identification and assessment of all environmental characteristics and habitat values that could be affected by the proposal.
- The identification and assessment of the likely environmental impacts on these characteristics and values.
- The implementation of measures designed to minimise likely environmental impacts.
- Consideration given to adopting a whole of life cycle approach through:
  - use of environmentally benign materials, products and processes, eg. fuel-efficient motors, use of recyclable and recycled materials;
- Integrated waste minimisation, reuse and recycling.

# 8.4 <u>Valuation and Pricing of Resources</u>

- The costs and benefits of all aspects of the proposal should be considered. This should
  include non-economic environmental resources within a defined area around the subject site
  using methodologies such as contingency valuation.
- Consideration could be given to measuring positive environmental initiatives (e.g. energy savings) for possible use as a trade off for other environmental concessions.
- Demonstrate that the planning process and any subsequent development incorporates objectives and mechanisms for complying with ESD principles.

# 9. CONSIDERATION OF ALTERNATIVES AND JUSTIFICATION FOR THE PROPOSAL

- Consider the environmental consequences of adopting alternatives, including alternative:
  - sites and site layouts;

# Environment Protection Licence - Protection of the Environment Operations Act 1997



- access modes and routes;
- materials handling and loading processes;
- waste and water management;
- impact mitigation measures, particularly air quality and noise measures
- energy sources.
- Selection of the preferred option should be justified in terms of:
  - ability to satisfy the objectives of the proposal;
  - relative environmental and other costs of each alternative;
  - acceptability of environmental impacts;
  - acceptability of any environmental risks or uncertainties;
  - reliability of proposed environmental impact mitigation measures;
  - efficient use (including minimising re-use) of land, raw materials, energy and other resources.

#### IDENTIFICATION AND PRIORITISATION OF ISSUES 10.

- Provide an overview of the methodology used to identify and prioritise issues. The methodology should take into account:
  - relevant NSW government guidelines;
  - industry guidelines;
  - EISs for similar projects;
  - relevant research and reference material;
  - relevant preliminary studies or reports for the proposal;
  - consultation with stakeholders.
- Provide a summary of the outcomes of the process including:
  - all issues identified including local, regional and global impacts (eg increased/ decreased greenhouse emissions);
  - key issues which will require a full analysis (including comprehensive baseline
  - issues not needing full analysis though they may be addressed in the mitigation strategy;
  - justification for the level of analysis proposed (the capacity of the proposal to give rise to high concentrations of pollution compared with the ambient environment or environmental outcomes is an important factor in setting the level of assessment).

### 11. CUMULATIVE IMPACTS

- Identify the extent that the receiving environment is already stressed by existing development and background levels of emissions to which this proposal will contribute.
- Identify and assess the cumulative impact of other currently proposed mining operations that have the potential to impact upon background level emissions of air, water and noise.
- Assess the long-term and short-term cumulative impacts of the proposal against the relevant air, noise and water quality objectives for the area or region.
- Identify infrastructure requirements flowing from the proposal (eg water services, transport infrastructure upgrades).

Environment Protection Licence - Protection of the Environment Operations Act 1997

# ElS Reguirements



 Assess likely impacts from such additional infrastructure and measures reasonably available to the proponent to contain such requirements or mitigate their impacts (eg travel demand management strategies).

### 12. MANAGEMENT AND MITIGATION OF ENVIRONMENTAL IMPACTS

- Use environmental impacts as key criteria in selecting between alternative sites, designs and technologies, and to avoid options having the highest environmental impacts.
- Describe any mitigation measures and management options proposed to minimise identified environmental impacts associated with the proposal including an assessment of their effectiveness and reliability and any residual impacts after these measures are implemented.
- Outline any proposed approach (such as an Environmental Management Plan) that will demonstrate how commitments made in the EIS will be implemented. Areas that should be described include:
  - operational procedures to manage environmental impacts;
  - monitoring procedures;
  - training programs;
  - community consultation;
  - complaint mechanisms including site contacts:
  - strategies to use monitoring information to improve performance;
  - strategies to achieve acceptable environmental impacts and to respond in event of exceedences.

### 13. COMPILATION OF MITIGATION MEASURES

- Outline how the proposal and its environmental protection measures would be implemented
  and managed in an integrated manner so as to demonstrate that the proposal is capable of
  complying with statutory obligations under an EPA licence (eg. outline of an environmental
  management plan).
- The mitigation strategy should include the environmental management and cleaner production principles which would be followed when planning, designing, establishing and operating the proposal. It should include two sections, one setting out the program for managing the proposal and the other outlining the monitoring program with a feedback loop to the management program.

### 14. EPA LICENSING

 Identify licensing required by the EPA under environment protection legislation, including details of all new scheduled development works, scheduled activities, ancillary activities and types of discharges (to air, land, water). Department Urban Affairs and Planning (Sydney) PO Box 3927 Sydney 2001 03 December 2001



Attention: S. Warren

Dear Sir/Madam

# Muswellbrook Coal open cut extension

I refer to your letter of 07 November 2001 in regard to the above matter. The Department of Land and Water Conservation (DLWC) provides the following comments for your consideration.

## WATER MANAGEMENT

The Planning Focus document does not provide details in regard to the potential impacts of the extension proposal on water quality in the adjacent area. No details have been supplied at this point in relation to storages, water supply, segregation of differing water quality circuits or disposal options from the proposal.

The department requires a detailed assessment of water management for the proposal, and how the water management system for the proposal will integrate into the overall site water management plan. This must include:

- Water supply requirements, licences under Parts 2 and 5 of the Water Act, 1912 for water supply arrangements, and options for water management on site.
- Anticipated groundwater make volumes and rates for the extension, including variations in make during the extension and into the post-mine life of the site.
- 3. The number and capacities of all storages on site, and the purpose for the storages and uses of all waters captured in them. This must be included as a detail of the harvestable right assessment for the site, and delineation of the Maximum Harvestable Right Dam Capacity (MHRDC) for the site. Storages must be grouped into non-assessable (sediment control dams, dams with no effective catchment, with detailed assessment of water use, treatment and discharge requirements), assessable dams under the site harvestable right and licencable structures.
- 4. Water circuits for clean runon (with diversion details), sediment-laden waters and contaminated waters on site, and a system for use of contaminated water for dust suppression and other uses. The EIS must show how these water circuits are to be managed separately to each other and how poor quality water is to be managed to prevent contamination of adjacent areas.
- 5. Waters within the final void must be discussed in detail, with long term groundwater recovery make inflow rates and void water levels explained. The quality of void waters and any proposed

use of those waters must be explained in the EIS. Any long term impacts on rehabilitated void faces and landforms from increase in saline void levels must be explained.

6. Any post-mining use of the voids or landforms must be explained in terms of water use, long term water quality and post-mining groundwater table levels and potential degradation of water quality in those structures.

#### GROUNDWATER

Specific measures to assess and manage groundwaters which are effected by the proposal must be described in detail in the EIS. Issues to be included in the EIS are:

- 1. Description of current groundwater flux, direction of movement and quality, over a range of climatic conditions for the site.
- Pre and post mining groundwater regimes, and an explanation of the conclusions for the postmining groundwater table recovery level.
- 3. Potential risks to groundwater quality which may occur during and after mining occurs on the site, with a process for mitigating any groundwater contamination which occurs as a result of the mining operation.
- 4. Monitoring procedures to be adopted for the development, and a pre- and post-mining monitoring and performance measurement system to manage any alteration in groundwater quality which occurs as a result of mining operations.

#### REHABILITATION

The backfilling of the No.1 and No.2 pits requires careful management of inert coarse overburden and soil materials. An explanation of soil stockpiling and emplacement of overburden materials must be included in the EIS. The department requires the EIS to explain the landscaping and use of stockpiled soils and topsoil to be explained. Departmental standard for rehabilitation and soil management must be demonstrated.

Vegetation management on the site should be explained in the EIS. The current dryland box/ironbark community represents a disturbed community through much of the Upper Hunter, and opportunities to protect the community on the site should be explored in the EIS. The department requires that use of vegetative material, including fallen timber, trees which are felled and revegetation of the site, should be incorporated into the site management plan, which should comply with the Synoptic Plan for mining rehabilitation for the region.

#### **CROWN LAND**

The area of Crown land bordering the project site may be affected by the proposal, in terms of visual impacts and boundary influences on local ecosystems. The department requests that the Crown Land area be assessed in terms of visual protection, and its boundary to the project site be protected. The department requests that a revegetation strategy be included in the Environmental Impact Assessment, with boundary plantings of native vegetation to protect the Crown Land from impacts. The department recommends that this he used as a component of a vegetation management strategy for the entire site, with revegetation and habitat trees/logs included, linked to existing tree corridors on neighbouring portions of land.

Should there be any further enquiry in this matter, please contact Fergus Hancock, Natural Resource Project Officer on (02) 65421225.

Yours faithfully

Fergus Hancock

Natural Resource Project Officer

**Hunter Region** 

In reply please send to:

Singleton

Our reference:

82/2789S GM:SA ENQ: 01/1634

Your reference:

U888/1

Contact:

Garry Moore

HLA Envirosciences Pty Ltd PO Box 73 HRMC 2310

16th November 2001

ATTENTION: COLIN PHILLIPS

Dear Sir

### EXTENSION OF MUSWELLBROOK COAL COMPANYS NO 1 OPEN CUT <u>COAL MINE</u> PLANNING FOCUS MEETING

Thankyou for the opportunity to attend the Planning Focus Meeting.

The site is located within the Muswellbrook Mine Subsidence District. It is therefore a requirement of Section 15 of the Mine Subsidence Compensation Act that all surface improvements are approved by the Mine Subsidence Board.

Any relocation or alterations to existing improvements will also require Board approval, this would include roads, powerlines, building structures

The manproof fence surrounding the Bimbadeen pot hole area was supplied and installed by the Mine Subsidence Board and remains the property of the Board.

A decision on what to do with the fence can be made at the time of mining.

The coal company or council may wish to purchase the fence for future use.

Yours faithfully

Garry Moore

District Supervisor - Singleton



PO Box 188G Newcastle 2300 Telephone: (02) 4926 9995 Facsimile: (02) 4929 1032

### NEWCASTLE:

NSW Government Offices 117 Bull Street Newcastle West 2302 PO Box 488G Newcastle 2300 Telephone: (02) 4926 9750 Facsimile: (02) 4929 1032 DX 4322 Newcastle West

### SPEERS POINT

143 Main Road Specis Point 2284 PO Box 9 Boolargo 7284 Telephone: (02) 4950 8088 Facsimile: (02) 4950 8101 DX 7820 Newcastle

Suite 3 Feldwin Court 30 Hely Street Wyong 2259 PO Box 157 Wyong 2259 Telephone (02) 4352 1646 Facsimile: (02) 4352 1757 DX 7317 Wyong

### SINGLETON:

Joint Coal Board Building I Civic Avenue Singleton 2330 PO Box 524 Singleton 2330 Telephone: (02) 6572 4344 Facsimile (02) 6572 4504

#### PICTON:

100 Argyle Street Picton 2571 PO Box 40 Pictor 2571 Telephone: (02) 4677 (967 Facsimile: (02) 4677 2040 DX 258) 4 Camden

EMAIL: mail@minesub.nsw.gov.au

WEBSITE: WWW.minasub.naw.gov.au





U888/1

6 March 2002

Margrit Koettig Central Aboriginal Heritage Unit National Parks and Wildlife Service PO Box 1967 Hurstville NSW 2220

Dear Margrit

### Muswellbrook Coal No. 1 Open Cut Extension

I refer to my telephone conversation of today on the topic of National Parks and Wildlife Services' (NPWS') input, as an approval body, into the Director-General's Requirements for the Environmental Impact Statement (EIS) for Muswellbrook Coal Company's (MCC's) No. 1 Open Cut Extension proposal. The telephone conversation was a follow-up of the advice forwarded to planningNSW and NPWS on 18 December 2001 that, due to the location of Aboriginal sites within the footprint of the proposed coal mining operations, NPWS would become an approval body for the proposal.

As a component of the Director-General's Requirements for the proposal issued on 14 February 2002 it was stated that:

"Further to your advice contained in Form A, the Department understands that following further investigations of the site, NPWS may also be an approval body for this project. As a result you are required to consult with NPWS directly and incorporate their requirements in the preparation of the EIS".

It is my understanding, as a result of today's telephone conversation, that NPWS does not wish to offer any additional formal advice on this proposal and wishes to rely upon information already provided by way of existing guidelines and, the comments provided by NPWS (Tanya Koeneman) at the Planning Focus Meeting held on 14 November 2001. I also note your advice that consultation with all relevant local Aboriginal groups should be in a manner that allows sufficient time for meaningful and effective consultation. Additionally, that for this project, notice should be taken of recent discussions between Vanessa Hardy of HLA and Officers of NPWS on the information required for the archaeological assessment of the Ashton Project.

I thank you for the time taken to clarify NPWS' position on this matter. I will forward copies of this letter, by way of information, to planning NSW and to the consent authority, Muswellbrook Shire Council.

Yours faithfully

**HLA-Envirosciences Pty Limited** 

Colin Phillips

Manager, Planning and Environment

U888 NPWS let 6-3-02.doc/CP:od

cc:

Chris Ritchie - planningNSW

Mark Howes - MCC

Chris Gidney - MSC

Meaghan Russell - HLA Pymble

Newcastle Office: 18 Warabrook Boulevarde Warabrook NSW 2304

All Mail Should Be Addressed To: PO Box 73 HRMC NSW 2310 Ph: (+61 2) 4968 0044 Fax: (+61 2) 4968 0005

Email: mail@hla-enviro.com.au