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Nature Conservation Saves for Tomorrow

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Independent Planning Commission

Email: ipcn@ipcn.nsw.gov.au

Submission opposing revised Bylong Coal Project (SSD 6367)

Blue Mountains Conservation Society

Blue Mountains Conservation Society is a community organisation with over 800 members working to preserve the natural environment of the Greater Blue Mountains. The Society's area of interest encompasses the Greater Blue Mountains World Heritage Area which includes Wollemi National Park. The proposed Bylong Coal Project is adjacent to Wollemi National Park and hence the Greater Blue Mountains World Heritage Area.

Previous Blue Mountains Conservation Society submission

In October 2015 Blue Mountains Conservation Society made a submission to the NSW Department of Planning and Environment opposing the proposed Bylong Coal Project. The Society has now examined the Revised Mine Plan (2018) prepared by the proponent, KEPCO. The Society believes that the likely direct and indirect impacts of the revised plan on the natural environment continue to be unacceptable. The Society remains opposed to the proposed Bylong Coal Project development. All of the concerns raised in our 2015 submission stand.

Department of Planning and Environment Bylong Coal Project State Significant Development Final Assessment Report (SSD 6367)

In October 2018 the Department of Environment and Planning (DPE) released their Final Assessment Report which recommends that the project is “approvable” subject to certain conditions outlined in the report. Blue Mountains Conservation Society considers that DPE’s Final Assessment Report does not adequately assess all of the likely impacts of the proposed project and rejects their conclusion that the project is “approvable” subject to the outlined conditions. The Society is concerned that a number of the conditions recommended by the DPE are discretionary, that is they may be modified subject to later approval if required by KEPCO.

Blue Mountains Conservation Society does not agree with the DPE that the proposed development is in keeping with certain relevant objects of the NSW *Environmental Planning and Assessment Act 1979* particularly

“1.3 (b) to facilitate ecologically sustainable development by integrating relevant economic, environmental and social considerations in decision-making about environmental planning and assessment, and

1.3 (e) to protect the environment, including the conservation of threatened and other species of native animals and plants, ecological communities and their habitats”.

Ecological Significance of the Bylong Coal Project site

The area of the proposed Bylong coal project has outstanding natural values. The EIS prepared on behalf of the mine proponent, KEPCO, found that the Bylong Coal Project site contained:

- **three threatened plant communities** including White Box-Yellow Box-Blakely’s Red Gum Woodland (Box Gum Woodland) which is listed as critically endangered under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) and endangered under the current NSW *Biodiversity Conservation Act 2016*. It was previously listed as endangered under the now superseded *NSW Threatened Species Conservation Act 1995*.

The Box Gum Woodland community is very poorly represented in conservation reserves. There are small occurrences in Wollemi National Park but it does not occur in any of the other seven reserves which comprise the Greater Blue Mountains World Heritage Area (GBMWhA). The community occurs predominantly on fertile soils and has been largely cleared for agriculture. Thomas *et al.* (2000) estimate that in south-eastern NSW the extent of Box Gum Woodland has been reduced to around 5% of its pre-1750 distribution. Remnants of this community that are reserved are generally on relatively poor soils and do not represent the natural variation of this community that is found on more fertile soils such as in the Bylong Valley (Prober 1996).

- four **threatened plant species**
- three **endangered plant populations**
- three **potential new plant species**. During the course of plant survey work for the EIS material was collected by KEPCO's consultants from three different plant species (*Grevillea* sp., *Hibbertia* sp. and *Sannantha* sp.) and confirmed by taxonomic experts to be three likely new species (Bell and Driscoll 2014). The DPE's Final Assessment does not address the significance of these three plants.
- **23 threatened fauna species** including 16 threatened birds (the Dusky Woodswallow has been listed as threatened since the EIS was produced) and seven threatened mammal species recorded in area. Of particular significance is the Regent Honeyeater which is now listed as critically endangered at both state and national level. As this species continues to decline its status at national level has been upgraded from Endangered to Critically Endangered since the EIS was prepared.
- **17 additional threatened fauna species** recorded nearby and potentially occurring in the study area including seven birds, seven mammals and three reptiles.

Particular issues of concern to Blue Mountains Conservation Society

1. Greenhouse gas emissions and impacts of rapid climate change

The Society believes that urgent and effective action to reduce greenhouse gas emissions and the impacts of rapid climate change is immediately required. The recommendations and warnings in the 2018 Intergovernmental Panel on Climate Change's report *Global Warming of 1.5°C, an IPCC special report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty* cannot be ignored.

The DPE's Final Assessment Report provides economic arguments as to why the proposed coal project should proceed, however the economic costs that will be incurred by the increasing impacts of climate change are not considered in these arguments. It is difficult to appreciate just how great and diverse the costs of rapid climate change will be in 25 years, when the mine is reaching the end of its proposed life, if greenhouse gas emissions are not immediately reduced. Nevertheless, these costs should not be ignored.

Compared to the original project proposal, the proposed reductions in predicted annual greenhouse gas emissions resulting from the Revised Mine Plan are small (Scope 1 Co2 0.09 mt to be reduced by 3.9%, Scope 2 0.05 mt to be reduced by 1.4% and Scope 3 7.90 mt to be reduced by 2.7%). The significant Scope 3 emissions relating to the burning of coal in Korea are not, but arguably should be, counted in Australia's emissions target. Regardless, the impacts of all classes of greenhouse emissions will contribute to global warming and all emissions are equally detrimental. The increased greenhouse gas emissions that will be associated with this proposed new coal mine and their likely impacts on biodiversity both within and beyond the GBMWA are unacceptable.

The deleterious impacts of global warming are already impacting on the biodiversity of the GBMWA. A recent study (Smith and Smith 2018) has documented the decline of the iconic Greater Glider (listed as a threatened species in 2016) at lower elevations in the Blue Mountains. This decline is related to rising temperatures already being experienced in the Blue Mountains region. This decline degrades the biodiversity of the GBMWA and hence the defined outstanding universal values of the GBMWA.

In November 2016 the NSW Government released its *NSW Climate Change Policy Framework*. The policy, published by the Office of Environment and Heritage, sets an aspirational long-term objective of achieving net-zero emissions in NSW by 2050. This will be achieved through particular functions including setting policy to achieve emissions savings. Implementation of the policy includes “Investigate how to embed climate change emissions savings and adaptation in government decision making” (page 1). The NSW Government’s emissions savings objective and adaptation objectives aim to “guide public and private sector decision making, particularly for long-lived assets” (page 5).

DPE, in its Final Assessment, states that it considers the policy is a framework to guide government in its own operations rather than a development control policy as such. The DPE thus concludes that the policy’s content “has no direct bearing on either the project or its determination by the Commission”. The Society is dismayed that the DPE is dismissing the spirit of this government policy. Surely providing advice and decision making regarding this project is part of “government operations” and should thus be guided by current published policy. The Society believes that to not consider the impacts of climate change in any decision making is to act negligently.

2. On-site Biodiversity Impacts of Revised Mine Plan

The on-site loss of biodiversity due to the proposed project is unacceptable. The revised project will still remove large areas of significant native vegetation including known and potential habitat for a suite of threatened fauna species. The critically endangered Box Gum Woodland is of particular concern. Under the Revised Mine Plan 247.7 ha of this community will be removed. This constitutes a reduction in area cleared for this community of only 4.5 ha. The DPE does not take account of the first objective of the National Recovery Plan for Box Gum Woodland (White Box – Yellow Box – Blakely’ Red Gum and Derived Native Grassland) which was prepared in 2010 by the NSW Department of Environment, Climate Change and Water on behalf of the Australian Government. The first objective of the Plan is to

- Achieve no net loss in extent and condition of the ecological community throughout its range.

Another particular concern is the Regent Honeyeater which sits on the brink of extinction and is now listed as critically endangered at both state and national level. The very low numbers of this species appear to have been greatly further depleted during the extreme 2018 drought. DPE does not take proper account of the 2016 National Regent Honeyeater Recovery Plan in its consideration of the proposed project. The proposed project will result in a substantial net

on ground loss of habitat that is identified as critical to the survival of the Regent Honeyeater. This is contrary to the goals of the National Regent Honeyeater Recovery Plan. The Regent Honeyeater's survival is dependent on the maintenance of habitat on fertile soils. The species is rarely recorded in the adjacent World Heritage Area and other conservation reserves in the area where soils are generally poor.

3. Inadequacy of proposed biodiversity offsetting

The proposed coal project will result in a substantial net loss of native vegetation, including 247.7 ha of critically endangered Box Gum Woodland. There will be a net loss of important habitats for threatened and other species.

Proposed "off sets" comprise seven land-based offsets ie areas of existing vegetation and habitat, the largest of which is in an identified subsidence zone. This "off setting" entails changing the tenure of existing parcels of vegetated land. The DPE's assessment provides no assurance that the security of these "off sets" will be guaranteed in the long term, let alone in perpetuity. Any existing critically endangered ecological communities and identified habitat of critically endangered species should already be protected by virtue of their listed conservation status. These should already be red flag or "no go" areas. Blue Mountains Conservation Society does not believe that it is acceptable to further diminish areas of critically endangered vegetation or the habitats of threatened species, particularly species that are critically endangered. The DPE does not take account of the impacts of the cumulative loss of biodiversity in the region.

While KEPCO may have sought to avoid, mitigate and or offset the residual impacts of the project in accordance with current NSW and Commonwealth requirements, the Society believes that, given the net on-ground loss of biodiversity that will occur if the proposal goes ahead, it is not correct to claim, as the DPE claims regarding this project, "that biodiversity values would be enhanced or maintained over the medium to longterm". The "short term" prospects of threatened species and other biodiversity are not even considered but should be.

Some additional compensatory measures involving rehabilitation of removed/destroyed vegetation are recommended by the DPE in their Final Assessment. These are discussed below.

4. Unacceptable risks associated with proposed rehabilitation of woodland community

The DPE's Final Assessment has recommended that an area of proposed rehabilitation to woodland within the area that has been subject to open cut mining be increased from 33 to 65 ha in order to, in part, offset impacts of the project.

Detail as to how the rehabilitation will be undertaken is lacking. It is impossible to assess the likelihood of success of proposed rehabilitation when such detail is lacking. The DPE's Final Assessment makes no assessment of the likelihood of success of any such rehabilitation, the degree to which the original ecological community can be restored, or the time frame within which the rehabilitation would be achieved (bearing in mind that existing remnant woodland

trees are likely to be hundreds of years old). It is also unclear how any regeneration will be achieved if the open cut area is to be used to manage coal rejects and excess water over the life of the mine (25 years). Open cut mining will completely destroy the area proposed to be rehabilitated. The DPE takes no account of the fact that ecological communities contain far more than the above ground vegetation, Soil structure and biodiversity as well as terrestrial invertebrates and vertebrates must all be restored to rehabilitate an ecological community. The proposed rehabilitation does not provide for continuity of habitat availability.

The Society notes that research into the restoration and rehabilitation of the critically endangered Box Gum Woodland (as found at the Bylong site) is currently being undertaken by the Fenner School of Environment and Society, Australian National University, and led by Dr Damien Michael, Senior Research Officer. This research is being undertaken because this ecological community has already declined to a critical level and “Currently, we lack effective methods for returning threatened plants to areas of box-gum woodland from which they have been lost, or including them in revegetation and restoration projects aimed at bringing back this habitat type. Techniques are particularly lacking for ground cover plants like forbs (flowering herbs).” Any rehabilitation in the face of crippling drought, as has been experienced in the Bylong Valley this year, has not even been attempted anywhere.

In 2012 the Planning Assessment Commission (PAC) for the Coalpac Consolidation Project, an opencut coal mine proposal mostly in Ben Bullen State Forest in the nearby western coalfields, considered these same issues. The PAC concluded that “rehabilitation cannot restore the existing vegetation associations or ecological balance of the area”; and “rehabilitation to mature woodland is unproven for open-cut mines in NSW”¹ The proponent subsequently withdrew this proposal and in 2014 the PAC refused consent to a smaller open-cut mining project for the same area.

The Society believes that the uncertainty and risks associated with the proposed rehabilitation in an area that has been subject to open cut mining means that it cannot be counted as an offset to the impacts of clearing native vegetation.

5. Impacts on the adjacent Greater Blue Mountains World Heritage Area

The Society is particularly concerned about likely impacts of the proposal on the natural values of the adjacent Greater Blue Mountains World Heritage Area. Such impacts have not been properly addressed by the DPE in their Final Assessment. Any actions that degrade the natural values, including the biodiversity, of the adjoining Wollemi National Park (which is within the GBMWA) degrade the outstanding universal values of the GBMWA.

The list of known and likely threatened fauna identified by the EIS in the coal project site includes a substantial proportion of the threatened species that have been recorded in the adjacent Greater Blue Mountains World Heritage Area: 23 of the 33 threatened birds (two-thirds), 14 of the 28 threatened mammals (half) and 2 of the 3 threatened reptiles (two thirds)

¹ PAC Coalpac Consolidation Project Review: Main Report 2012 p.98

of the entire GBMWA (over one million hectares) have been recorded or are likely to occur in the area of the proposed mine.

KEPCO's EIS for the project states that "The project will remove large areas of known and potential habitat for a suite of threatened fauna species. The majority of threatened species known, or with the potential, to occur within the study area are highly mobile and are considered likely to utilise habitat resources throughout the locality and within adjacent conservation reserves". Most of the threatened species associated with the Bylong site are species associated with relatively fertile landscapes, for example the "threatened woodland birds" and the Regent Honeyeater. These species are threatened because most fertile landscapes have been cleared for agriculture. The generally infertile landscapes of reserves such as Wollemi National Park, within the Greater Blue Mountains World Heritage Area, remain largely forested. It is true that many of the threatened species in the Bylong coal project site would range into the adjacent World Heritage Area. However, it is unlikely that they would survive in the World Heritage Area without access to habitat in the few remaining unreserved fertile areas such as in the Bylong Valley.

Likewise, many of the threatened fauna species of the GBMWA are mobile and depend for their survival on resources both within and outside of the GBMWA. Many of the threatened species within the GBMWA are dependent on intermittent access to adjacent unreserved remnants of fertile habitat for their survival. It is thus imperative for threatened and other species in the GBMWA that adjacent habitats, particularly those remaining on fertile soils, such as in the Bylong Valley, be conserved. The fauna of the GBMWA is a 'matter of national significance'. The net loss of habitat associated with the coal project is very likely to have a detrimental impact on the threatened fauna species and faunal diversity of the adjacent GBMWA.

The impacts on the water resources (see below) and hence the fauna of the World Heritage Area are also a matter of concern that has not been adequately addressed.

6. Impacts on water resources, including within the Greater Blue Mountains World Heritage Area

There is considerable uncertainty in regard to groundwater modelling predictions for the proposed project, but DPE is apparently satisfied that despite "low risks" associated with the Revised Mine Plan, the project is approvable. The recommended conditions include a requirement to provide compensatory water supply to the owner of any privately-owned land whose water supply is adversely affected by the project. However, any possible loss of water supply from adjoining or nearby public lands is not considered.

The Society is most concerned that the recently (May 2018) released Commonwealth *Bioregional Assessment for the Northern Sydney Basin-Hunter Subregion* found (Page 206) that "There are over 137 km² of the GBMWA within the zone of potential hydrological change in the Hunter subregion". This report (Figure 74, page 207) identifies a large area of the GBMWA adjoining the eastern edge of the Bylong project as being at risk of potentially significant hydrological changes and ecosystem impacts due to additional coal resource development (including the Bylong proposal) within the subregion.

The Society believes that the Final Assessment does not take adequate account of this report. There does not appear to have been any water modelling undertaken for streams and groundwater in the adjoining World Heritage Area. Nor does there appear to be any consideration of the cumulative impacts of a new coal mine in the region.

The Society remains concerned that irreversible damage to the hydrologic regime, including within the adjacent World Heritage Area, is a real possibility.

Conclusion

Blue Mountains Conservation Society opposes the proposed Bylong coal project. We do not believe that DPE, in their Final Assessment for the project, have adequately assessed the likely impacts of the project on the natural values of the area of the proposed coal mine and, most importantly, on the adjacent Greater Blue Mountains World Heritage Area.

Blue Mountains Conservation Society thanks the Independent Planning Commission for the opportunity to comment on the DPE's Final Assessment report and to make a presentation at the IPC's hearing in Mudgee.

Yours sincerely

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Ms Madi Maclean *President, Blue Mountains Conservation Society*

on behalf of Blue Mountains Conservation Society

References

Bell, S.A.J. and Driscoll, C. (2014). *Assessment and mapping of vegetation in the Bylong Valley: Authorisations 287 & 342*. Unpublished Final Report to Hansen Bailey Pty Ltd. Eastcoast Flora Survey. December 2014.

Department of Environment, Climate Change and Water NSW. 2010. National Recovery Plan for White Box – Yellow Box – Blakely's Red Gum Grassy Woodland and Derived Native Grassland. Department of Environment, Climate Change and Water, Sydney.

Herron, N.F. *et al.* 2018. Impact and risk analysis for the Hunter subregion. Product 3-4 for the Hunter subregion from the Northern Sydney Basin Bioregional Assessment. Department of the Environment and Energy, Bureau of Meteorology, CSIRO and Geoscience Australia, Australia.

National Recovery Plan for the Regent Honeyeater (Anthochaera phrygia), Commonwealth of Australia 2016.

Prober, S.M. (1996). Conservation of Grassy White Box Woodlands: rangewide floristic variation and implementation for reserve design. *Australian Journal of Botany* **44**:57-77.

Smith, P. and Smith, J. 2018. Decline of the greater glider (*Petauroides volans*) in the lower Blue Mountains, New South Wales. *Australian Journal of Zoology*
<https://doi.org/10.1071/ZO18021>

Thomas, V., Gellie, N. and Harrison, T. (2000). *Forest ecosystem classification and mapping for the Southern CRA region*. Vol 2 Appendices. NSW National Parks and Wildlife Service Directorate. A report for the NSW CRA/RFA Steering Committee.