



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

By email: [plan\\_comment@planning.nsw.gov.au](mailto:plan_comment@planning.nsw.gov.au)

Friday, 1 June 2012

Dear Sir/Madam,

**Re: Submission - Coalpac Consolidation Project: Application No: 10\_0178**

The National Parks Association of NSW, Nature Conservation Council of NSW and the Wilderness Society strongly object to the Coalpac Consolidation Project (CCP) proposal.

The proponent, Coalpac Pty Ltd, seeks to 'consolidate' its existing Cullen Valley Mine and Invincible Colliery coal mining operations, and continue coal mining under a single, contemporary planning approval. It does so with flagrant disregard for the environmental and social values of the area. If approved, this proposal would unnecessarily damage a uniquely scenic and biodiverse area and negatively impact the local community.

The proposal is inappropriately located too close to the village of Cullen Bullen and in a public forest of high conservation value. Coalpac proposes to destroy a large part of the Ben Bullen State Forest (BBSF) for its exclusive occupation under various mining leases for a period of 21 years. The scenic and environmental values of this area will be lost forever, as rehabilitation simply cannot restore the existing biodiversity and geodiversity.

We support the wish of the NSW National Parks and Wildlife Service (Office of Environment and Heritage) to add the entire BBSF to the conservation reserve system as a matter of priority, as it is an area with outstanding natural values. We strongly support the Gardens of Stone Stage 2 (GoS2)<sup>1</sup> reserve proposal and acknowledge that this proposal was tabled in 2005, and that it is being considered through a 'whole of government' review process.

Further, less damaging underground coal mining methods than the CCP could be pursued to obtain coal within the BBSF. These methods would be compatible with the GoS2 proposal.

Approval of this project by the NSW Government would see it acting against the wishes of the majority of Cullen Bullen residents<sup>2</sup>, the NSW conservation movement<sup>3</sup>, and over 2,000 residents

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<sup>1</sup> Muir, K. (October 2005) *Gardens of Stone Stage Two*. Colong Foundation & Blue Mountains Conservation Society.

<sup>2</sup> Petition 551 tabled 2<sup>nd</sup> May: Mr Paul Toole - from certain citizens opposing the open-cut mining proposal in Ben Bullen

who have written to a combination of local Members of Parliament<sup>4</sup> and the NSW Premier calling for the proposal to be rejected and for the area to be protected, as well as the wishes of the Office of Environment and Heritage.

### **Review process**

We request that the following documents be considered within the review process:

1. Castleden, WM, et. al. 2011 The mining and burning of coal: effects on health and the environment, Medical Journal of Australia.
2. Christine Ferguson and Mike Blake, Central Council Natural Resources & Energy Policy Committee, The Nationals NSW, *Submission to Director, Strategic Regional Policy*, NSW DP&I, 24 April 2012, Section 4.0.
3. Petition 551 tabled 2<sup>nd</sup> May: Mr Paul Toole - from certain citizens opposing the open-cut mining proposal in Ben Bullen State Forest, and to protect the village of Cullen Bullen and the Ben Bullen State Forest from future open-cut mining proposals.<sup>5</sup>
4. The Lithgow Environment Group has undertaken extensive field investigations in relation to the ecology and biodiversity of the local region. A volume of data provided by the Lithgow Environment Group to the Office of Environment and Heritage (OEH) identifies a large number of flora species existing within the BBSF that do not appear in the wildlife atlas. This data provides factual, detailed account of species in terms of initial identification, location and distribution and official recordings of the species. The data highlights the high conservation values of the BBSF and each species is being added to the atlas as time and OEH resources allow.

### **Objections**

The following sections outline the basis for our objection in more detail:

#### **Inadequate flora assessments**

Coalpac Pty Ltd failed to identify a host of flora species existing in the proposal area in its preliminary environmental assessment (EA).

We note the proponent states in Appendix J: Ecological Impact Assessment, Section S3.2 Flora: *"More than 400 plant species were recorded in the project boundary, with a high percentage being native"*.

The plant species identified are listed in Table A1: Flora Species Recorded in the Project Boundary Quadrats 1 – 20, and Table A2: Flora Species Recorded in the Project Boundary Quadrats 21 – 44. An actual count of Tables A1 and A2 equates to 467 plant species, 74 of which are exotic weeds.

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State Forest, and to protect the village of Cullen Bullen and the Ben Bullen State Forest from future open-cut mining proposals: <http://www.parliament.nsw.gov.au/Prod/la/LATabDoc.nsf/0/8E142467B22144DECA2579F20026B8E7>

<sup>3</sup> Delegates to the 2010 Annual Conference of the Nature Conservation Council of NSW voted unanimously in favour of a motion opposing the issue of further development consents for open-cut coal mining in the 2005 Gardens of Stone Reserve proposal area: [http://www.nccnsw.org.au/sites/default/files/2010%20Annual%20Conference%20Minutes\\_0.pdf](http://www.nccnsw.org.au/sites/default/files/2010%20Annual%20Conference%20Minutes_0.pdf). See also *Natural Advantage: A 2011-2015 Agenda for safeguarding the benefits of nature*, available online at: <http://www.nccnsw.org.au/sites/default/files/NATURAL%20ADVANTAGE%202011-15%20term%20of%20govt.pdf>.

<sup>4</sup> Hard copy letters sit with the Minister for Planning & Infrastructure, OEH and various Members of the Legislative Assembly. Electronic letters sit with both the NSW Premier and the NSW Minister for Environment & Heritage.

<sup>5</sup> [www.parliament.nsw.gov.au/Prod/la/LATabDoc.nsf/0/8E142467B22144DECA2579F20026B8E7](http://www.parliament.nsw.gov.au/Prod/la/LATabDoc.nsf/0/8E142467B22144DECA2579F20026B8E7)

Local botanists from the Lithgow Environment Group (LEG) have identified an additional 123 flora species within the project area that the proponent has failed to report in its second version of the EA. The volume of the discrepancy is high and suggests the proponent's methodology is completely inadequate.

By adding Coalpac's 467 listed species and the Lithgow Environment Groups' additional 123 additional species, the total number of plant species is in the order of at least 590. This highlights the common statement that the Ben Bullen State Forest is a biodiversity hotspot.

#### *Specific oversights*

The key groups involved with the GoS2 campaign argued strongly that the Flora Assessment was totally inadequate, after LEG found *Persoonia marginata*, a federally-listed threatened species, on the Cullen Valley Mine site.

In addition, we specifically bring attention to these four species missed in version 2 of the EA, all of which are known to occur in this local area, and should have been looked for:

- Pagoda Daisy (*Leucochrysum graminifolium*) – ROTAP 2R
- *Acacia asparagoides* - ROTAP 2R
- *Philotheca obovalis* – ROTAP 3RCa
- *Leionema lamprohyllum* ssp *orbiculare* - ROTAP 2R-P3.

We also highlight these glaring errors:

- There is record of Forest She-oak (*Allocasuarina torulosa*) which does not occur in this area, but the assessment failed to record *Allocasuarina distyla* and *Allocasuarina nana* which are common in the proposal area and are a critical food source for the vulnerable Glossy Black Cockatoo and Gang Gang Cockatoo.
- There is no record of the existence of Brown Barrel (*Eucalyptus fastigata*), the dominant tree of fertile old-growth gully forests, which Coalpac proposes to clear more of than any other vegetation type.
- There is no record of the existence Native Blackthorn (*Bursaria spinosa* subsp. *lasiophylla*), which is the sole food plant for the endangered Purple Copper Butterfly.

This project shows a serious and repeated pattern of omissions and errors in its Environmental Assessment. The proponent has failed to identify flora species in its flora assessments for existing projects. The Blue Mountains Conservation Society copied Carl Dumbleton of the Department of Planning & Infrastructure into correspondence about this matter on 18 July 28 2011.

**We therefore request an independent flora assessment be carried out to establish a full and complete assessment of the natural values of the area**, as the proponent has demonstrated it is incapable of producing such a report.

#### **Proposed Funding Contributions**

The proponent's environmental assessment proposes the following arrangement:

*Further to this, Coalpac will support the progressive establishment of GoS2 and to this end, provide a monetary contribution of \$0.015 per tone of coal sold (approximately \$1,000,000), to OEH (or other relevant body) throughout the life of the Project to assist in the development, implementation and management of the GoS2.*

It is our understanding that there is currently no framework for the OEH to accept funding for this purpose from Coalpac Pty Ltd.

It is our view that there is also a significant argument which can be made as to the limited weight which should be given to the offer. The Proponent proposes to support the progressive establishment of GoS2 by providing a monetary contribution of \$0.015 per tonne of coal sold (estimated to be approximately \$1,000,000) to OEH.

This contribution is to be made over the life of the project (i.e. 21 years). In considering the merits of this particular aspect of the proposal, it is suggested that the Minister should consider the present value of the contribution. That is, because the contribution of funds is spread out over a lengthy period of time, it should be discounted to its present value.

Assuming the payments by Coalpac to OEH were made evenly over a period of 20 years at \$50,000 per year (with payments occurring at the end of each year), and using a conservative discount rate of 7% in nominal terms this would equate to a present value of the commitment in the order of \$529,701.

The environmental assessment states further that:

*"If required by OEH, rehabilitated areas of the Project Disturbance Boundary and biodiversity offset properties will also be progressively released into conservation into GoS2."*

In our view the offer to donate rehabilitated land is poorly described and thought out. The offer relates to two categories of land, being:

- (a) rehabilitated areas within the project boundary, and
- (b) biodiversity offset properties.

Two issues arise in relation to this offer. Firstly, whether OEH would be interested in accepting ownership of rehabilitated land. Secondly, the proponent's capacity to give effect to this commitment should the offer be accepted by OEH.

### **Greenhouse Gas Emissions and Climate Change**

Coal mining contributes significantly to anthropogenic climate change through the emission of large volumes of greenhouse gases (GHG). Climate change will weaken the resilience of the environment, threatening the biological diversity of life on our planet; the quality of water that supports life and increase environmental impacts on human health.

- Global carbon emissions are *overstated* a hundred-fold in the proposal, thus grossly understating how much this proposal would increase CO<sub>2</sub> and climate change.
- The Coalpac proposal would contribute 0.02 per cent to world emissions and 1.3 per cent of Australia's total carbon footprint, a relatively significant increase for a single project.
- The Coalpac proposal would, if approved, make a large contribution to Australia's already high carbon footprint.
- Coalpac's environmental assessment for this proposal inaccurately dismisses viable alternatives such as renewable energy and energy conservation that could make this project unnecessary.

### **Misstatements about alternatives, especially renewable energy**

The EA argues essentially that if the proponent does not mine this coal, then someone else will mine and burn it elsewhere. The EA claims that alternate sources of energy are not viable in the short to middle term. This seriously misrepresents both the current status and ability of renewable energy to meet energy needs. Note the excerpt below from the forthcoming book 'Human Dependence on Nature' (Washington, 2012)<sup>6</sup>:

*Renewable energy supplied an estimated 16% of global final energy consumption at the end of 2010 (REN21 2011). In regard to electricity, renewables produced 1,320 GW (312 GW excluding hydroelectricity) of electricity in 2010. By early 2011, renewables comprised 25% of electricity capacity from all sources. They accounted for approximately half of the estimated 194 GW of new electric capacity added globally during 2010. ... Civilisation can reach a 95% sustainably-sourced energy supply by 2050. There are up front investments required to make this transition in the coming decades (1-2% of global GDP), but they will turn into a positive cash flow after 2035, leading to a positive annual result of 2% of GDP in 2050 (WWF 2011). A large-scale wind, water, and solar energy system can reliably supply all of the world's energy needs, with significant benefit to climate, air quality, water quality, ecological systems, and energy security, at reasonable cost (Delucchi and Jacobson 2011).*

The cost of photovoltaic electricity is due to equal that of mains power by 2014. Wind power is already close to coal-fired power in cost and will improve in cost when carbon pricing comes into effect. An Australian study has shown that we could switch to 100% renewable energy within 10 years for 2-3% of GDP a year (Wright and Hearps, 2010)<sup>7</sup>. The energy and climate change arguments in the Coalpac EA are thus deliberately misleading. This project will be a significant contributor to global warming, and there clearly *are* alternatives to burning coal to produce electricity.

### **The proposed step-back and risk-review buffer zone**

The Executive Summary (CCP v1) emphasises the 50 m step-back as discussed above. It also refers to a 100 metre monitoring zone adjacent to sandstone cliffs and pagodas. This is further developed in S8.2.3 (p109) and described as a 100 metre risk-review buffer zone. Coalpac claims that experience at Cullen Valley mine justifies this risk-review/risk-management approach.

Although highwall mining is stepped back 50m, it can still undermine cliffs and pagodas by approximately 250m. It is our view that there is essentially no buffer. A minimum step-back of 310 metres is essential.

### **Air Quality**

We note that management of air quality problems largely comes down to buying up affected properties, using detailed meteorological data to aid keeping impacts below the stipulated OEH criteria, and numerous statements of intention which conveniently fit with limiting operational costs.

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<sup>6</sup> Washington, H. (2012 forthcoming) Human Dependence on Nature: How to Help Solve the Environmental Crisis. Earthscan (due to be published Nov, 2012).

<sup>7</sup> Wright, M. and Hearps, P. (2010) *Australian Sustainable Energy Stationary Energy Plan*, Melbourne: University of Melbourne Energy Research Institute/ Beyond Zero Emissions, see: <http://beyondzeroemissions.org>.

The proponent has failed to properly acknowledge the health and environmental risks associated with PM<sub>2.5</sub> particle sizes, even when the data were collected (S2g.4 p7).

The impacts of PM2.5 are clearly outlined in the first document listed for consideration:

Castleden, WM, et. al. 2011 The mining and burning of coal: effects on health and the environment, Medial Journal of Australia.

Fine dust will present a larger problem for local residents, miners and the potential for recreational tourism than the proponent suggests.

It must also be noted that, according to the publication *Mining Australia* (September 2011), in an article entitled "Blast Fume Events: Addressing a Noxious Issue", it was stated that:

*"Current World Health Organisation guidelines for NOx are a one hour level of 200µg m3 (approximately 200 parts per billion), and an annual average of 40µg m3. However, typical concentrations of NOx in post blast clouds can measure anywhere between 5.6 to 580 parts per, exceeding the safe limits by around 30 to 3000 times. This is clearly far too high."*

The Cullen Bullen School is located within about 1000 m of dust-generating activities and is perfectly located to experience dust-laden winds from the north east. This is totally unacceptable, considering the West Australian EPA recommends a separation distance of 1000-2000m<sup>8</sup> between open-cut coal mines and sensitive land uses such as for schools.

Further more, we directly support the NSW Nationals call for a **5 km** buffer for future open-cut mines and a **5 km buffer around villages**.<sup>9</sup> Without this, the mining industry will continue to affect the closing down of regional schools and the 'wiping off of the map' of targeted regional towns.

### **Blasting**

With regard to blasting within 200m of pagodas and cliffs, a specialist geotechnical examination will be implemented; this should acknowledge the request for a minimum of a 310m step-back for the highwall. In some instances, blasting is proposed close to previously mined areas. It is not possible to predict accurately how the vibration will travel through these.

### **Visual impacts – disregard for scenic values**

The report is largely silent in relation to the destructive impacts visible from the high cliff and pagoda country to the east in BBSF, yet this is a major concern relative to low-impact recreation and tourism. Recreational tourism opportunities for the area are identified in the 'Seeing the Gardens' report<sup>10</sup>.

### **Surface water impact assessment**

The water management system (S8.9.4 pp159-160) ensures that substantial amounts of the operational water are recycled, or, if surplus to needs, are sent to the old underground workings. This means that for the duration of mining (21 years) the three main creeks (Cullen, Dulhuntys, and

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<sup>8</sup> Guidance for the Assessment of Environmental factors - Separation distances between industrial and sensitive land uses - June 2005; [http://www.epa.wa.gov.au/docs/1840\\_GS3.pdf](http://www.epa.wa.gov.au/docs/1840_GS3.pdf)

<sup>9</sup> Christine Ferguson and Mike Blake, Central Council Natural Resources & Energy Policy Committee - The Nationals NSW, Submission to Director, Strategic Regional Policy, NSW DP&I, 24 April 2012

<sup>10</sup> Blue Mountains Conservation Society & Colong Foundation for Wilderness (July 2009). *Seeing the Gardens* – Published Blue Mountains Conservation Society & Colong Foundation for Wilderness.

Jews) will have reduced flows. This in turn could influence the local water table, the conservation of aquatic and riparian communities, and the water levels in agricultural or domestic water bores.

There is need to re-examine and improve the whole process of ensuring that mine-related waters meet acceptable water quality standards which reflect the environmental significance of the region and receiving water courses.

The project is likely to produce acid mine drainage that will impact on local streams for many decades. It may also produce elevated levels of heavy metals that will also kill aquatic life. This is occurring right now with one of Coalpac's old mines, the Canyon Colliery Mine, which is contaminating streams with unsafe levels of zinc and nickel in the Heritage-listed Grose Valley.

### **Social matters**

The primary adverse social impact is on the amenity of the inhabitants of Cullen Bullen. In addition to the air and blasting issues already outlined, it is important to note that Cullen Bullen will become a dusty town. Homes, cars and clothes will be difficult to keep clean. Rainwater tanks will be contaminated.

To reiterate, a minimum 5km buffer zone excluding open-cut mining should be established around the town of Cullen Bullen to protect its social values and amenity. This would provide adequate protection for the children and staff of Cullen Bullen Primary School, ensuring the school is not closed down in the future, due to health and other risks.

It is unreasonable for open-cut coal mining activity to continue 24hrs a day, 7 days per week so close to Cullen Bullen or any town.

We direct your attention to the request for consideration of document three:

Petition 551 tabled 2<sup>nd</sup> May: Mr Paul Toole - from certain citizens opposing the open-cut mining proposal in Ben Bullen State Forest, and to protect the village of Cullen Bullen and the Ben Bullen State Forest from future open-cut mining proposals.<sup>11</sup>

The prayer of the petition states

*"Residents object to:*

- 1. Increased threats to their health from fine and other damaging particles due to the proximity of the proposed open-cut mining activity.*
- 2. Increased threats to the health of the children attending Cullen Bullen Public School from fine and other damaging particles due to the proximity of the proposed open-cut mining activity.*
- 3. Increased threats to their property and public amenity from blasting and other high-impact, mining activity.*
- 4. Increased threats to the quality of their lifestyle from any increase in the level of open-cut mining activity within hundreds of metres of their village.*
- 5. Open-cut activity blighting the scenic landscape and impacting local tourism.*
- 6. The loss of habitat for native plants and animals.*

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<sup>11</sup> <http://www.parliament.nsw.gov.au/Prod/la/LATabDoc.nsf/0/8E142467B22144DECA2579F20026B8E7>

*The undersigned petitioners therefore ask the Legislative Assembly to act to reject the open-cut proposal and take the necessary steps to protect the village of Cullen Bullen and the Ben Bullen State Forest from future open-cut mining proposals."*

In addition, if the mine is approved, recreational activity in a large part of a public forest will not be possible for at least 21 years. The community expects to be able to access public land freely and for State Forests to be protected in perpetuity. The NSW Government would effectively be allowing the privatization and liquidation of public land if it approves this proposal.

### **Ecological impacts**

The Preliminary Environmental Assessment (PEA) determined that the ecological risk was high and the rating was moderate but certain. This is downgraded in the current EA to a moderate risk with a moderate but remote rating.

Approving the mine would devastate the biodiversity of the area:

- The habitat of literally hundreds of native plant species would be destroyed.
- The iconic lyrebird uses the sides of pagodas in this area to nest and raise its young. Mining will completely remove its food habitats in the valley below.
- The project proposes to kill 19,200 vulnerable *Eucalyptus cannonii*, trees and this is unacceptable.
- This mine would destroy the habitat of 35 mammal species, 15 of which are listed under the EPBC Act.
- Habitats for 12 bird species threatened under the EPBC Act including the Regent Honeyeater and Powerful Owl will be completely removed.
- Some species prefer living in pagoda related habitats; underscoring another need for a larger step-back buffer zone than the proponent proposes.

The threatened species and vegetation communities are fully detailed (S8.14, Tables 43, 44, 45) and we note there is no dispute about their presence and it is inarguable that the OEHL should be acting in the interests of its 'threatened species' constituency under the *TSC Act*.

Coalpac fully recognises the damaging implications of the CCP in terms of the destruction of significant portions of vegetation communities (S8.14 Table 46).

### **Rehabilitation Claims**

Recreating the original ecosystems is not possible. While some fauna may return and ultimately some forms of ecosystem will be established, they will be very different from what was originally there.

It is not justified to claim that after a three dimensional body of rock, soil and its contained hydrologic regime or surface and groundwater, is dug out that it can be back-filled and retain the same hydrologic regime as before.



### **Other concerns**

Coalpac Pty Ltd's environmental management record leaves a lot to be desired. For example, Coalpac has been fined on at least eleven occasions for pollution incidents.

Commitments for management and mitigation in the current EA will only have value to the extent that they are closely monitored and enforced. We question the capacity of government to ensure this will happen considering the findings volunteers have revealed in the past in the area.

### **Conclusion**

The role of the Department of Planning and Infrastructure is not to facilitate unrestrained expansion of the mining industry. Based upon merit alone this proposal should be rejected entirely.

It is regrettable that Coalpac's EA fails to fully evaluate site specific or regional cumulative impacts. We are of the view that the environmental and social impacts of the CCP are unacceptable, and that the proposed management and mitigation measures are inadequate.

Open-cut mining is apparently preferred because it has cost advantages for the proponent. But the applicant's bottom line should not determine Government policy. Extraction should be by relatively low impact underground methods and, where this is not practicable, the coal should remain in the ground as it represents a tiny proportion of the state's coal resources.

Due to climate change a large proportion of the state's coal resources should never be mined and can therefore be set aside to address land use conflicts. This scale of open-cut mining in a publicly reserved forest, which has outstanding natural values and is proposed for conservation, is overwhelmingly against the public interest. The effective privatisation and liquidation of a large part of the forest is an outrageous precedent, and is contrary to the state's efforts to reduce deforestation.

Regards



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