The Newnes Hotel Cabins

Everything Money Can't Buy

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



Newnes, 20 May 2014

Ref.: State Significant Project - Angus Place Mine Extension (SSD 12_5602)

Dear Sir/Madam.

I am an operator of holiday cabins at Newnes, downstream from the area being undermined by the proposed expansion of both Springvale and Angus Place collieries.

The text below and the page numbers refer to the Springvale EIS. However as the EIS for Angus Place is similar and the issues are the same I am submitting this as a submission opposing the expansion plans for Angus Place as well.

I object to this proposed expansion of longwall mining by Centennial Coal from both Springvale and Angus Place mines for the reasons explained below. But firstly I would like to criticize the Environmental Impact Statement compiled for this application. This EIS mentions everything that supports the application but leaves out aspects which might speak against it. It contradicts itself and in parts is simply untrue:

Greenhouse Gas Emissions

The most obvious example of this 'limited view' is the statement in the Summary of Environmental Impacts (SoEI) that Greenhouse Gas "*Emissions will not increase as a result of the project*" (page 480). Centennial may want to argue that the greenhouse gas emissions of all the machinery required in the actual operations and all the clearing of forest required for above ground supporting infrastructure is "negligible". But to ignore the fact that the entire purpose of this project is to sell for combustion 4.5 million tons of the thermal coal p.a. for 13 years resulting in harmful CO2 emissions is deceitful and misleading. The Greenhouse Gas Impact Assessment (p.434) totally ignores that fact.

Cliffs and Pagodas

The EIS contradicts its own findings in both the area of cliff fracture and the harm to groundwater.

Department of Planning Received 2 3 MAY 2014

Scanning Room

Cliff fracture

In the Summary of Environmental Impact (SoEI) under 'Cliffs' and 'Pagodas' the EIS states that "the predicted maximum strains for the cliffs are 1.5 mm tensile and 0.5 mm compressive and no spalling or cracking is predicted" (p.479). However, a more detailed examination of the facts in Chapter 5.3 of Appendix E states that:

"Longwall mining results in the complete collapse of the goaf area behind the advancing longwall shearer. This collapse results in the successive upwards transfer of stresses, with subsequent subsidence and deformation of the overlying strata that result in changes to the natural hydraulic properties of the formations." (Appendix E Groundwater Impact Assessment p.51)

The Fractured Zone, including a transition zone "is predicted to propagate approximately 140 m above the roof of the Lithgow Seam." (App. Ep.51)

The Constrained Zone where "some bed separation or slippage can be present as well as some discontinuous vertical cracks, is predicted to propagate to approximately 240 m to 250 m above the roof of the Lithgow Seam." (App E p.51)

Even the Surface Zone will experience "mining induced tensile and compressive strains (which) may result in the formation of surface cracking or ground heaving. The Surface Zone may also experience bed separation resulting in enhanced horizontal permeability. Shallow surface cracking can also occur but this is generally limited to the upper 10 m to 15m". (App E p.52)

One interesting comment in the **Heritage** section of the SoEI is the description of the historic site of a grinding stone at site 45-1-0002. After stating that "no spalling or cracking is predicted" (p. 479) for cliffs and pagodas "the sandstone where the grinding groove is or was located" can be expected "to fracture and damage the site should it still remain." (p480). So all the cliffs and pagodas will be fine but the grinding stone will fracture and vanish in a 'magical surrender of the spirits of the land'.

It is clear that fracturing of the rock underneath the surface **will** occur as a result of the longwall mining and that the use of tentative language in the EIS statement is an attempt to minimize the potential for this serious damage to the cliff and pagoda landscape to occur.

Ground Water

Ground water will find its way through cliff cracks into the mine affecting the Ground Water aquifers. The Springvale mine expansion proposes to increase the pumping out of mine water from 20.9 Mega (= million) liters per day to a potential 29.9 ML/d (p.305). This water has sat in the ground for millions of years balancing the different aquifers which in turn replenish the swamps and creeks which nourish the above ground environment, including the World Heritage listed Wollemi National Park. The conclusion of the EIS, presumably after hydraulic investigation and modeling, suggests that after cracking the ground as described above and subsequently pumping that much water out from the lowest point will see "...minimal impact on the shallow and perched aquifer systems across Newnes Plateau" (p.479).

In contrast chapter 7.3.1 of Appendix E p.76, states that:

"From the piezometric and water table contours presented on Figures 26 to 30, and with reference to Section 5.2.5, it is apparent that the initial groundwater levels are considerably impacted by current and historical mining operations."

Given the volume of water to be pumped out from the mine as well as the undoubted effect this volume of water will have on underground aquifers (which it is impossible to predict), this conclusion defies scientific evidence and logical argument.

Surface Water

The effects on Surface Water are described as follows in the SoEI:

"The predicted depressurisation of aquifers in strata overlying the coal seam will have minimal impact on the shrub and hanging swamps on Newnes Plateau and the surface drainage network of the water supply catchments" (p479).

However, the Groundwater Impact Assessment raises the issue of the impact on Carne Central Swamp as follows:

Carne Central Swamp, as represented by Reach CA2 in the model. The Carne Central Swamp may be impacted by of portion of the 0.199 ML/day baseflow losses predicted for Reach CA2. No recovery of baseflow impacts is predicted post mining (App E p.91).

The impact of subsidence on surface water in Appendix F, Chapter 6.4 p.98 investigates impacts on Marangaroo Creek, Wolgan River and as far as the Colo River. However, Carne Creek which will be directly undermined is conveniently left out.

Any predicted or accidental impact on Carne Creek will have large impacts downstream as this still pristine water catchment is left (after the upper Wolgan River is damaged from previous mining activities) as the lifeline for the Wolgan River environment as far downstream as Rocky Creek, the next larger tributary. Carne Creek is also the sole water supply of Emirates Wolgan Resort.

Mine Water Discharge

On the increased discharge of 29.9 ML/d of mine water into the Coxs River and subsequently the Sydney Water catchment the SoEI comments "The consequence of increased discharge to the Coxs River is not significant since there is excess demand for this water resource in this catchment." (p.479). This argument neglects the fact that the mine discharge water is contaminated with heavy metals and is of high salinity. The effect of mine water can be seen in the damage from past mining water discharges to East Wolgan Swamp in 2.6.2.7 (p.86)which are described as follows:

At East Wolgan Swamp, the following impacts were found to be caused by mine water discharge:

- dieback of vegetation (along path of mine water flows);
- possible changes to swamp soil/water chemistry (changes due to elevated EC(800 µS/cm 1000 µS/cm) and high pH (8-9) of mine water flows (p86)

This is further supported in 2.8.3.5 where it is stated that "Goldney et al (2010) found that swamp impacts were due to a combination of factors, the most important being mine water discharge and subsidence, although the relative contribution of each could not be determined" (p.100).

So there is clear evidence that mine discharge water is so polluted that it can damage (it burns) the swamps but in the SoEI, the conclusion is "Mine water discharges into the surface catchment have a neutral effect on water quality since the beneficial use of that water as potential drinking water is maintained" (p.478). And that same mine water is deemed to be of drinking water quality and declared as being a "Continuation of supply of good quality groundwater to the Coxs River (which) also has the advantage of being a reliable water source to the power stations in times of drought." (p319).

While it is stated that "There is no proposed discharge to the Newnes Plateau associated with the Project" (p319) any malfunction of the Springvale Transfer could result in emergency discharges into the Wolgan River and possibly Carne Creek. In fact, such an occurrence has been documented at LDP004 & 5 and for almost a year. From May 2008 to February 2009 damaging mine water was discharged into the Wolgan River. So not only the Sydney Water catchment will receive mine water but potentially both the Wolgan River and Carne Creek can be subjected to it, primarily affecting the Wolgan Valley Resort but also residents of the Wolgan Valley and also downriver, World Heritage protected Wollemi National Park flora and fauna.

Stakeholder Consultation

Chapter 7.0 states that: "Effective consultation and engagement is inclusive of all stakeholders and include landholders, residents, local communities, indigenous groups, non-government organisations, local, state and federal government, staff and workforce." (p200).

Further "The public, including community groups and adjoining and affected landowners were identified and consulted with as part of the consultation and engagement strategy "(p201).

In fact, this was not the case. None of the Wolgan Valley residents were contacted by Centennial and that includes Emirates Wolgan Resort and Spa who are the likely the biggest losers when the aquifers are damaged as a result of this extended mining activity should it be allowed to go ahead. Emirates Wolgan Resort and Spa rely solely on Carne Creek for their water supply.

I requested to make a presentation to the Centennial Community Consultation Committee meeting of 8 April, 2014 (see attached) but was refused by the Chairman, Howard Fisher. However my written presentation was read out during that meeting through committee member Ian Coates. Apparently, there was no discussion and he was told that I would receive a response from Centennial. I have not heard from them. This is the reality of 'the consultation and engagement strategy' presented in Chapter 7.

Similarly, no one in the Blue Mountains Conservation Society, nor the Colong Foundation for Wilderness is aware of this 'Consultation Strategy' between Centennial Coal and themselves as described in Chapter 7 nor "that Springvale Coal is leading the way in terms of engaging with high profile NGOs" (p.210). This is clearly not happening in reality.

Also despite a long history of 'engagement' the Lithgow Environment group does not even get a mention.

In closing I would like to emphasise the 'schizophrenic mindset' evident in this EIS. Here is a company which intends to mine and sell 58 million tons of thermal coal in the age of climate change, ripping up aquifers and dumping the resultant mine effluent in Sydney's water supply catchment. And yet they state in the closing comments of the SoEI:

Springvale Coal has shown a commitment to the principles of Ecologically Sustainable Development (ESD) and understands that social, economic and environmental objectives are interdependent (p484).

and their definition of ESD:

Definition of ESD:

Using, conserving and enhancing resources so that ecological processes, on which life depends, are maintained and the total quality of life, now and in the future, can be increased (p.484).

... and Green Coal, Mac Donald Healthfood, Socially Responsible Banks...that's just nonsense.

- I object to this proposed extension of longwall mining by Centennial Coal that will impact on 1,860 hectares of forest on the Newnes Plateau. This proposed mining will cause unacceptable environmental impacts to important swamps, cliffs, pagodas, and stream environments in this significant part of the Gardens of Stone region. Centennial Coal must not be allowed to simply replicate the damage it has already caused to nationally threatened upland swamps on the Newnes Plateau for which it was required by the Commonwealth Government to pay \$1.45 million in reparations.
- The Springvale and the adjoining Angus Place mine extension proposals
 require further detailed consideration and must be subject to a Planning
 Assessment Commission review with concurrent Public Hearings. The hearing
 process should also take place over an extended period and allow for questions
 and answers.
- I oppose the proposed discharge of up to 43.8ML/day of untreated eco-toxic
 mine effluent to the Coxs River via the Springvale-Delta Water Transfer
 Scheme (SDWTS). This inappropriate discharge is inconsistent with the
 Sydney Catchment Authority Sydney Drinking Water Audit 2010
 recommendations that require improved treatment of such licensed discharges.

- The Wallerawang Power Plant has shut down, possibly permanently. The current SDWTS proposal to provide water to this plant is not viable. Before discharge, this mine water must be treated to a standard that protects undisturbed aquatic ecosystems. The eco-toxic mine effluent has unacceptably high levels of turbidity, heavy metals (including aluminium, zinc, copper and nickel) and salinity. The mine effluent, currently running at 12.5Ml/day must be treated using reverse osmosis technology to remove all metals and salts.
- Any malfunction of the SDWTS, such as following a bushfire, must not result
 in emergency discharges to the World Heritage Area via Wolgan River or
 Carne Creek. These discharges must be reinserted underground into the mine
 instead. The proposed duplication of the SDWTS must keep to the existing
 alignment. The current proposal of an unnecessary road and pipeline easement
 descending off Newnes Plateau will cause unacceptable scarring to a scenic
 part of the Gardens of Stone region.
- All 1,860 hectares affected by the proposed longwall mining will be subject to surface cracking. Whole sub-catchments will be fractured to a depth of 15 to 20 metres. Surface groundwater aquifers will become more permeable and interconnected. Centennial predicts surface aquifer drawdown to range from 10 metres under ridges to 0.5 metres under shrub swamps.
- The sandstone rock supporting the 41 nationally endangered swamps, and particularly the 11 shrub swamps affected by the proposal, will also develop a large number of fractures. Centennial predicts these cracks to be 5 to 50mm wide and 10 to 15 metres deep. All these nationally endangered swamps will dry out and the peat soils that support these swamps will decompose. Over a period of years eucalypts and banksias will migrate into these dying swamps as they evolve to dry land communities.
- Carne Creek is currently in a pristine state, and its waters that flow through the Greater Blue Mountains World Heritage Area are of the highest standard. It is home to endangered platypus, today a rarity in this area. This creek was a key determinant in the location of the Emirates eco-resort. The extensive fracturing of the sandstone associated with longwall mining of headwater swamps will release high levels of metals, notably manganese and iron, polluting Carne Creek so that it will run bright orange as was the case with the Wolgan River in the past. Flows in Carne Creek will also become irregular. Bungleboori Creek will also be affected.
- The mining footprint must be significantly lessened and mining methods reduced in intensity to protect Carne Creek, pagodas, cliffs and the nationally endangered swamps associated with these proposals. Centennial Coal must be required to consider alternative board and pillar mining methods for its proposed Springvale extension. Centennial's Airly mine in the Capertee Valley operates to depth of 405 metres underground in the same geology, with bad mine roof conditions, including many structural defects. If Centennial can operate Airly Colliery as a board and pillar mine, then it can also operate Springvale mine in this manner.

- Please require Centennial to revise this proposal to improve environmental outcomes. Lowering the intensity of mining will avoid damage to Carne Creek, pagodas, cliffs and the many nationally endangered swamps that the current proposal puts at risk.
- The potential damage to the aquifers and the health of the Wolgan River environment will have significant impact on the Newnes area as a tourism destination.

I have not made any political donations of \$1,000 or more to any political party over the past two years.

Yours sincerely,

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Attached: Written presentation to the CCC of 8 April

The Newnes Hotel Cabins

Everything Money Can't Buy



Newnes, 7 April 2014

To

Community Consultation Committee for Angus Place & Springvale By hand of Ian Coates

Ref.: Expansion of long wall mining into the water catchment of Carne Creek

My name is Thomas Ebersoll and I own and operate the Newnes Hotel Cabins at Newnes in the Wolgan Valley. I am also a member of the Lithgow Environment Group.

I am concerned about Centennial's expansion plans for long wall mining from both Angus Place as well as Springvale collieries into the water catchment of Carne Creek.

I have witnessed on two occasions the Wolgan River turning milky white and smelling of hydraulic oil and I am aware of the effects of the past long wall mining activities from Angus Place into the Wolgan River catchment, namely:

- The drying up of springs at the bottom of Wolgan Gap.
- The damage to the swamps in the Wolgan catchment.
- The crack which opened in East Wolgan Swamp and
- The poisoning of the water catchment by past mine water releases.

This record on Centennial's treatment of our environment is not acceptable and despite alleged improvements (after a \$1.4 million fine) and assurances that "everything is good now" the fact remains that long wall mining alters the hydrology of the ground. Why else would all the mine dewatering be necessary – this is water which is taken from the ground and that has an effect on the aquifers, the rivers and their environment.

My concern is that with the present expansion plans the water catchment of Carne Creek is treated in a similar way as that of the Wolgan River. Carne Creek is now the lifeline of the Wolgan River before the next larger tributary, Rocky Creek joins some 20km downstream. It is also the sole water supply of Emirates Wolgan Valley Resort.

I urge everyone involved to realize that these plans do not only concern the mining of coal but have much wider consequences.

My request is to shorten the planned long walls so that no mining occurs within the catchment area of Carne Creek:

- No mining east of Sunnyside Ridge Road for Springvale (Springvale's long walls 414-419, Figure 8.6.A)
- for Angus Place shorter long walls for 1001-1012 and 1018 & 1019) and
- No LW1014A and 1013A (As of Figure 5 of Ref.:127623060-088-R Rev1)

Doing that would reduce Centennial's profit. But it would also keep a large part of our environment intact while still maintaining the mining operation. And we might find ourselves able to pass on a sustainable tourism industry to our children once the mining operations have moved on.

While I have this opportunity could I please table two more points:

- I would like to request that the report commissioned by the Federal Government for the \$1.4 million enforceable notice to Fenner School at the Australia National University be made available.

 I wonder what actions have been identified in this report.
- Could I also recommend that given Wallerawang Power Station was required
 to desalinate its discharge into the Coxs River that Centennial lead by example
 and any mine water discharge will be desalinated prior to disbursement into
 any water course to achieve the same natural background levels.

Thank you for this opportunity to table my concerns and thank you for your consideration. Could I please ask for your responses to be made available to me and not just to the CCC.

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