

Ref: 24530-2:MD

29 January 2010

APPENDIX

BLACK HILL & TANK Paddock LOWER HUNTER LANDS PROJECT PRELIMINARY ENVIRONMENTAL ASSESSMENT ECOLOGY

It is proposed that the entire Coal & Allied Industries Limited (Coal& Allied) owned Black Hill and Tank Paddock sites be rezoned/listed as a 'State Significant Site' (SSS) in Schedule 3 of State Environmental Planning Policy (Major Development). A draft Schedule 3 listing will be prepared with the Concept Plan Application.

The Concept Plan will apply to the entire 183ha Black Hill and the 147ha Tank Paddock sites. The key parameters for the proposed development of the sites are as follows:

- Dedication of 147ha of conservation land to the New South Wales Government (NSWG) that is identified in the Lower Hunter Regional Strategy and Lower Hunter Regional Conservation Plan, comprising 100% of the Tank Paddock site.
- Use of the 183ha Black Hill site as 'employment lands' for a range of employment generating activities.
- Indicative development staging. The number of lots and extent of staging for release areas will be largely dictated by the service infrastructure requirements as well as responding to market forces.
- The provision of associated infrastructure.

Approval will not be sought under the Concept Plan for a specific lot layout. An indicative super-lot layout will be prepared, which will indicate how subdivision could be achieved that will enable a range of industrial and ancillary activities to be undertaken.

An existing mining consent under the Black Hill site will defer development on the site until post June 2013. Accordingly, a detailed built form layout has not been prepared at this stage. Approval is not sought under the Concept Plan for subdivision or for individual buildings on the site. Urban Design Guidelines will be prepared to inform the Concept Plan in respect of urban form, built form, open space and landscape, access and movement and visual impact for the site.

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It is proposed to dedicate land for conservation purposes as part of the Major Project Application via a Voluntary Planning Agreement (VPA) between Coal & Allied and the NSWG in accordance with s.93F of the Environmental Planning & Assessment Act, 1979 (EP&A Act).

The proposed Concept Plan and a Plan showing the proposed development areas and conservation areas is included in the Preliminary Environmental Assessment (PEA) prepared by Urbis.

Brief Overview of Regional & Site Context

The ecological features of the Tank Paddock and Black Hill locality include:

- The fact that the vast majority of the holdings are forested.
- The Tank Paddock is contiguous with a larger corridor of bushland that comprises a significant forested remnant in the Lower Hunter region that provides connectivity from the Watagan Range to the Hexham Swamps.
- The locality is known to contain vegetation types, such as coastal forest and tall wet forest to coastal floodplain wetland systems, representing areas that contain significant biodiversity.
- The regions forested areas contain potential habitat for an array of native fauna species, including numerous threatened or regionally significant species as mentioned above. Importantly, such habitat extends to threatened fauna (and to a lesser extent, flora) species that are typically associated with Lower Hunter woodland and wetland systems.

Ecological Considerations

A preliminary assessment has been undertaken over the site to inform the PEA. The preliminary assessment drew on a number of information sources including previous preliminary reporting and information held on government databases and archives. Data gathered during preliminary assessments was used to assist in identifying distributions, suitable habitats and known records of threatened species. Preliminary assessment utilised a number of information sources, including:

- Aerial Photograph Interpretation (API) and literature reviews to determine the broad categorisation of vegetation within the site;
- Review of fauna and flora records contained in the DECCW Wildlife Atlas (Accessed Jan 2010);
- Literature reviews;
- Regional vegetation mapping projects:

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- LHCCREMS – Vegetation Survey, Classification and Mapping. (NPWS 2000, House 2003);
- Hunter Bird Observers Club (HBOC) records;
- Birdata (web version of Birds Australia's New Atlas of Australian Birds);
- A review of GIS data including aerial photography, topographic maps, SEPP 14 Wetland Mapping, Soil Landscapes, Acid Sulphate Soil Potential; and
- Collective knowledge gained from extensive work in the area.

The preliminary assessment has revealed three vegetation communities are present on the Black Hill site, based on regional vegetation community mapping prepared for the Lower Hunter and Central Coast Regional Environmental Management Strategy - LHCCREMS (House 2003; NPWS 2000) as follows:

- MU 17 - Lower Hunter Spotted Gum Ironbark Forest;
- MU 5 - Alluvial Tall Moist Forest; and
- Weeds and Cleared Areas.

Based on the aforementioned vegetation communities, the following are considered to be commensurate with Endangered Ecological Communities as gazetted under Schedule 1 of the Threatened Species Conservation Act 1995. This community is Lower Hunter Spotted Gum Ironbark Forest which is commensurate with 'Lower Hunter Spotted Gum Ironbark Forest in the Sydney Basin Bioregion'.

The desktop search results indicated numerous threatened flora and fauna species have been previously recorded within the locality and/ or have potential habitat within the site. The following have been recorded within 5km of the site and/or if not recorded on the DECCW Wildlife Atlas are considered to have potential habitat and therefore should be considered.

Flora

- *Acacia bynoeana*
- *Caladenia tessellata* (Thick Lip Spider Orchid);
- *Callistemon linearifolius* (Netted Bottle Brush)
- *Dendrobium melaleucaphilum* (Spider Orchid)
- *Diuris praecox* (Rough Double Tail)
- *Grevillea parviflora ssp parviflora* (Little-flower Grevillea)
- *Melaleuca biconvexa* (Biconvex Paperbark)

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- *Microtis angusii*
- *Rutidosia heterogama* (Heath Wrinklewort)
- *Syzygium paniculatum* (Magenta Lilly Pilly)

Fauna

- *Litoria aurea* (Green and Golden Bell Frog)
- *Litoria brevipalmata* (Green-thighed Frog)
- *Varanus rosenbergi* (Heath Monitor)
- *Botaurus poiciloptilus* (Australasian Bittern)
- *Lophoictinia isura* (Square-tailed Kite)
- *Callocephalon fimbriatum* (Gang-Gang Cockatoo)
- *Calyptorhynchus lathami* (Glossy Black-Cockatoo)
- *Melanodryas cucullata* (Hooded Robin)
- *Stagonopleura guttata* (Diamond Firetail)
- *Pomatostomus temporalis* (Grey-crowned Babbler)
- *Chthonicola sagittatus* (Speckled Warbler)
- *Climacteris picumnus* (Brown Treecreeper)
- *Melithreptus gularis* (Black-chinned Honeyeater)
- *Anthochaera phrygia* (Regent Honeyeater)
- *Lathamus discolor* (Swift Parrot)
- *Neophema pulchella* (Turquoise Parrot)
- *Ninox connivens* (Barking Owl)
- *Ninox strenua* (Powerful Owl)
- *Tyto novaehollandiae* (Masked Owl)
- *Tyto tenebricosa* (Sooty Owl)
- *Ptilinopus magnificus* (Wompoo Fruit-Dove)
- *Ptilinopus regina* (Rose-crowned Fruit-Dove)
- *Ptilinopus superbus* (Superb Fruit-Dove)
- *Dasyurus maculatus* (Spotted-tailed Quoll)
- *Phascogale tapoatafa* (Brush-tailed Phascogale)
- *Petaurus australis* (Yellow-bellied Glider)

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- *Petaurus norfolcensis* (Squirrel Glider)
- *Phascolarctos cinereus* (Koala*)
- *Pteropus poliocephalus* (Grey-headed Flying-fox*)
- *Miniopterus schreibersii oceanensis* (Eastern Bentwing-bat)
- *Miniopterus australis* (Little Bentwing-bat*)
- *Mormopterus norfolkensis* (Eastern Freetail-bat*)
- *Saccolaimus flaviventris* (Yellow-bellied Sheath-tail-bat)
- *Falsistrellus tasmaniensis* (Eastern False Pipistrelle)
- *Chalinolobus dwyeri* (Large-eared Pied Bat)
- *Myotis adversus* (Large-footed Myotis)
- *Scoteanax rueppellii* (Greater Broad-nosed Bat)
- *Vespadelus troughtoni* (Eastern Cave Bat)

Potential Impacts

Generally impacts associated with land development can be summarised into the following categories:

- Habitat loss;
- Landscape fragmentation and severing of connectivity;
- Riparian zone degradation;
- Edge effects; and
- Degradation to genetic flow, integrity and population dynamics.

Although the proposal will result in the removal of intact vegetation at Black Hill, Viney Creek riparian corridor will be protected. The proposed riparian corridor will provide for habitat connectivity for highly mobile fauna.

In any case, the proposed dedication of conservation land at Tank Paddock will preserve a large vegetated area that is linked to other similar areas, which together with Tank Paddock have been recognised as fundamentally important to achieving long term regional biodiversity outcomes in the Lower Hunter region as outlined within the Lower Hunter Regional Strategy and the Lower Hunter Regional Conservation Plan. The importance of the conservation of Tank Paddock as part of the Conservation Estates will result in maintaining a vegetation corridor from Hexham Swamp and the Hunter Estuary to the Watagan Mountains and the Sugarloaf Range. This large tract of native vegetation will provide habitat for a wide variety of native flora and fauna.

Given that measures have been taken to avoid any proposed development in particularly sensitive areas (such as Viney Creek Riparian Corridor) and considering

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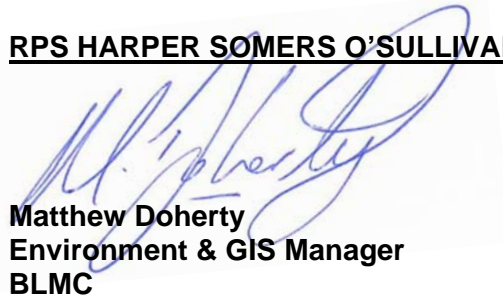
the large area of conservation land that is proposed to be set aside as part of the proposed development, overall it consider that the proposal will provide positive ecological outcomes.

The PEA will be expanded upon to include rigorous field survey and associated reporting that complies with relevant guiding policy and legislation in a suitable scientific format to inform the final EA.

EPBC Act Considerations

The project has been referred to the Commonwealth, Department of Environment & Water Resources (DEWHA) pursuant to the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) provisions. The DEWHA concluded the proposed action is not a “controlled action” on 23 December 2008 and, as such, does not require assessment and approval by the Minister before it can proceed.

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