

**Statement of Reasons for Decision on Not Controlled Action under the
Environment Protection and Biodiversity Conservation Act 1999
ABBRIEVIATED**

I, ALEX RANKIN, Assistant Secretary, Environment Assessment Branch, Approvals and Wildlife Division, Department of the Environment and Heritage, a delegate of the Minister for the Environment and Heritage for the purposes of section 75 of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act), provide the following statement of reasons for my decision of 19 February 2007 that the proposed action by Centennial Hunter Pty Limited to develop a coal mine and associated facilities, known as the Anvil Hill Project, located at Wybong, approximately 20 kilometres west of Muswellbrook, NSW (EPBC 2007/3228) is not a controlled action under the EPBC Act.

Legislation (DELETED)

Background

4. The proposed action was referred under section 68 of the EPBC Act by Umwelt (Australia) Pty Limited, on behalf of Centennial Hunter Pty Limited (person proposing to take the action), and was received by the Department on 11 January 2007. The referral indicated that, in the view of Centennial Hunter Pty Limited, the proposed action is not a controlled action.
5. The proposed action involves the development and operation of an open cut coal mine and associated facilities, including a coal preparation plant, access road and rail loop, at Wybong, near Muswellbrook, NSW. The project is based on a large, undeveloped coal reserve of approximately 150 million tonnes of coal, and the mine is expected to produce approximately 10.5 million tonnes per annum of run of mine coal. The disturbance footprint over the 21 year life of the mine is about 2238 hectares. Some 1904 hectares of native vegetation outside the disturbance footprint is proposed to be reserved and maintained for conservation purposes.
6. In accordance with subsections 74(1) and 74(2) of the EPBC Act, the Minister for Industry, Tourism and Resources, the Minister for Defence and the New South Wales Minister for Planning were informed of the referral in correspondence dated 11 January 2007 and invited to provide comment on whether the proposed action is a controlled action. No comments were received.
7. In accordance with subsection 74(3) of the EPBC Act, the referral, together with an invitation for public comment, was published on the Department's web site on 11 January 2007 for 10 days comment. Thirteen public comments were received, including a submission from the Anvil Hill Project Watch Association. The majority of the submissions contended that the proposal should be a controlled action because of likely significant impacts on matters of national environmental significance, including threatened species and ecological communities listed under the EPBC Act.
8. Submissions also raised concerns about the possible occurrence of four flora species nominated for listing under the EPBC Act (*Commersonia rosea*, *Pomederris reperta*, *Prasophyllum* sp. aff. *petilum* and *Oligochaetochilus* sp. aff. *praetermissus*). However, these species were not listed as threatened species under the EPBC Act at the time of the decision.
9. On 19 February 2007 I decided that the proposed action is not a controlled action.

Evidence or other material on which my findings were based

10. The evidence or other material upon which my findings were based are listed below:
 - a brief from the Department, dated 14 February 2007, including the following:
 - referral for the proposed action and associated figures and maps;
 - *Anvil Hill Project Environmental Assessment, Volumes 1-7*, Umwelt (Australia) Pty Limited, August 2006;
 - *Anvil Hill Project Environmental Assessment, Response to submissions Parts A, B & C*, Umwelt (Australia) Pty Limited, November 2006;
 - thirteen public submissions, including a summary of issues raised in the submissions;
 - email correspondence from Umwelt, providing further information, dated 11 January 2007 and 7 and 17 February 2007;

PROTECTED

- *White Box – Yellow Box – Blakely's Red Gum grassy woodlands and derived native grasslands* (EPBC Act Policy Statements, Department of the Environment and Heritage, May 2006)
- advice from the Department relating to the potential impacts of the proposed action on matters protected under the EPBC Act.

Findings on material questions of fact

11. I found that there is no likelihood of the proposed action having a significant impact on a matter protected by any provision of Part 3 of the EPBC Act other than, potentially, sections 18 and 18A (Listed threatened species and communities) and sections 20 and 20A (Listed migratory species). In particular, I found that two listed ecological communities, two listed flora species and several listed fauna species are known to occur, or may occur, in the area of the proposed action.
12. I found that the proposed action is not likely to have a significant impact on the ecological character of the Hunter Estuary Wetlands Ramsar site which is about 100 kilometres downstream of the project area. I found that the proposed action will result in negligible, or very small, changes to annual stream flows in the downstream Goulburn and Hunter River systems that flow into the Ramsar site. I found that discharges from the mine site will be suitably licensed, including in accordance with the Hunter River Salinity Trading Scheme, and that water quality in the downstream Ramsar site is not likely to be affected by the proposed action.
13. I found that the project area is located 3 kilometres north of the Myambat Military Barracks which is Commonwealth land owned by the Department of Defence. I found that significant impacts on the environment of Commonwealth land are not likely given the separation distance.

Listed ecological communities

14. I found that the listed ecological communities *White Box-Yellow Box-Blakely's Red Gum grassy woodlands and derived native grasslands* and *Weeping Myall – Coobah – Scrub Wilga Shrubland of the Hunter Valley* may occur in the region of the proposed action.
15. I found that there is only one known local occurrence of the *Weeping Myall – Coobah – Scrub Wilga Shrubland of Hunter Valley* at Jerrys Plains Cemetery, which is approximately 25 kilometres from the site of the proposed action. I found that, while Weeping Myall Woodland was recorded within the project area, this woodland type does not conform with the specific ecological community listed under the EPBC Act.
16. I found that a community type similar to the listed *White Box-Yellow Box-Blakely's Red Gum grassy woodlands and derived native grasslands* occurs in the project area (known as Upper Hunter White Box – Ironbark Grassy Woodland). I also found that there are two other vegetation communities occurring in the project area that could potentially conform to the listed community under the EPBC Act, namely Forest Red Gum Riparian Woodland and the Ironbark Woodland Complex. I found that the Ironbark Woodland Complex occurs extensively across the project area and that the Forest Red Gum Riparian Woodland occurs in riparian areas in the proposed disturbance area.
17. I found, however, that the above communities do not constitute the listed ecological community under the EPBC Act based on vegetative diagnostic plots. In particular, I found that key diagnostic species, such as White Box, Yellow Box or Blakely's Red Gum, were absent or not present as the dominant canopy species sufficient to form the listed community. I therefore found that a significant impact on listed ecological communities is not likely.

Listed plant species

18. I found that the listed vulnerable plant, Painted Diuris (*Diuris tricolour*), occurs in the project area. I found that this species is found west of the Great Dividing Range in NSW, and that a large-flowered variant is known from the Muswellbrook Local Government Area where the proposed action occurs. I found that a number of occurrences, ranging from a few individuals to several thousand plants, are within an approximate 200km² area of the Local Government Area.
19. I found that flora surveys recorded 4 individual Painted Diuris within disturbed grassland in the proposed offset area for the proposed action. I also found that further sightings of the species (in 14 more or less contiguous locations) within the disturbance area were provided to Umwelt (ecological consultants to Centennial Hunter Pty Limited) by the Anvil Hill Project Watch

PROTECTED

Association in October 2006. I found that Umwelt undertook a follow up survey of the area on 20 October 2006 and recorded one individual.

20. I found, on the basis of the extensive surveys undertaken, that a substantial population of the Painted Diuris is not likely to occur within the disturbance area. While I considered that individual plants may be lost within the disturbance area, I found that a significant impact on this species is not likely in the absence of an identified important population within the disturbance area and given the presence of local and regional populations that would not be affected by the proposed action.
21. I found that the listed vulnerable Tricolor Donkey Orchid (*Lasiopetalum longistamineum*) occurs within the Merriwa and Muswellbrook Local Government Areas generally on sandstone outcrops. I found that this species was recorded at 12 locations during site surveys of the project area, with none occurring in disturbance areas. I found that an important population of this plant is not likely to occur in areas to be disturbed and that a significant impact on this species is not likely.
22. I found that both Painted Diuris and Tricolor Donkey Orchid are small plants that are likely to depend on surface/rain water. I found that mine activities are not likely to have significant indirect impacts on plants outside of the disturbance area because of the separation distances involved, different elevations, and noting water management and dust control strategies that will be implemented to protect surrounding environments.

Listed fauna species

23. I found that the two listed fauna species, the vulnerable Brush-tailed Rock Wallaby (*Petrogale penicillata*) and Large-eared Pied Bat (*Chalinolobus dwyeri*), are known to occur or may occur in the project area. I found that a number of old scats, identified as from Brush-tailed Rock Wallabies, were identified from the Limb of Addy Hill near the site of the proposed action indicating that the wallaby once occurred on this forested hillside. I found that suitable habitat for the wallaby does not occur in areas likely to be affected by the proposed action. I found that, even if a population still occurs on the Limb of Addy Hill, significant impacts on this species are not likely given that suitable habitat will not be disturbed or affected.
24. I found that small numbers of the Large-eared Pied Bat were recorded on three occasions within caves and overhangs within the general project area. I found that two of these recordings were from the Limb of Addy Hill, which will not be affected by the proposed action, and that one recording was from the disturbance area. I found that the project is likely to affect some potential foraging habitat for the species, but that no breeding or important roosting colonies of the bat occur in the project area. I also found that extensive foraging habitat areas will remain in the project area and that a significant impact on populations of the Large-eared Pied Bat is not likely.
25. I found that the project area may provide occasional foraging habitat for listed bird species such as the Swift Parrot (*Lathamus discolor*), Superb Parrot (*Polytelis swainsonii*), Regent Honeyeater (*Xanthomyza phrygia*) and the Australian Painted Snipe (*Rostratula australis*). I found that important or critical habitat supporting these species is not known to be present and that regular populations of these species have not been recorded within the disturbance area. I found, in these circumstances and given the wide availability of woodland habitat in the project area, that significant impacts on listed threatened bird species are not likely.

Listed migratory species

26. I found that four listed migratory species (Rainbow Bee-eater (*Merops ornatus*), White-bellied Sea-eagle (*Haliaeetus leucogaster*), White-throated Needletail (*Hirundapus caudacutus*) and Satin Flycatcher (*Myiagra cyanoleuca*)) were recorded from the study area. I found, while these species may utilise habitat within the project area for foraging, that important populations or habitat is not known to be present or will otherwise be affected by the proposed action. In particular, I found that these species are widely distributed across Australia, and that the known records from NSW are scattered broadly across the state with no obvious concentration of records from the local area. In these circumstances, I found that a significant impact on listed migratory species is not likely.

Other considerations

27. I considered whether the proposed action is likely to have indirect impacts on matters protected by Part 3 of the EPBC Act as a result of any possible contribution to greenhouse gas emissions. I found that the greenhouse effect is causing changes to global atmospheric conditions and

PROTECTED

weather patterns, which might result in impacts on matters protected by Part 3, such as the ecological characteristics of the Hunter Estuary Wetlands Ramsar site.

28. I found that the proposed action will extract a maximum of 10.5 million tonnes per annum of run of mine coal (eg before washing). I found that this will result in approximately 7.98 million tonnes of product coal per year. Assuming that all product coal from the project is consumed by end users, the combustion of product coal from the project will have a full fuel cycle maximum annual average greenhouse gas emissions of 12,414,387 tonnes of CO₂-equivalent per annum. I found that this amount is equivalent to approximately 0.04% of the current global greenhouse gas emissions. I also found that such emissions are a small proportion of the total possible emissions from all other sources.
29. I found that mining and use of coal is an important contributor to the greenhouse gas emissions currently produced by Australia, but it is only one amongst many such contributors (others include industry; motor vehicle use; burning of other fossil fuels such as oil and natural gas; decomposition; clearing and burning of vegetation; and waste disposal). I found that the Australian contribution to current annual greenhouse gas emissions, though relatively large on a per capita basis, is only one amongst many contributions that are made by all other industrialised countries. I found that the amount and concentration of greenhouse gases in the atmosphere, and any resultant adverse impacts on matters protected by Part 3 of the EPBC Act, are the consequence of human activities on a global scale over a long period of time.
30. I found that any contribution to the amount and concentration of greenhouse gases in the atmosphere as a consequence of the proposed action would be small relative to both the amount and concentration of greenhouse gases currently in the atmosphere, and the additional amount of greenhouse gases that would make their way into the atmosphere from other sources during the period of the proposed action and any resulting increase in the concentration of greenhouse gases in the atmosphere during and after that period.
31. I found that the following possible impacts of greenhouse gas induced climate change could occur: warming of the ocean; coral bleaching (associated with warming of the ocean); ecological shift (change in the ecological character of an area due to climate change); sea level rise (including changes to erosive patterns, flooding, increased storm penetration, etc); and changing storm frequency – particularly inflow of nutrients (from land) and change to marine circulation systems (particularly impacting coral and fish dispersal).
32. I found that, while it is clear that, at a global level, there is a relationship between the amount of carbon dioxide in the atmosphere and warming of the atmosphere, the climate system is complex and the processes linking specific additional greenhouse gas emissions to potential impacts on matters protected by Part 3 of the EPBC Act are uncertain and conjectural. In light of this, and in light of the relatively small contribution of the proposed action to the amount and concentration of greenhouse gases in the atmosphere, I found that a possible link between the additional greenhouse gases arising from the proposed action and a measurable or identifiable increase in global atmospheric temperature or other greenhouse gas impacts is not likely to be identifiable.
33. I further found that the additional contribution of greenhouse gases in the atmosphere arising from the mining, shipping and transport of coal from the proposed action is likely to be negligible in the context of existing emissions.

Reasons for my decision

34. In making my decision I took account of the precautionary principle and public comments made on the referral. In particular, I noted issues raised about the potential presence of the listed *White Box-Yellow Box- Blakely's Red Gum grassy woodlands and derived native grasslands* ecological community and listed species within the disturbance area.
35. I noted that flora and fauna surveys, using appropriate experts and techniques, had been conducted for a minimum of two years and considered that the site of the proposed action had been adequately characterised in terms of the likely presence of listed ecological communities and species under the EPBC Act. I concluded that, while the presence of individual listed plants within the disturbance area cannot be discounted, important populations are unlikely to be present.

PROTECTED

I considered that the loss of individual plants of the relevant plants is not likely to represent a significant impact on local, regional, state and national populations.

36. I also considered information and advice provided by the Anvil Hill Project Watch Association in regard to the potential presence of *White Box-Yellow Box- Blakely's Red Gum grassy woodlands and derived native grasslands*. I noted that similar vegetative types occur in the project area, but concluded that adequate ecological assessments had been undertaken to conclude that the specific community listed under the EPBC Act, and as described in Department's *Policy Statement on White Box-Yellow Box- Blakely's Red Gum grassy woodlands and derived native grasslands ecological community*, is not present.
37. In light of my findings above, I decide on 19 February 2007 that the proposed action is not likely to have a significant impact on any of the matters protected by the EPBC Act and is therefore not a controlled action.

SIGNED 18 APRIL 2007

.....
ALEX RANKIN
/ /2007