Nature Conservation Council
The voice for nature in NSW

Major Projects
Department of Planning and Environment
GPO Box 39
Sydney NSW 2001

13 May 2016

Submission of Objection: South Wambo Longwall Mine Modification 12, DA 305-7-2003

Dear Sir/Madam,

The Nature Conservation Council of NSW (**NCC**) is the peak environment organisation for New South Wales, representing over 150 member societies across the state. Together we are committed to protecting and conserving the wildlife, landscapes and natural resources of NSW.

NCC **objects** to the proposed South Wambo Longwall Mine Modification due to its potential environmental impacts, including impacts on biodiversity, including threatened species and endangered ecological communities, impacts on water resources, and the uncertainty of the proponent's financial circumstances. Our key concerns are outlined below.

- **Impact of the proposed modification on biodiversity**

The proposed modification of the South Wambo Longwall Mine will have significant impacts on biodiversity, including threatened species and ecologically endangered communities. These include:

- Two critically endangered ecological communities in the schedule of the Commonwealth *Environmental Protection and Biodiversity Conservation Act* (1999) (EPBC Act): Central Hunter Valley Eucalypt Forest and Woodland and Weeping Myall – Coobah – Scrub Wilga Shrubland of the Hunter Valley.[1]

- Six endangered ecological communities listed under the NSW *Threatened Species Conservation Act* 1995 (TSC Act)[2], namely
  - Central Hunter Grey Box – Ironbark Woodland
  - Central Hunter Ironbark – Spotted Gum – Grey Box Forest
  - Hunter Floodplain Red Gum Woodland
  - Hunter Lowland Red Gum Forest
  - Hunter Valley Weeping Myall Woodland
  - Warkworth Sands Woodland

[1] EIS Volume 2, Flora Assessment, p 49
[2] Ibid

- Eight birds and five mammals listed under the TSC Act and/or EPBC Act, including *Chthonicola sagittata* (Speckled Warbler), *Circus assimilis* (Spotted Harrier*), Climacteris picumnus victoriae* (Brown Treecreeper [eastern subspecies]), *Pomatostomus temporalis temporalis* (Grey-crowned Babbler [eastern subspecies]), *Daphoenositta chrysoptera* (Varied Sittella), *Glossopsitta pusilla* (Little Lorikeet), *Grantiella picta* (Painted Honeyeater), *Melanodryas cucullata cucullata* (Hooded Robin [south-eastern form]), *Chalinolobus dwyeri* (Large-eared Pied Bat), Mormopterus norfolkensis (Eastern Freetail-bat) *Saccolaimus flaviventris* (Yellow-bellied Sheathtail-bat), *Scoteanax rueppellii* (Greater Broad-nosed Bat) and *Vespadelus troughtoni* (Eastern Cave Bat).

We note that the Warkworth Sand Woodland of the Hunter Valley was recently listed as critically endangered under the EPBC Act[3].

It is also noted that 'alteration of habitat following subsidence due to longwall mining'[4] is listed as key threatening process under the TSC Act. This proposal is likely to result in the alteration of habitat following subsidence due to longwall mining, as discussed further below.

While the proposed longwall mine modification assessed in the EIS will have varying degrees of impact on all of the above NSW and Commonwealth listed threatened species and EECs, NCC will concentrate on the potential impacts on Warkworth Sands Woodland (WSW) to demonstrate the extent of the impacts this modification will have on threatened species and endangered ecological communities. The Warkworth Sands Woodland endangered ecological community located in the Hunter Valley has a particular environmental, legal and social importance.

The largest and best conditioned patch of WSW was located not far from the Wambo Mine on the Warkworth Mine, operated by Rio Tinto. The Warkworth Continuation Proposal 2014 intended to clear this valuable stand of WSW. In spite of a Land and Environment Court decision[5] that the proposal should not be approved (subsequently confirmed by the NSW Court of Appeal), the proposal was approved by the NSW Government in November 2015[6]. The WSW on the Warkworth site is now being cleared for open cut coal mining.

The destruction of WSW on the Rio Tinto site makes any remaining Hunter Valley Warkworth Sands Woodland even more precious. There is a significant stand of WSW overlying part of the proposed Wambo coal mine variously referred to as the South Wambo Underground Mine or Area 4 in maps in the EIS.

[3] http://www.environment.gov.au/biodiversity/threatened/species/pubs/143-conservation-advice-05052016.pdf
[4] http://www.environment.nsw.gov.au/determinations/LongwallMiningKtp.htm
[5] Bulga Milbrodale Progress Association v Minister for Planning and infrastructure and Warkworth Mining [2013] NSWLEC 48 @ 86 – 136, (15 April 2013)
[6] http://www.environment.gov.au/biodiversity/threatened/species/pubs/143-conservation-advice-05052016.pdf (p49)

The EIS appears to attempt to downplay the importance of the WSW located above the South Wambo Underground Mine. The map at Figure 4 of the Flora Assessment[7] shows the WSW as Community 12 – Rough-barked Apple – Coast Banksia Woodland. There is no mention on the map key that this is WSW, but the correlation can later be found in the text[8]. The Flora Assessment provides quite comprehensive vegetation community descriptions of eleven of the thirteen EECs recognised on the study area.

No community description is given for Warkworth Sands Woodland. The reason given[9] is that:
WSW *'is represented by very small occurrences in the study area'*

In fact, an examination of the map at Figure 4 indicates that quite a significant area of the proposed South Wambo Underground Mine is overlaid by Warkworth Sands Woodland.

As mentioned above, a key threatening process, recognised under the NSW TSC Act is the alteration of habitat following subsidence due to underground mining. WSW is particularly susceptible to underground mining beneath due to its particular characteristics, as described in the approved conservation advice accompanying the WSW listing under the EPBC Act[10]:

"The Warkworth Sands Woodland occurs on aeolian sand deposits west of Singleton…The Warkworth soil landscape is perched on a shallow ephemeral alluvial aquifer, which is perched above a low permeability base of residual clay associated with the underlying strata. The soil has low fertility, is rapidly drained and has a low available water-holding capacity".

Underground mining beneath the WSW risks destroying the perched watertable structure that makes this vegetation community an endangered ecological community.

- **Potential Impact of the Wambo Mine Modification Proposal on Water Resources**

The impacts of longwall mining on streams has been recognised for a number of years. Alteration of habitat due to subsidence has been recognised as a key threatening process. The Total Environment Centre, in a 2007[11] report on the impacts of longwall coal mining on the environment, made the following statement in relation to the impacts on water bodies:

"The NSW Scientific Committee recognised that subsidence due to longwall mining is the cause of habitat alteration, including cracks beneath a stream or other water bodies, and that subsidence may lead to a 'temporary or permanent loss of water flows and could cause permanent changes to riparian community structure and composition".

[7] EIS, Volume 2, Flora Assessment, Figure 4
[8] EIS Volume 2, Flora Assessment, p 50
[9] EIS Volume 2, Flora Assessment, p 49
[10] http://www.environment.gov.au/biodiversity/threatened/species/pubs/143-conservation-advice-05052016.pdf (p 44)
[11] http://www.australiancoalalliance.com/Information/TEC%20LCM%20Report_final.pdf

Details of this damage are contained in the NSW Scientific Committee Final Listing Report[12]. The report noted that damage to some creek systems in the Hunter Valley has been associated with subsidence due to longwall mining, and Wambo Creek[13] was specifically mentioned as one of these.

The Secretary's Environmental Assessment Requirements require an assessment of the likely impacts of the development on watercourses – such as Wollombi Brook, an important tributary of the Hunter River which is likely to be significantly impacted by the underground mine. NCC believes that the level of assessment in the EIS of the likely impact on Wollombi Brook is inadequate. A statement that the longwalls would achieve negligible impact on the Wollombi Brook does not constitute adequate assessment. If Wambo Creek has previously been damaged by longwall mining, why couldn't the same thing happen to Wollombi Brook?

The map at Vol 1, Figure 9 of the EIS showing the general arrangement of the South Wambo Mine clearly illustrates the risk. Longwall mines go very close to the Wollombi Brook for more than 2 kilometres of its length. A structure which is apparently an underground access road (there is no explanatory key on the map) lies under the Wollombi Brook for more than 2 kilometres. There is nothing in the EIS that allows assessment of the risk of this structure or even explains what it is. Any impact on water extractors downstream is claimed to be minor – but there does not appear to be intelligible analysis explaining how this statement is justified.

Cracking of the beds of other creeks is acknowledged[14] – why not Wollombi Brook?

Further information is required to properly assess the impacts of the proposed application on water resources, including Wollombi Brook, particularly given that this project application will be reviewed by the Independent Expert Scientific Committee on Coal Seam Gas and Large Coal Mining Development under the EPBC Act. The advice of that committee should be taken into account as part of the consideration of the projects impact on water.

- **Suitability of the proponent, Peabody Energy, for approval to expand coal mining activity in NSW.**

The EIS[15] for this mine modification is in the name of Wambo Coal P/L, a subsidiary of Peabody Energy Australia Ltd[16]. On 13th April, 2016, the US parent body, Peabody Energy, announced that they were filing for Chapter 11 bankruptcy proceedings in the United States. The Peabody announcement claimed that:

"No Australian entities are included in the filings, and Australian operators are continuing as usual".

[12] http://www.environment.nsw.gov.au/determinations/LongwallMiningKtp.htm
[13] Wambo Creek is a tributary of Wollombi Brook – see EIS, Volume 1, Figure 9
[14] EIS Volume 2, Appendix C – Surface Water Assessment, pp40-41
[15] Peabody Energy, *South Wambo Underground Mine Modification Environmental Assessment* **(EIS)**
[16] EIS Executive Summary, p ES1

Australian coal industry commentators have a far less sanguine view of Peabody Australia's capacity to meet its current environmental commitments. For example, writing in anticipation of Peabody Energy filing for bankruptcy in the US, the Sydney Morning Herald[17] noted that:

"The financial statements of the US coal giant Peabody Energy show that its Australian entity is only a going concern while the guarantee of its parent exists".

If the NSW Department of Planning and Environment is contemplating approval of this modification request, NCC requests that the Department first obtains credible and **independent** advice that Wambo Coal P/L is capable of meeting the financial costs and rehabilitation responsibilities proposed in the South Wambo Longwall Mine Modification, in addition to its current rehabilitation liabilities.

The Department also needs to take the company's recent environmental record into account in assessing the company's fitness for approval of further coal mining activity. On 13th January, 2016, the NSW EPA produced a media release[18] which described the collapse of a portion of a dam wall at Wambo Mine, discharging sediment laden rainwater into the Hunter River catchment. NCC is not aware of the outcome of the EPA investigation of this recent pollution incident. However, NCC recommends that any proposed approval of the South Wambo Mine Modification not be considered until the incident has been fully investigated by the EPA. If Wambo Coal P/L is found guilty of environmental pollution, NCC questions whether the corporation meets the fit and proper person test to allow it to be given approval to mine even more coal in the Hunter Valley.

Conclusion

As outlined above, NCC is concerned that the proposed South Wambo Longwall Mine Modification will have significant environmental impacts, including impacts on biodiversity, including threatened species and endangered ecological communities, and on water resources. We have also raised concerns with the proposed applicant, particularly in relation to its financial position and recent environmental record. We would recommend that this application be rejected.

Yours sincerely,

Kate Smolski
Chief Executive Officer

[17] Michael West, Sydney Morning Herald, 13th April, 2016, p 28
[18] http://www.epa.nsw.gov.au/epamedia/EPAMedia16011301.htm