

Your reference: SSD 5465 Our reference: DOC14/64441-01; EF14/3105 Contact: Ziggy Andersons, 4908 6820

Ms Sophie Butcher Planning Officer, Mining Projects Department of Planning and Environment GPO Box 39 SYDNEY NSW 2001

Dear Ms Butcher

RE: REVIEW OF CHAIN VALLEY COLLIERY – MODIFICATION 1 ENVIRONMENTAL ASSESSMENT – SECTION 96 MODIFICATION TO SSD-5465

I refer to your email requesting comments on the Chain Valley Colliery – Modification 1 Environmental Assessment (EA) which represents a modification to the approved Chain Valley Colliery (CVC) project approval (SSD-5465). The Office of Environment and Heritage (OEH) understands that the proposed modification involves the construction of an underground linkage between CVC and Mannering Colliery, and that the EA was placed on public exhibition 23 may 2014.

OEH has undertaken a review of the EA titled 'Chain Valley Colliery – Modification 1, Statement of Environmental Effects, Section 96 Modification to SSD-5465', prepared for LakeCoal Pty Ltd by EMGA Mitchell McLennan Pty Limited (EMM) and dated April 2014.

OEH is unable to assess the application as there is insufficient information provided within the EA. The EA lacks an adequate description of the sites aquatic ecology, the EA states that 'surveys conducted for this area showed an absence of seagrasses' though no details of these surveys are provided. Details on OEH's concerns are provided in **Attachment 1**.

If you require any further information regarding this matter, please contact Ziggy Andersons, Regional Biodiversity Conservation Officer, on 4908 6820.

Yours sincerely

1 0 JUN 2014

RICHARD BATH Senior Team Leader Planning, Hunter Central Coast Region Regional Operations

Enclosure: Attachment 1

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ATTACHMENT 1: COMMENTS AND RECOMMENDED CONDITIONS OF APPROVAL FOR PROPOSED CHAIN VALLEY COLLIERY – SECTION 96 MODIFICATION TO SSD-5465

OEH has reviewed the Environmental Assessment (EA) for Aboriginal cultural heritage issues, subsidence impacts on lake ecology and threatened biodiversity. Comments on these issues are provided below.

ABORIGINAL CULTURAL HERITAGE ASSESSMENT

The existing conditions of consent for SSD-5465 require a Heritage Management Plan to be developed. OEH supports this management initiative.

OEH would recommend that ongoing and continuous consultation with the relevant Aboriginal community and that any management plans be developed in consultation.

THREATENED BIODIVERSITY ASSESSMENT

Subsidence Impacts on Lake Ecology

OEH has reviewed the EA for potential impacts on the benthic ecology of the bed of Lake Macquarie in the modification area and due to the lack of information is unable to assess this application. OEH acknowledges that predicted subsidence from the proposed underground linkage will range from 5 mm to 20 mm where first and secondary working occurs, respectively. Nonetheless OEH is of the opinion that the EA does not adequately assesses the impacts of subsidence on the benthic micro and macro communities in Lake Macquarie and has concerns about the location of the highest predicted levels of subsidence and therefore cumulative subsidence corresponding with the shoreline and the Seagrass Protection Barrier.

OEH has concerns about any changes in depth in the lake due to mine subsidence that may reduce light levels reaching the sediment surface and thereby affect benthic microalgal primary production. Subtle changes in depths influencing critical light levels reaching the sediment surface can have strong effects on benthic productivity and this can have flow on effects to important ecological processes such as oxygen production and sediment-water nutrient cycling.

In regards to impacts to seagrass Table 5.2 'Biodiversity (aquatic) of the EA indicates that seagrass surveys have been conducted in the application area indicating 'an absence of seagrasses'. No details on where and when the seagrass surveys were conducted that support this statement are provided and a review of aerial photography covering the application area indicates that there is likely to be seagrass in the application area. The only information that is provided in relation to these surveys is a reference to the *Chain Valley Colliery Mining Extension Project – Marine Ecology Assessment* (JSA Environmental 2013) the study area of which did not cover the proposed modification area.

Therefore further data is required to ensure the potential impacts of the proposed activities on existing seagrass populations and foreshore vegetation in addition to the predicted threatened species can be assessed irrespective of subsidence rates.