



**Environment,
Climate Change
& Water**

Our reference: LIC07/106-
06:DOC10/46306:GN
Contact: Greg Newman, (02) 4224
4100

NSW Department of Planning
(Attention: Naomi Nelson)
PO Box 39
SYDNEY NSW 2001

RECEIVED

- 8 DEC 2010

Dear Madam

**APPIN VENT SHAFT NUMBER 6 PROJECT – RECOMMENDED CONDITIONS OF APPROVAL
AND AMENDMENTS TO THE STATEMENT OF COMMITMENTS**

I refer to the Application, Environmental Assessment (EA), and accompanying information provided for the above project. The most recent submission was received by the Department of Environment, Climate Change and Water (DECCW) on 21 September 2010. DECCW did not receive a draft EA as part of an adequacy review for this proposal.

Prior to providing our recommended conditions of approval for the project, DECCW requires the provision of additional information and assessment of several key issues which have not been adequately considered or addressed to date. Based on DECCWs' experience in dealing with other coal mine vent shafts, these issues represent important individual components of the EA but more importantly, when considered collectively, are critical in assessing possible land use conflicts. These issues are:

- assessment of alternative locations
- air quality impact assessment (odour)
- threatened species assessment.

The additional information required to complete our assessment is more fully described in Attachment 1.

DECCW also requests a copy of the submissions received by the Department of Planning (DoP) (or a report summarising these submissions) in response to the exhibition of the EA.

We are happy to discuss the above matters with DoP and the Proponent if required. Please call Greg Newman on (02) 4224 4100 in our DECCW Wollongong Office to arrange a suitably convenient time.

Yours sincerely

G Howard 8/12/10

GISELLE HOWARD
Director Metropolitan
Environment Protection and Regulation

Attachment 1: Matters Requiring Further Clarification

cc: BHP Billiton - Illawarra Coal
(Attention: Bruce Blunden)
PO Box 514
UNANDERRA NSW 2526

Attachment 1

Appin Coal Mine – Ventilation Shaft Number 6

Matters Requiring Further Clarification

Department of Environment, Climate Change and Water (DECCW) requires the information listed in points i - viii be provided in order to complete our assessment of the Environmental Assessment (EA).

Alternatives Considered - Vent Shaft Locations

DECCW receives many community complaints regarding odour and noise from vent shafts in the Southern Coalfields. Noise complaints have related to fan noise and vibration, while odour complaints have been caused, in part, by mining through areas of oil shale. DECCW understands the coal seams in the proposal area contain oil shale and thus present a possibility of generating offensive odours and community complaints. Minimising the potential impacts on residents through appropriate citing should be a priority as post operational options may be limited and costly. For example, the Proponent identifies activated carbon filtration and thermal oxidation as treatment options which could be implemented to address odour problems. Another Southern Coalfields mining operation receiving community complaints is evaluating odour mitigation options including constructing a large stack and heating ventilation air to assist with odour dispersion. DECCW has been advised that property acquisition is also under consideration to manage land use conflict. Acquisition is unlikely to be an option in Douglas Park area due to the large number of dwellings.

The current proposed site for the vent shaft is approximately 500 metres from Douglas Park. The odour assessment shows the Proponent's criteria is exceeded on elevated areas to the north and west of the town. Table 7.2 of the EA identifies a number of opportunities (but did not evaluate specific sites) by moving the Ventilation Shaft No 6 (VS#6) further away from the Douglas Park township, which would reduce the potential for noise and odour impacts for Douglas Park residents. Some of these sites (to the north and north-east) would also result in less clearing of Cumberland Plain Woodland (CPW).

- i. Thus DECCW seeks a more detailed assessment of alternative (specific) locations which could provide the necessary mine operations functions as well as minimise the above environmental impacts and potential land use conflicts.

Air Quality Impact Assessment

The AQIA modelled the odour impacts from the proposed vent shaft using Dendrobium Mine vent shaft air and Metropolitan Colliery vent shaft air. As mentioned above, Odour Criteria were exceeded at elevated locations north and west of Douglas Park. DECCW understands the Bulli Seam coal resource contains significant amounts of oil shale which has a higher potential to generate odorous emissions. It is unclear from the EA if the vent shaft air used in the Odour Assessment represented mining through odorous materials that is, a worst case scenario. Thus DECCW seeks clarification on:

- ii. the likelihood of encountering oil shale or other odorous material in mining areas serviced by the proposed VS#6 and;
- iii. whether the odour assessment considered vent shaft air from oil shale or other odorous materials/worst case scenario.

Threatened Species

1. Impacts on the Cumberland Plain Woodland

The EA states that at least 3.5 hectares of CPW will be removed through the construction of the VS#6, access road and associated infrastructure. CPW is listed as a critically endangered ecological community under the *Threatened Species Conservation Act 1995* (TSC Act) and *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).

The significance of CPW on the VS#6 site is confirmed by its linkage to the highest priority fauna habitat within the Greater Southern Sydney Region, as identified in the *Vertebrate Fauna of the Greater Southern Sydney Region* (DECCW, 2007) and Hawkesbury-Nepean Catchment Action Plan

2007 – 2016 (HNCMA, 2008). CPW in the locality is known to support a number of threatened flora and fauna species listed under the TSC Act and EPBC Act.

a. Measures to Avoid or Mitigate Impacts on CPW

The EA states that the proposed VS#6 has been sighted to avoid and mitigate impacts on CPW to the largest extent possible. However it appears that much of Lot 1 and 2 DP576136 and Lot 1 DP121322 have been previously cleared of native vegetation and are land portions owned by the Proponent. Table 7.2 of the EA identifies a number of opportunities (but did not evaluate specific sites) presented by moving the proposed VS#6 in a north-easterly or northerly direction, including increased distance from the Douglas Park township, reduced noise and air quality impacts for Douglas Park residents and improved vehicle access to the VS#6 site.

- iv. To satisfy Step 4 of the draft *Guideline for Threatened Species Assessment* (DEC and DPI 2005) the EA must identify and describe all measures to avoid or mitigate impacts associated with the proposal on CPW, including but not necessarily limited to, the feasibility of citing of the proposed VS#6 site within previously cleared areas on Lot 1 DP576136, Lot 2 DP576136 and Lot 1 DP121322. The EA must contain justification of the preferred option.

b. Measures to Offset Impacts on CPW

DECCW considers that compensatory measures should only be considered where impacts cannot be avoided or mitigated, however the EA proposes that residual impacts on CPW will be compensated by the development of a proposed biodiversity offset. The *Ecological Assessment* used the BioBanking Calculator to determine an offset ratio.

While the BioBanking Assessment Methodology may be used to assess and calculate the biodiversity impacts of the development proposal without obtaining a BioBanking statement, a copy of the BioBanking Assessment and Credit Report for the development site and the BioBank site must be provided in the EA in order to transparently describe this process.

- v. DECCW requires a copy of the BioBanking Assessment and Credit Report for the development site and BioBank site.

Any offsets should be directed towards 'priority conservation lands' as identified in the draft *Recovery Plan for CPW* (DECCW, 2009) and should be developed in accordance with the *Principles for the Use of Biodiversity Offsets in NSW*, and in consultation with the DECCW. Offsetting areas for biodiversity conservation without any mechanism to ensure conservation of the area in perpetuity is not considered sufficient to offset against the loss of biodiversity.

- vi. DECCW seeks details of the preferred mechanism to ensure conservation of the offset area is secured in perpetuity.

Should compensatory measures be sought through the BioBanking Scheme, DECCW can provide additional details on matters which must be considered.

2. Impacts on Threatened Flora and Fauna Species and their Habitats

While vegetation mapping and validation was conducted on 3 June 2010 using the BioBanking Assessment Methodology, additional targeted threatened species surveys are required to determine the presence and abundance of threatened species (for 'species credits') not able to be predicted through vegetation surrogates.

a. Targeted Threatened Flora and Fauna Surveys

The BioBanking Assessment Methodology identifies a number of 'species credit' species under the TSC Act and the EPBC Act as having potential to occur within the study area, including but not necessarily limited to, Sydney Plains Greenhood (*Pterostylis saxicola*), Bynoe's Wattle (*Acacia bynoeana*), Bargo Geebung (*Persoonia bargoensis*), Brown Pomaderris (*Pomaderris brunnea*) and Nodding Geebung (*Persoonia nutans*). While DECCW notes that random meander searches for threatened flora species were undertaken, these searches were conducted at an inappropriate time of the year to detect Sydney Plains Greenhood, Bynoe's Wattle and Bargo Geebung.

vii. To satisfy the BioBanking Assessment Methodology, targeted species surveys must be undertaken in accordance with the sections 5.2 and 5.3 of the draft *Threatened Biodiversity Survey and Assessment: Guidelines for Developments and Activities* (DECCW, 2004) and documented in the EA. Where a species is recorded on site, its area of habitat for fauna, or distribution based on a count of individuals for flora, must be mapped as a species polygon in accordance with section 4.4.1 of the BioBanking Assessment Methodology and provided in the EA. The survey must be undertaken during the time of the year that is suitable for identifying the species, as identified in the Threatened Species Profile Database or by DECCW. Alternatively, an expert report may be prepared under section 4.4 of the BioBanking Assessment Methodology.

b. Measures to Avoid, Mitigate or Offset Impacts on Threatened Species and their Habitats

In order to satisfy Step 3 of the draft *Guideline for Threatened Species Assessment*, likely impacts should be assessed, evaluated and reported on in the EA to evaluate the magnitude, extent and significance of any direct or indirect impacts of the proposal on threatened species, populations, or their habitats.

The Applicant should then identify actions that will be taken to avoid or mitigate any impacts of the proposal on threatened species, populations, or their habitats, including but not necessarily limited to, measures to address Key Threatening Processes, the feasibility of citing of the proposed VS#6 within previously cleared areas on Lot 1 DP576136, Lot 2 DP576136 and Lot 1 DP121322. The EA should contain justification of the preferred option and should include an assessment of the effectiveness and reliability of the measures and any residual impacts after these measures are implemented.

The EA needs to clearly state whether it meets each of the key thresholds set out in Step 5 of the draft *Guideline for Threatened Species Assessment*.

viii. DECCW requires an assessment of any impacts on threatened species and identification of actions to avoid or mitigate these impacts.

