

SUBMISSION on

INVINCIBLE COLLIERY PA 07_0127 MODIFICATION

Any quotations shown below are from Coalpac's Environmental Assessment PDF document.

Modification Purpose

"to continue to supply competitively priced coal fuel to Mount Piper Power Station"

Since Wallerawang power station has ceased operation (put on standby) there is less demand for coal for the power stations in the area. Thus less coal is needed by Energy Australia.

Mt Piper can get coal from other suppliers nearby. There is no desperate need for Coalpac to supply it.

"to enable the development of an optimum rehabilitation and final landform outcome for the existing and proposed mining areas at Invincible Colliery and Cullen Valley Mine"

The previously mined areas have only been partly rehabilitated, and to a very poor standard. If the modification is approved, why would this poor performance suddenly change, and the whole area be totally rehabilitated by Year 2 as Coalpac says will happen? (see Figure 5, p.35)

The proposed modification is in fact a veiled threat that no more rehabilitation will be done unless it is approved. It should be done anyway under previous commitments.

The two main justifications quoted for the modifications are not valid or realistic, and so the modification should not be approved.

It is even debatable whether the proposed mining are "modifications" as such:

"These Modifications do not constitute a "radical transformation" from what has been approved under PA 07_0127 for Invincible Colliery and DA 200-5-2003 for Cullen Valley Mine."

A 100% increase in the area to be mined at the Invincible mine is hardly a minor change.

Ecological and geological impacts

"With the diversity and density of local providence species recorded in rehabilitated areas, there is strong evidence to support that these areas will achieve biodiversity outcomes comparable to adjacent native woodland communities."

There is no evidence of this happening or that it ever will.

“Extend existing topsoil management and rehabilitation strategies”

These have been poorly handled, with erosion, weeds, and barren ground in the rehabilitation and perimeter areas.

“The Modifications will result in habitat clearing which leads to “edge effects”

This results in degradation of the adjoining forest and impacts from weeds, erosion, and drainage changes.

“Surface runoff from natural forested catchments and open cut mining areas including sumps, fine reject dams, coal stockpiles and some rehabilitation areas tends to seep into the underground workings via backfilled entries, subsidence induced cracks and channelling”

Surface water in the area has been severely affected by the previous mining. Due to subsidence cracking, etc. there are very few natural streams in the area.

Geological damage: there are many occurrences of cracking in the ground and rock outcrops and of cliff/overhang collapses in Ben Bullen State Forest in and adjoining the Coalpac area. These have been caused by previous underground coal mining, by Invincible and other neighbouring coal mines. Mining on top of existing mined areas is likely to be unstable, e.g. in the highwall areas.

Inaccuracies in the Environmental Assessment

- *“to avoid a subsequent impost of increased electricity prices in NSW by the provision of lower cost coal to the operator of Mount Piper Power Station”* – this sounds very dubious.
- *“delivering economic welfare through the provision of lower electricity costs to the people of NSW”* – are prices going down?
- It is claimed that the new workings will be further away from Cullen Bullen township, but this is not true at the north end of the Invincible mine.
- Conceptual Rehabilitation 7 years & 20 years Post-mining shown on Figure 19, p.115 is bit of Photoshop editing to adjust the colour of the (mostly) acacias used in rehabilitation. Wattles miraculously become eucalypts!
- Throughout the Coalpac Modification documents they claim over and over that highwall mining will have no effect on the above ecosystems or geological features. They have not taken into account the fact that the whole of the Invincible mine area has previous underground coal mining under it, and there are many examples of existing surface cracking and cliff/overhang collapses. What happens when you highwall an area already damaged by old underground mining?



Crack in ground from old underground workings in the proposed Invincible open cut area.

- *“For the Modifications, the proposed final highwall positions are now significantly further away from the sensitive rock formations than that proposed for the CCP.”*
- *“For the Modifications the closest crest is greater than 200m away from any pagoda landform, which further reduces the risk of any stability impact”*

At the Invincible mine this is largely but not completely true. There are still geological formations within some of the highwall areas, especially at the northern end of Invincible. At Cullen Valley there has been no attempt to avoid any geological formations, and the highwall areas completely enclose whole rocky ridges with cliffs and pagodas.



rocky outcrops on spur completely in proposed Invincible highwall area



delicate pagodas with hollows on rocky ridge in highwall area at Invincible

- *“Vegetation communities were mapped using GPS during flora field surveys. In addition, aerial photographs and satellite imagery, as available from SIX Viewer, Google Earth and topographic maps were used to assist in the delineation of vegetation communities”*

The vegetation mapping appears to be of suspect integrity, based largely on zones of land elevation (especially at Cullen Valley), rather than being derived from field surveys by experts. The reality is not that simple, with vegetation communities also being influenced by ground moisture, slope, aspect, soil type, etc.

If the mapping contains errors, it could result in important endangered ecological communities or individual plants being missed, and hence equivalents not being conserved in the offset areas.

- Economic benefit cost analysis

“A BCA of the Modifications indicated that it would have net production benefits to Australia of \$219M”

This is made up of \$11M company tax to the Commonwealth Government, \$29M in royalties to the NSW Government, after tax profit of \$25M to Coalpac and its shareholders, and \$155M in the form of lower cost coal to the operator of Mount Piper power station. How on earth can you put a figure on “savings” to Mt Piper? The figure of \$155M quoted is 70% of the claimed total value of the net benefit to Australia!

Rehabilitation myth

“Maintain and extend successful current rehabilitation practices”

Coalpac continually claims to have a record of successful rehabilitation.

And claim that they will restore the mined areas virtually back to their original state:

“voids can then be rehabilitated and incorporated, together with the proposed disturbance areas, into a free draining final landform that is consistent with the surrounding landscape and capable of sustaining a native forest vegetative cover of similar composition to that in existence prior to mining.”

and *“these areas will achieve biodiversity outcomes comparable to adjacent native woodland communities”*

The reality is different:—

The rehabilitated areas are staggering in their sameness, and claustrophobic in their density, especially as they get older. The barren broken ground is almost depleted of ground covers, and the topsoil is thin and poor.

I have seen this type of rehabilitation at other coal mines, including Baal Bone and Blue Mountains Collieries. Even after 10 to 20 years, it is a boring monoculture of acacias growing on barren ground, without the structure and diversity of soils, plants and trees that you get in the real forests.



Invincible mine rehabilitation is like “chalk and cheese” compared to the adjoining State Forest

“Progressive rehabilitation has been undertaken on a regular basis since 2002 at Cullen Valley Mine and from 2008 at Invincible Colliery. Rehabilitation is undertaken as soon as practicable following the completion of mining and landform establishment”

Why aren't all the currently mined areas rehabilitated? Only a small percentage has been done.

The fraction that has been done, is botanically incompatible with the adjoining native bushland, and will never be the same.

Why has the rehabilitation not been done after all the years the mines have been operating?

It is claimed in the proposed modification that **all the disturbed areas** (of both mines) will be rehabilitated by Year 2 of the Conceptual Mine Plan (see Figure 5, p.35).

Funny....that's what they said last time that they were seeking approval for a DA.

They say they want to do more mining as they don't have enough overburden to fill the six existing large voids.

Yet another example of previous bad management and unfulfilled promises.

Biodiversity offsets

“Conserve a significant area of similar vegetation types and suitable habitat for threatened flora and fauna impacted by the Modifications”

This is “creative accounting” to justify destroying one patch of ground, by saying that you are taking care of an ecologically equivalent area elsewhere.

If you have two existing areas and you wreck one, how does that balance out?

The choice of offset areas is suspect too. The offset areas at Cullen Bullen are largely around the lower half of Tildesley Hill, which were always there, still are, and have not been improved or altered. So how does that compensate for the destruction next to it?

Most offset areas are on private land that is fenced with signs telling you to Keep Out. This is a poor substitute for State Forests which are accessible by the general public.

What will happen with managing the offset areas when the Coalpac closes down, which will happen at some time, sooner or later?

Existing visual landscape and final landform

“The indicative final landform for the Project has been developed to promote visual characteristics and biodiversity outcomes that generally conform to the existing landscape of the Ben Bullen State Forest.”

Coalpac’s past record is abysmal, so why should they be trusted in the future?

There has been a mine fire at Cullen Valley mine since the 1970’s, and Coalpac has not even been capable of extinguishing that. Now they want to build a pipeline to get water to put on the fire and to control dust. They pipeline is just another example of slicing up the Ben Bullen State Forest.

Coalpac will never be able to create a final landform with “visual characteristics and biodiversity outcomes that generally conform to the existing landscape of the Ben Bullen State Forest.”

They certainly have not done anything remotely like that so far, in all the years that they have been there.

The existing mine is a blight on the landscape any way you look at it:–



“Continuation of existing management practices and Coalpac’s extensive knowledge of developing effective rehabilitation in the local area gathered during rehabilitation already undertaken at Cullen Valley Mine and Invincible Colliery.”

Conclusion

The Cullen Bullen community and the Lithgow district are better off -as now- without the Coalpac mines operating. The air is cleaner, there is less noise, less trucks, and a halt to further ecological damage to the Ben Bullen State Forest.

It will be good when this divisive issue in the community comes to an end.

The only people who want the mining are people who are directly getting money out of it. That is the only factor that they consider. Unfortunately some parts of Government only have that perspective too.

Based on short term self-interest rather than the principles of sustainable development. We need to consider the long term social and environmental impacts as well.

I say please no more greenhouse gases and other toxic products produced by the burning of cheap, poor quality coal– which is what Coalpac is offering to supply because it's cheap. For the sake of a short term extension of the life of the mine, we will be destroying 100's of hectares of State Forest biodiversity which is irreplaceable, regardless of what Coalpac claims it can do to rehabilitate it.

Coalpac and neighbouring coal mines have a shameful history of damage to Ben Bullen State Forest. It is time for it to stop, and the damaged areas to be fully and properly rehabilitated.

The following photos show a couple of examples of State Forest to be cleared for open cut mining:





Scribbly gum woodland on slope in Invincible highwall area

