

## Submission on the

### AIRLY MINE EXTENSION PROJECT SSD 12\_5581

In The Justification and Conclusion of the EIS for the Airly Extension it states that:

*“The technical studies have concluded that no significant alteration to the supporting physical or hydrological environments is likely to occur as a result of the Project”*

I feel that such a generalised statement is meaningless, as how much environmental damage is “significant” is debatable. The only proper protection for an area is to guarantee “no damage”.

“Minimal” or “Minor” damage is not acceptable to me, especially in a State Conservation Area which includes areas of nationally significant geodiversity and Endangered Ecological Communities.

As the only true way to protect an area is not to mine under it, I would not like to see the Airly mining area extended easterly beyond its current lease boundary into the rest of the A232 authorisation area.

That is the only way to conserve what is essentially a wilderness area on the Genowlan Mountain mesa.

No mining would avoid the disturbance effects of mine exploration, various forms of monitoring, and mining subsidence effects on the geology, hydrology, and the ecosystem.

Mining also affects the visual and noise amenity of areas. It would spoil the ambience of the area for bushwalkers and other recreational users.

Increased industrial activity results in a greater bushfire risk also, which would be a risk for other users of the National Parks estate.

Centennial Coal wants to mine under virtually all of the Airly-Genowlan mesa area, but since their development was approved about 20 years ago they have only mined a relatively small area on the western side of Airly Mountain. Limiting their mining area to the current mining lease would still allow a very large area for mining, much larger than they have managed to mine so far.

The company says that they plan to use mining methods that would vary across the entire area according to the depth of cover and the sensitive nature of the surface features, such as cliffs, pagodas or heritage sites.

The various methods would result in varying amounts of subsidence at the surface, or as they say “to engineer the desired subsidence levels”.

In areas of cliffs and pagodas they plan to use first workings mining (but only 30m either side of the cliff), but even that will result in 5% of mining related impacts to the majority of cliffs, and in some cases 10%.

This may be considered “insignificant” by the ACARP methodology, but those standards need to be tightened in this day and age. Even Centennial Coal admit that the 1.8m subsidence (and potential damage) approved in the existing development consent is not acceptable by society today.

As such, I think there should be no mining under cliffs/pagodas or other significant surface features such as The Grotto, which are of national geodiversity significance.

The company acknowledges that subsidence *will* occur, it is just a matter of how much. Subsidence will have a detrimental effect on the hydrology (including near surface and deeper aquifers), which in turn can affect the associated ecosystem.

There is an EEC near Genowlan Point, and this should not be mined under unless they can guarantee no adverse impacts.

Increased size of mining areas also leads to issues with surface water runoff and mine water make, and damage to aquifers. The company states that the Permian aquifer just above the Lithgow Seam will be damaged, leading to flooding of parts of the mine.

Cracking and subsidence ground effects can have the opposite result of reducing the water available in the

ecosystem, leading to dieback of vegetation, and subsequent erosion in sensitive soil profile areas.

The plan to mine under the existing (largely unknown) New Hartley workings and the unique heritage areas of Airly village (including “Cave Houses”) is not a good idea, as the area is already quite damaged by the historical mining, and mining the vertically close by Lithgow Seam could have unforeseen results.

In conclusion, I feel that the important geodiversity and biodiversity of the Mugii Murum-ban SCA should be protected as much as possible from mining damage (*which the company admits will occur*), and a large part of this preservation can be achieved by not approving the mine extension over the whole of the Airly-Genowlan mesa, and limiting any further mining to the current lease boundary, and not in the bulk of Genowlan Mountain, which includes Genowlan Point which has an endangered ecological community and magnificent cliffs and pagodas. Any mining there would ruin the remote wilderness feel of the area.

This mine design, in any approved extension area, should be made even more conservative (eg. panel and pillar widths) to minimise the subsidence effects on surface features and aquifers.

Some of the profit from the sale of coal should be foregone to get an even better environmental outcome, with negligible damage to the area rather than the greater “no significant” damage.