Tuesday July 8<sup>th</sup>, 2014



Mining and Industry Projects NSW Department of Planning & Infrastructure GPO Box 39 Sydney NSW 2001

Dear Sir/Madam,

## Objection to Airly Colliery modification 3 – (extending 162/91 consent for a year) due to inappropriate consent conditions for a NPW Act reserve

## Need to confirm adequate minimisation of subsidence impacts associated with Bord and Pillar Mining Methods

The Colong Foundation agrees with the Greater Blue Mountains World Heritage Advisory Committee that the Mugii Murum-ban State Conservation Area should be added to the Greater Blue Mountains World Heritage Area once mining at Airly Colliery has been completed.

For this intention to be successfully achieved, any modification 3 consent must require maximum tilts and strains specified as specified on page "i" of the executive summary and on page 29 in section 6.1 of the environmental assessment. There must be no exceptions to vertical subsidence being a maximum of 125mm, a maximum tilt of 2.5 mm/m; and a maximum strain of 2.0 mm/m.

The Colong Foundation is confused by Centennial Coal's remarks in its June 2014 environmental assessment that suggest mining subsidence be greater than the above undertakings.

On page 11 the June 2014 environmental assessment states that modification 3 would extend the life of the existing consent to 31 October 2015, this implies that there would be no change to any consent condition other than the expiry date.

Surely regulatory and determining authorities can determine appropriate consent conditions for a modification consent? The modification as proposed by Centennial would apparently include a mine method and design that allows 'Full extraction in areas outside Environmental Protection Zones with

supercritical void widths' and 'maximum subsidence of 1.8 m' (page 11, Section 3.1 mining under the proposed modification).

Subsidence of 1.8m is totally unacceptable must be removed from any extension of development consent under Modification 3.

The Colong Foundation for Wilderness is a member of the Special Management Committee, established under the 1991 consent. This Committee received a presentation by Centennial Coal on September 14, 2010 regarding its intended mining operations at Airly Colliery.

Slide 12 of that Centennial Coal presentation gave the following undertakings: 'Different layout depending on depth:

- Quartering <120m depth;</li>
- Partial extraction of pillars >120m depth;
- No mining <20m depth. No intersections <30m depth
- Barriers and compartments isolate extracted areas
- Remaining coal supports overburden
- Very low levels of surface subsidence' (Centennial Coal, Sept 2010)

The relevant slide from this presentation is attached to this submission as **Attachment A** and the minutes of 14 September 2010 are provided as **Attachment B**. These Special Monitoring Committee minutes state that mine would use a Partial extraction technique instead of 'full extraction' methods to minimise subsidence, prevent damage to aquifers and allow flexibility of mining to cater for varying underground conditions and surface features.'

The Colong Foundation assumes that these undertakings to the Special Monitoring Committee are further evidence that Centennial Coal must not cause a vertical subsidence of greater than 125mm, a maximum tilt of 2.5 mm/m; and a maximum strain of 2.0 mm/m.

Given these undertakings, the proposed extension of consent by one year for mining operations must specify subsidence criteria that are in the executive summary and page 29, with no exceptions.

The December 2013 EPBC referral adds further confusion. For example, documents another inappropriate proposal for a total subsidence of 0.5 metres under the historic oil shale ruins. Such variations are unacceptable. The subsidence criteria proposed in the executive summary of the June 2014 environmental assessment for Modification 3 must be the criteria used as a condition in the modification consent, not those in 162/91 consent.

#### Consent 162/91 is no longer appropriate

The 162/91 consent is out of date and any modification of consent for continued mining operations at Airly must ensure minimal surface subsidence. Circumstances have changed, as the Mugii Murum-ban State Conservation Area was created on March 4, 2011.

The Colong Foundation does not accept that it is appropriate to continue mining for a one year under the old regulatory framework that permits subsidence of 1.8 metres, as if there has been no change in land use or formal company undertakings regarding minimal subsidence.

The development consent for this mine must be amended to reflect these circumstances.

We appreciate that Centennial Coal has not been able to meet its obligations regarding a new development application for the entire operation before expiry of the old consent. This oversight does not, however, justify rolling over an inappropriate consent conditions into the proposed modification consent.

In this interim period the existing consent should be modified. The condition that allows for 1.8 metres of vertical subsidence must not be migrated into the modification 3 consent.

#### New development application must be for the entire mine operation

Further, the proposed new major project assessment, called the Airly Mine Extension Project (SSD 12\_5581), must consider environmental management within the existing mining lease area. Development consents should lapse on in expiry and new one issued to allow mining operations to adapt to changed circumstances. Adaptive management should operate in these circumstances.

Airly Mine Extension Project environmental assessment must not be constrained to the new lease area, as has been proposed by Centennial Coal. <u>The regulatory framework for development control regarding the expiry of old consents must require an environmental review and issue of a new consent for the entire mining operation</u>.

The existence of mining lease 1331 is does not preclude changes in the development control of activities under NSW planning legislation.

#### Oil Shale Ruins should be treated as an area of special significance

The June 2014 environmental assessment, Centennial Coal ignores the oil shale heritage in its mining operation area. Centennial Coal has not indicated the location, character and extent of these important ruins on Figure 6 on page 31 of the June 2014 environmental assessment. These ruins are indeed sensitive cultural features and should have been indicated on Figure 6.

Centennial does not propose in its June 2014 environmental assessment to protect the oil shale ruins from pillar splitting or quartering, such as proposed in relation to the 'stone cottage'.

The allegation made by RPS Australia East Pty Ltd (April 1998) that the Airly Shale Mining Complex is only of local heritage value is ludicrous. Those who have examined these ruins are impressed at the level of preservation and unique character of the miner's dwellings on Mount Airly. I know of no better preserved site for such heritage in NSW, including Newnes and Glen Davis.

The Colong Foundation opposes the proposed mining operation as it does not adequately identify or protect these historical oil shale ruins. The Foundation disappointed with the failure by Centennial to refer to, assess and protect the heritage values of these ruins in the proposed Modification 3 environmental assessment.

The Foundation believes that the proposed mining operations will have environmental impacts on the oil shale heritage. <u>Centennial Coal must not</u> <u>reduce, split or quarter coal pillars under the Airly oil shale ruins</u>. There should be no noticeable subsidence impacting on the oil shale ruins.

#### Management of product and rock waste stockpiles

The company owns large tracts of cleared land at Airly. Centennial should remove cattle and revegetate its properties to manage its properties in a manner more consistent with the adjoining national parks and reserves.

The Foundation understands that Centennial has a plan to separate fine and coarse mine wastes. This plan may be part of a proposal to market coal product to the local power plant market. This plan may explain why large stockpiles of coal have accumulated at the mine.

The management plan needs to consider the landscaping of coal product and waste rock piles in relation to parks and popular tourist viewing points, such as the Glen Davis Road and even Pearsons Lookout. Visually prominent waste and product heaps must be appropriately screened.

The mess created at the head of the Wollangambe River catchment by Centennial's Clarence Colliery should not be repeated here at Airly Colliery in the Capertee River catchment.

The company must screen its operations and prevent visual blight in a popular tourist area, the Capertee Valley. Airly Colliery should be subjected to continuous rehabilitation and landscaping.

The coal waste piles should be top sealed with clay as soon as possible to prevent contamination of groundwater resources through heap leaching. Such leaching leads to more or less permanent source of downstream pollution. Capping of waste heaps should also be a priority at Centennial Coal's Clarence Colliery.

#### Impacts on the World Heritage Area – Water management

Water discharged from this mine will have critical impacts when the effluent affects the World Heritage Area downstream. Omission of these impacts and failure to consider downstream impacts on the World Heritage Area in the modification 3 proposal is of concern.

There will be water quality impacts, they should be part of the modification assessment process and the potential to pollute the World Heritage Area are deemed a controlled action in relation to SSD 12\_5581. So the omission of this assessment is a serious concern.

The proposed operations under Modification 3 are very likely to discharge mine effluent into Airly Creek. Such discharges would impact on the Gardens of Stone National Park, in the Greater Blue Mountains Area. Airly creek flows directly into the adjoining World Heritage Area.

Water treatment of the effluent from this colliery to remove salts or dissolved metals should be required. Airly Creek is in a very good condition but has very small flows. Mine effluent discharges are likely to have a much greater effect on the previously pristine downstream ecology than if Airly Creek were a larger stream.

#### Conclusion

The Colong Foundation is very concerned that the proposed partial extraction of the coal pillars will see a greater risk of mine subsidence related damage in the Mugii Murum-ban State Conservation Area.

Wording of the June 2014 environmental assessment in relation to mine subsidence must not result in mining methods causing impacts on the natural environment, particularly internal clifflines and pagodas, springs and groundwater, as well as on oil shale heritage sites.

Mine intensification by stealth is inappropriate and the ambiguities in the environmental assessment regarding subsidence must not be migrated into the development consent.

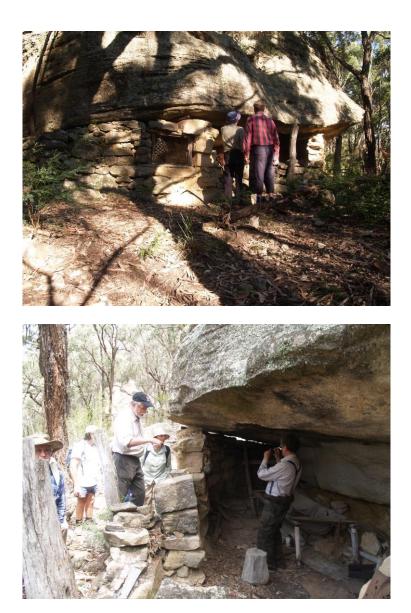
Images depicting some of the Mt Airly oil shale ruins are below.

Thank you for the opportunity to comment on this modification proposal.

K. Minn

Keith Muir Director The Colong Foundation for Wilderness





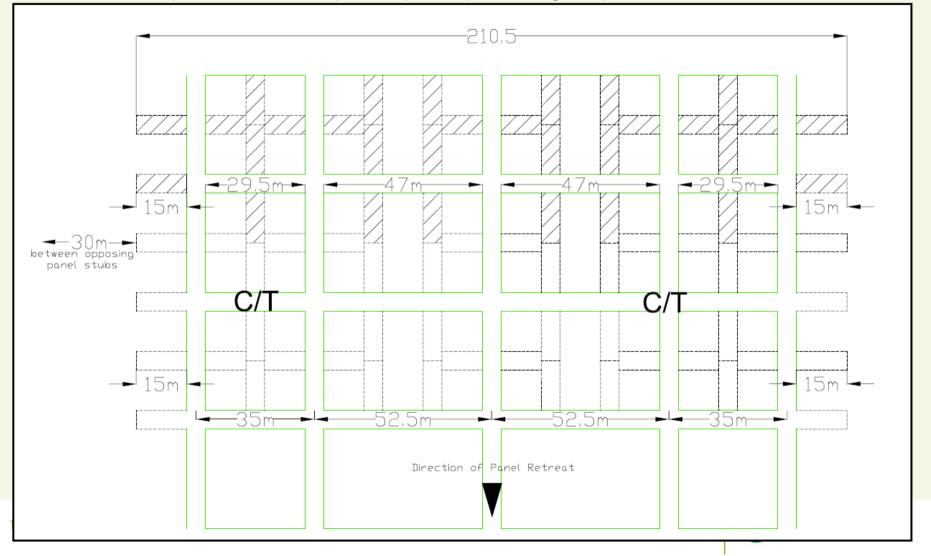
# ATTACHMENT A Why Use Partial Extraction?

- Minimise subsidence environmental protection and consent conditions
- Prevent damage to aquifers environmental protection and minimise ingress of water to the mine
- Prevent high stresses due to 'abutment' load generated with full extraction due to weak roof
- Mining method allows flexibility to cater for varying underground conditions, provide protection of surface features (natural and man made) and vary production rates



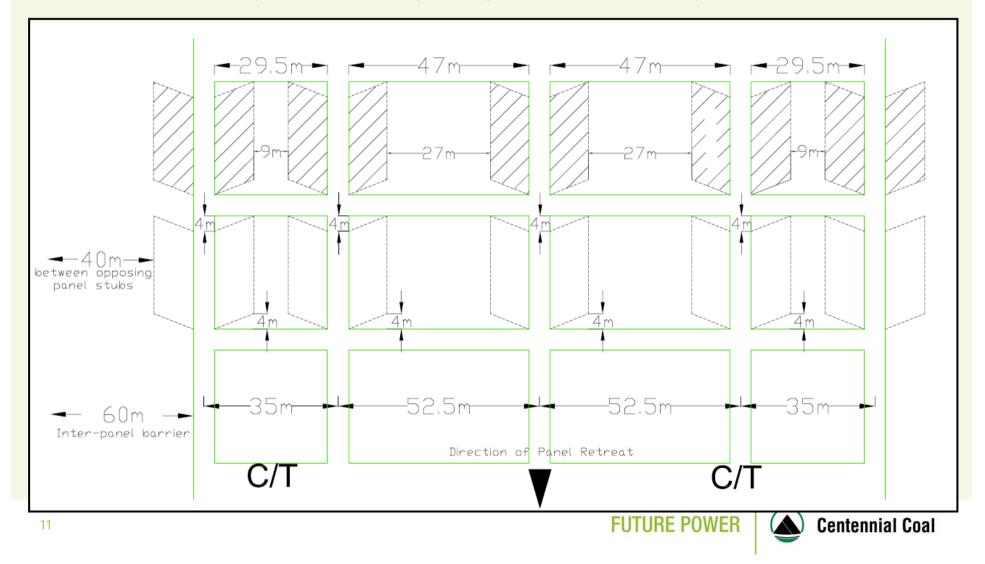
# **Conceptual Partial Extraction Layouts**

Conceptual extraction plan – pillar quartering (depth of cover 30m – 120m)



## **Conceptual Partial Extraction Layouts**

Conceptual extraction plan – partial extraction (depth of > 120m)



# **Partial Extraction Features**

- Different layout depending on depth
  - Quartering <120m depth</li>
  - Partial extraction of pillars >120m depth
  - No mining <20m depth. No intersections <30m depth</li>
- Barriers and compartments isolate extracted areas
- Remaining coal supports overburden
- Very low levels of surface subsidence
  - e.g. Clarence partial extraction <100mm
  - Full pillar extraction typically 0.5-1m
  - Longwall typically >1m



### Airly Mine Special Monitoring Committee

Minutes of Meeting 14th September 2010

### 1. Meeting Opening and Introductions

#### Attendance:

Councillor Grahame Danaher – Chairperson Gary Wallace - Lithgow City Council (LCC) Graham Pryor - Centennial Coal, Airly Mine (CEY) David King - Centennial Coal, Airly Mine (CEY) Nicole Van den Berg - Centennial Coal, Airly Mine (CEY) Greg Kininmonth- Department of Industry & Investment (Minerals (DII)) Dave Noble - DECCW - National Parks Karen McLaughlin- Colong Foundation for Wilderness and Blue Mountains Conservation Society (BMCS) Collette Parr - Capertee & District Progress Association (CPA) and local resident Veronica Sanday – Capertee Valley Environment Group Inc. (CVEG) Donna Upton- Capertee Valley Alliance Inc (CVA)

### 2. Apologies and Proxy Votes

Haydn Washington - Colo Committee Keith Muir - Colong Foundation for Wilderness - Karen McLaughlin nominated as proxy. Rona Wallace - Capertee & District Progress Association – Collette Parr nominated as proxy

#### 3. Correspondence

- Letter received from Rosie Doyle on 14/09/2010, to inform the SMC of the name change of the *Capertee Valley Protection Society* to the *Capertee Valley Environment Group Inc*. Veronica Nolan (Sanday) has been named as the CVEG representative for future SMC meetings.
- Legal advice received by LCC from Pikes Lawyers on 7/09/2010, regarding membership of the SMC and the replacement of the Capertee Valley Committee. Under legal opinion, the composition of the SMC cannot be varied unless the provisions of condition 31(a) of the Airly development consent are modified pursuant to Section 96 of the EPA Act.

#### 4. Confirmation of Previous Minutes

Motion: "That the minutes of the previous meeting be confirmed" Proposed: Karen McLaughlin Seconded: Dave Noble Motion carried

#### 5. SMC Membership

Applications for membership on the SMC have been received from:

- Blue Mountains Conservation Society
- Capertee Valley Environmental Group
- Capertee Valley Alliance Inc

As a consequence of the decision taken at the previous SMC meeting, legal advice had been sought by LCC on the possible replacement of the Capertee Valley Committee and admission of other community groups.

The legal opinion states that the composition of the SMC may only be varied if the provisions of condition 31(a) of the Airly development consent are modified pursuant to Section 96 of the EPA Act. The SMC cannot, of its own volition, alter its own composition of membership.

Airly Mine advised that it is currently working towards the Development of a Part 3A approval for the renewal of the development consent and mining lease.

Committee Discussion:

1. As part of a new Part 3A approval for the mine it is possible that the SMC will be replaced by a Community Consultative Committee (CCC). CCC meetings incorporate community members from the local area to the mine. It gives the general public a person within the community that people can approach as a member. The current consent will lapse in a few years and this will possibly come into practice then.

2. The committee can co-opt representatives from other relevant bodies, authorities or persons where necessary in accordance with condition 31(d).

3. The SMC could move motions to have the community and/or environment groups that applied for membership to the SMC accepted as non-voting participants of the SMC. As such they would be able to attend meetings and receive information in relation to the SMC.

#### ATTACHMENT B

Motion: "That the Capertee Valley Alliance Inc be involved with the SMC as a nonvoting participant of the Committee." Proposed: Dave Noble Seconded: Nicole Van den Berg Motion carried

Motion: "That the Capertee Valley Environment Group Inc be involved with the SMC as a non-voting participant of the Committee."

Proposed: Collette Parr Seconded: Karen McLaughlin Motion carried

Motion: "That the Blue Mountains Conservation Society be involved with the SMC as a non-voting participant of the Committee." Proposed: Collette Parr Seconded: Greg Kininmonth Motion carried

The Chairman announced that the SMC representative groups, both voting members and non-voting members, are to each nominate one representative for the purpose of meeting attendance. If that person cannot attend the SMC for any reason, a proxy representative may be nominated in writing and the correspondence of such is to be raised at the meeting and minuted within the minutes under apologies and proxy votes.

#### 6. Business arising from the minutes of the previous meeting

#### **Terms of Reference:**

An appendix has been attached to the Terms of Reference documenting conditions from Development Consent and Airly Mine leases where the SMC is referred to. This was tabled by Airly Mine.

Tour of Airly Mine site is available after the SMC meeting.

#### 7. **Adoption of Terms of Reference**

Motion; "That the terms of reference with the appendix be adopted." Proposed: Greg Kininmonth Seconded: Dave Noble Motion carried

The Terms of Reference document is to be distributed to SMC with the minutes of this meeting.

#### 8. **Airly Mine Presentation on Proposed Mining Methods**

A presentation was given by Airly Mine's Senior Mining Engineer David King. The presentation covered:

- Background of Airly Mine from the project being acquired by Centennial Coal in 1997 through to construction and mining in 2010.
- Proposed mining method to be adopted at Airly mine involving 'bord and pillar' method and partial extraction.

#### ATTACHMENT B

- Mining equipment used at the mine.
- Partial extraction technique instead of 'full extraction' methods to
  - o minimise subsidence,
  - o prevent damage to aquifers and
  - allow flexibility of mining to cater for varying underground conditions and surface features.
- Features of extraction.

Comment/ Question	Answer	Action
Can a plan covering	A plan showing land	Include plan in Airly mine
ownership of the land over	ownership will be presented	presentation at next
the lease be presented at the	at the next meeting on 15 <sup>th</sup>	meeting - CEY
next meeting?	March 2011	
What are the timings of	Both approval for	N/A
secondary extraction at the	secondary extraction and	
mine and also of the	the re-approval of the	
Development Consent	development consent will	
renewal?	be sought by 2014.	

#### 9. General Business

A presentation was given by Airly Mine's Environment and Community Coordinator, Nicole Van den Berg, providing an environment and community update covering the period since the last meeting. The presentation covered:

- Environmental monitoring sites at the mine
- Environmental water monitoring results from the past three months for Total Suspended Solids, pH, Electrical Conductivity, oil & grease. There have been no issues with any of these parameters since the last meeting
- Environmental air quality monitoring data from the past three months. The only issue was an unexplained elevated level of total insoluble solids at one of the monitoring points (DM1) in the June/July period. All other monitoring points including those closer to the mine site remained well below the level of 4g/m2/month and the reason for elevated levels is believed to not be related to mining activities.
- Community concerns. One complaint received from a neighbouring property in relation to noise from site in August 2010. Communication maintained with neighbours and changes were promptly made to the evasees of the temporary ventilation fans on site. Ongoing discussions are to be held with residents to keep them informed of progress of the installation of the permanent ventilation fans. Noise monitoring at a number of locations around the mine to be carried out in September to determine noise impacts on the surrounding area.
- Community relations. The site has been continuing with community interactions and sponsorship since the last meeting. For the information of the wider

community, a Community Information Day is being hosted by Airly Mine at the Capertee Memorial Hall on Saturday 23rd October between 10am and 3pm. Mine representatives who will be available to speak with members of the community on the day will consist of the Mine Manager, Human Resources Manager, Health, Safety & Training Coordinator and the Environment & Community Coordinator.

• Comment made over the need for ongoing positive things that are being undertaken on site being tabled. It was considered that the SMC is a perfect forum to indicate the net positive effect the operation is having on the local area. This forum is an opportunity for the local representatives to be advised on positive things being undertaken on site.

Comment/ Question	Answer	Action
Can a copy of the	An electronic copy of the	Attach a copy of the
presentations from today's	presentation will be	presentation to e-mail
SMC be provided with the	supplied with the minutes	containing the minutes -
minutes of the meeting?	when they are distributed	CEY
Collette Parr commented	Airly Mine encourage any	Nil
that if anyone has any	community members to	
issues with the mine, to	contact the mine directly if	
please make contact with	there are any issues. By	
the mine directly as issues	contacting the mine directly	
she has previously had,	the issues can be handled in	
have been taken seriously	a more timely manner	
and followed up proactively		
Community raised a	There is no proposal for	CEY to give ongoing
requirement for details on	ventilation shafts to be	updates on activities to be
what surface activities or	installed over any area of	carried out over the
infrastructure may exist in	either Airly or Genowlan	proposed SCA area at future
the future over the proposed	Mountains. All ventilation	meetings
State Conservation Area of	infrastructure is located at	
Genowlan Mountain.	the pit top area. There are	
	also no plans for the	
	installation of the 'eastern	
	portal' that was approved	
	under the DA that was	
	proposed for the eastern	
	side of Genowlan mountain.	
	Any ongoing activities over	
	the proposed SCA would	
	included environmental	
	monitoring including Flora	
	& Fauna monitoring and the	
	installation of groundwater	
	monitoring bores	
Donna Upton thanked the	As above	Nil

mine for relocating the spotlight that was directly in the line of site of Glen Davis Road at the time of the previous meeting		
Donna Upton raised a	CEY, LCC & DII	Nil
question concerning	commented that they were	
information she had heard	not aware of any such	
in relation to 6% of mining	discussions or directives.	
royalties being returned to		
the local communities		

#### Date of next meeting

Next meeting is scheduled to be held on Tuesday 15th March 2011 commencing at 10.30am at the Capertee Memorial Hall.

### 11. Meeting Closed

Chairman Grahame Danaher thanked everyone for their attendance. The meeting closed at 1.15pm

Tour of Airly Mine site commenced at 1:45pm. Attendees of the site tour included: Greg Kininmonth, Dave Noble, Karen McLaughlin, Collette Parr, Veronica Sanday, Donna Upton, David King and Nicole Van den Berg.