



Australian Government
Department of the Environment

EPBC Ref: 2013/7076

Howard Reed
Manager Mining Projects
Major Project Assessments
NSW Department of Planning & Environment
23-33 Bridge Street
SYDNEY NSW 2000

Howard
Dear Mr Reed

Merit Review on Environmental Impact Statement
Airly Mine Extension Project, NSW

Thank you for your invitation to comment on the Environmental Impact Statement (EIS), for the proposed underground coal mine extension at the existing Airly Mine in the Western Coalfields of NSW (SSD 12_5581, EPBC2013/7076), which was provided to the Department of the Environment (the Department) by the proponent on 15 September 2014. I apologise for the time it has taken to get these comments to you.

Please find the Department's comments attached. The Department recommends that the four key areas outlined at Attachment A are addressed by Centennial in order for the EIS to be sufficient to inform the Assessment Report's consideration of the impacts to matters of National Environmental Significance (MNES).

If you have any questions about the enclosed, please do not hesitate to call me or to contact the project manager, Colette Boraso, by email to colette.boraso@environment.gov.au, or telephone 02 6274 2204.

Yours sincerely

Mahani Taylor
Director
NSW Section
South-Eastern Australia Environment Assessments
December 2014

CC: Colin Phillips (DP&E)

Detailed comments on the Airly Mine Extension Project EIS

Avoidance of impacts on MNES

The Department notes that the project currently proposes to undermine the only known population of the Genowlan Point Pultanea. Due to the highly restricted nature of this critically endangered species, any impact to the species or its habitat will be considered as substantial. The Department requests that the proponent is asked to consider further avoidance of undermining this species, including a sufficient buffer.

Further to this, the Department will require that this species must be adequately monitored with contingency measures in place, which should include ceasing mining activities should any impacts (greater than 'negligible') be observed as a result of mining outside of a buffer area. These monitoring and contingency measures should be outlined in the PPR/RtS and addressed in greater detail in a management plan.

Impacts on water resources and the Greater Blue Mountains World Heritage Area

The Department recommends that the proponent respond to and address comments, issues, knowledge gaps and additional analysis required by the Independent Expert Scientific Committee's (IESC) in its advice on the project, especially as they relate to water resources, the Greater Blue Mountains World Heritage Area and potential impacts to EPBC-listed species.

Once the additional information requested by the IESC is collected, the proponent should use the additional information to reassess and revise the impact assessments provided in the EIS documentation to adequately quantify the extent of any impacts on MNES in the PPR/RtS.

Adequacy comments not addressed - impacts on threatened species and communities

The Department notes that it appears that the proponent has not addressed the following adequacy comments with sufficient detail. This information is requested to be included in the PPR/RtS:

1. Threatened bat species

The Department notes that the proponent has stated that old mine workings provide potential habitat for threatened bats. As there will be high levels of subsidence in the Old Hartley Shale Mine, this could impact on habitat for these bats should they reside in the mine. Therefore, additional information, which may require additional surveys, is necessary to determine the Old Hartley Shale Mine provides presence/absence of threatened bats. If the mine is found to provide habitat for listed threatened bat an impact assessment must be provided and avoidance, mitigation safeguards and measures proposed.

2. White Box-Yellow Box-Blakely's Red Gum and Derived Native Grasslands (Box Gum Woodland)

The Department notes that the proponent currently concludes that only 3.27 ha of the grassland state of Box Gum Woodland are likely to be impacted by the action. However, additional information is required to confirm the extent of the ecological community and rule out the possibility that modified areas (contained on pg 334 of Chapter 10) meet the definition of the community.

Further information regarding the Commonwealth definition of the critically endangered community, and the information Centennial need to address, is at Attachment B.

Further Guidance on defining Box Gum Woodland

Based on the *Commonwealth Listing Advice White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland* (the Listing Advice), (the written assessment that was used by the Minister to determine if the EC should be included on the list for threatened ecological communities, and the *White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grasslands EPBC Act Policy Statement* (EPBC Act Policy Statement) available at:

<http://www.environment.gov.au/resource/white-box-yellow-box-blakelys-red-gum-grassy-woodlands-and-derived-native-grasslands>), in order to determine the extent of the Box Gum Woodland on a site, the understorey features that make up the community need to be analysed at a patch level.

A patch is defined on page 21 as:

"a continuous area containing the ecological community (areas of other ecological communities such as woodlands dominated by other species are not included in a patch). In determining patch size it is important to know what is, and is not, included within any individual patch. The patch is the larger of:

- an area that contains five or more trees in which no tree is greater than 75m from another tree, or*
- the area over which the understorey is predominantly native. Patches must be assessed at a scale of 0.1 ha (1000m²) or greater."*

"In order for an area to be included in the listed ecological community, a patch must have a predominantly native understorey." (page 4 of the Listing Advice).

Predominantly native understorey is defined on page 21 as:

50% of the perennial vegetation cover in the ground layer is made up of native species.

The next feature of a patch of the EC based on the listing advice (page 2) is that:

"A patch in which the perennial vegetation of the ground layer is dominated by native species, and which contains at least 12 native, non-grass understorey species (such as forbs, shrubs, fern, grasses and sedges) is considered to have a sufficiently high level of native diversity to be the listed ecological community. At least one of the understorey species should be an important species (e.g. grazing-sensitive, regionally significant or uncommon species; such as Kangaroo Grass or orchids) in order to indicate a reasonable condition."

- In light of this, Centennial need to provide the "patch" scale [on a map] used to determine the extent of the CEEC. Centennial also need to provide the data used to determine the presence/absence of White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (Box Gum Woodland) at the pit

top area, including Reject Emplacement Area 1, Reject Emplacement Area 2, Stockpile Site 1 and Stockpile Site 2.

- The Department also requests that the proponent provide the following additional information to determine the extent of the derived native grassland component of the Box Gum Woodland onsite:
 1. The survey effort used to determine the presence/absence of the community, including a statement of claims against the following, or if surveys are not adequate to meet the below requirements, additional surveys are necessary.
 - a. Sampling: The Department requires sufficient information to determine that the site has been thoroughly sampled on a representative basis for vegetation cover and species diversity, starting with the area of maximum apparent native plant species diversity. Surveys should demonstrate that they have been based upon an appropriate quadrat size centred on the area of at least 0.04 ha or 0.1 acre (i.e. $20\text{m} \times 20\text{m} = 400\text{m}^2 = 0.04\text{ ha}$). Additionally, as the areas of impact in the proposed action areas are larger and more variable areas of vegetation quality, more samples or quadrats are required to assess a site accurately. Note that the Department requires the application of plots per patch to take into consideration the size, shape and condition across the site.
 - b. The timing/season of surveys: The proponent must demonstrate that adequate surveys have been undertaken during spring and early summer when the greatest number of species is likely to be detectable. This is important because the ecological community can be variable in its appearance throughout the year and between years depending on climatic variability, such as rainfall, as seasonal factors determine the visual dominance of taxa.
 - c. Disturbance (natural or human-induced): The proponent must detail the historical within the patch and when that disturbance occurred, as far as possible. Timing of surveys should also consider the detectability of flora species in the mid and ground layer at different times of their life cycle, or their recovery after recent disturbances (natural or human-induced) to the ecological community e.g. after a severe fire one or more vegetation layers may be absent for a time.
 2. In order to determine the quality of Box Gum Woodland at the impact sites, the Department requests that Centennial provide further information on the following criteria, in relation to the survey plots already conducted, or the additional surveys undertaken to meet the requirements of point 1:
 - a. Site condition, including:
 - i. overstorey (percentage cover, distance to nearest neighbour, and species (past and present))
 - ii. dominant grass species (percentage cover, species richness, and a species list)

- iii. forb diversity (species richness and a species list)
 - iv. weed component (percentage cover and species list), and
 - v. current and past land uses, including, as far as possible, when that disturbance may have occurred.
- b. Site connectivity, including patch size and distance to other derived native grasslands or grassy woodlands, which do or have the potential to meet the definition of Box Gum Woodland.
 - c. Species stocking rates, including the presence of and/or suitable habitat for listed threatened species.