



Office of  
Environment  
& Heritage

DOC16/421017-2  
SSD 5144 (MOD 2)

Ms Lauren Evans  
Planning Officer  
Department of Planning and Environment  
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Dear Ms Evans

**RE: MANDALONG SOUTHERN EXTENSION PROJECT - SSD 5144 (MOD 2) - FIRST WORKINGS  
MODIFICATION FOR LONGWALLS 22 & 23**

I refer to your e-mail dated 23 August 2016 inviting the Office of Environment and Heritage (OEH) to review and provide comment on the proposed change to the Mandalong Southern Extension Project. As described in the 'Statement of Environmental Effects' (SEE) the proposed changes. Modification 2, comprise the extension of first workings associated with longwall panels 22 and 23, resulting from a better understanding of the geological constraints around these two proposed panels.

OEH has reviewed the SEE in relation to Aboriginal cultural heritage, flooding, and threatened biodiversity. Due to the minor surface impacts expected with completion of the first workings OEH has few concerns, and so recommends standard conditions of consent as a precautionary measure. More details are provided in **Attachment 1**. OEH understands that if this Modification is approved, the additional information revealed about ground conditions around the targeted coal seams may result in an additional modification being lodged for secondary workings (i.e. longwall extraction) of extended longwall panels 22 and 23.

If you require any further information regarding this matter please contact Robert Gibson, Regional Biodiversity Conservation Officer, on 4927 3154.

Yours sincerely

6 SEP 2016

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

Enclosure: Attachment A

## **ATTACHMENT 1: OEH REVIEW OF MANDALONG SOUTHERN EXTENSION PROJECT (MOD 2)**

OEH has reviewed the report titled '*Mandalong Mine: Longwall 22 & 23 First Workings Modification: Statement of Environmental Effects*' (SEE) prepared by Centennial Coal, dated August 2016, in relation to Aboriginal cultural heritage, flooding and threatened biodiversity. The proposed modification involves extending first workings for Longwall Panels 22 and 23 up to 750 metres to the north west of the currently approved limited. Comments on those matters of consideration are provided below.

### **THREATENED SPECIES**

OEH has undertaken a review of the 'Ecological Assessment' presented in Chapter 11 of the SEE and the 'Threatened Flora and Fauna Likelihood of Occurrence Assessment' given in Appendix B of the SEE. OEH notes that the former assessment was based on limited field survey done in July 2016 and that the latter assessment was a desktop analysis that utilised database search results and the results of field survey undertaken in 2011 for the initial Environmental Assessment for this project. Both studies concluded that no impacts would occur to threatened species or communities from the proposed first workings (and any subsequent longwall mining) of panels 22 and 23. Therefore no recommendations were made in relation to impacts on threatened biodiversity in the SEE.

While OEH agrees that the impact of first workings on threatened biodiversity values is likely to be very minor, it appears premature to make the same case for longwall mining of those same panels. This is particularly the case when the actual sill location that limits coal extraction in this area of the targeted coal seams is not yet known, but will be determined during the course of the first workings proposed for this modification (SEE, p. 5). It is possible that other geological structures could be revealed in this region that could affect subsidence predictions, so it appears premature to discuss the impact of any longwall mining of the subject area and state that there will be no impact on threatened biodiversity (SEE, p. 15) particularly when it is not clear if secondary workings will be possible in this area.

If and when a subsequent Section 96(1A) Modification is applied for any additional secondary workings in longwall panels 22 & 23, OEH recommends that a flora and fauna survey is conducted of the surface area during a time when spring, summer or autumn-flowering species, such as *Tetratheca juncea* are likely to be flowering and thus detectable during field survey.

In relation to the current proposal OEH recommends that as a precautionary approach that any consent is conditioned with the following:

1. That in the event that unexpected mine subsidence occurs above the first workings that leads to harm to threatened species, populations, communities or their habitats, that such harm will be offset in accordance with the OEH offsetting policy [[www.environment.nsw.gov.au/biodivoffsets/](http://www.environment.nsw.gov.au/biodivoffsets/)].

### **ABORIGINAL CULTURAL HERITAGE**

OEH reviewed the Aboriginal cultural heritage assessment provided in Section 11.2 of the SEE. OEH notes that the proposed modification is not predicted to have any impacts on the natural or built surface environment. No Aboriginal heritage sites were identified within the Study Area. Based on the predicted first workings (and any subsequent pillar deformation) subsidence being undetectable (Seedsman Geotechnics, 2016) [SEE, Appendix A] for the main-gate development associated with longwall panels 22 and 23, no impacts to identified Aboriginal heritage sites within the vicinity of the Study Area are predicted as a result of the proposed modification to extend the first workings of Longwalls 22 and 23.

OEH therefore has no concerns with respect to Aboriginal cultural heritage management for this project.

## FLOODING AND FLOODPLAIN MANAGEMENT

OEH reviewed the Surface Water assessment and the Subsidence assessment provided in Section 11.3, and Appendix A of the SEE respectively. OEH is not able to assess the validity of the subsidence predictions in this instance and so have accepted them as reasonable, noting that approximate methods have been employed.

The area affected is State Forest and private small holdings along Tobins Creek. The creek is second order and ephemeral. The predicted surface deformations are in the range of 6 - 11 mm, which is less than that associated with changing soil moisture conditions. As such, the proposed first workings are most unlikely to have any adverse impact on stream behaviour. Further analysis is required, though, in the event of geological structures and features intersected by the proposed first workings and how they may influence subsidence for any new secondary workings that may be approved following a further modification for this consent.

A general comment on the proposed amendments to the consent conditions provided Appendix C of the SEE is that OEH does not support the proposal to modify the consent to allow development to be carried out "*generally in accordance*" [with the consent] and the "*conceptual mine plan*" (SEE, Section 4, p. 5). This would significantly weaken the consent authority's capacity to audit or conduct compliance on the consent.

