



Our ref: DOC19/871779-2

Your ref: SSD 4960 MOD 3

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Dear Ms Anderson

**Bulga Optimisation Project MOD 3 and Bulga Underground MOD 7 – review of Statement of Environmental Effects**

I refer to your e-mail dated 30 September 2019 inviting Biodiversity and Conservation Division (BCD) of the Department of Planning, Industry and Environment for advice in relation to the Bulga Coal Optimisation Project (SSD 4960 MOD 3) and the Bulga Underground Mine (DA 376-8-2003 MOD 7).

BCD have reviewed the *Bulga Optimisation Project Modification 3 and Bulga Underground Modification 7 Statement of Environmental Effects* (SEE), including key appendices, and the *Aboriginal Cultural Heritage Assessment Report, Bulga Optimisation Project Modification 3* (ACHAR) prepared by OzArk Environment & Heritage (June 2019). Additional information was provided by the proponent on the biodiversity assessment during a meeting on 29 October 2019 and in an e-mail dated 31 October 2019, which was also reviewed. BCD did not identify any issues with flooding or flood risk for the project and has no further comment to make on these matters.

BCD's recommendations on other relevant matters is provided in **Attachment A** and detailed comments are provided in **Attachment B**. If you require any further information regarding this matter, please contact Nicole Davis, Acting Senior Team Leader Planning, on 0409 394 343 or via email at [rog.hcc@environment.nsw.gov.au](mailto:rog.hcc@environment.nsw.gov.au)

Yours sincerely

**KATRINE O'FLAHERTY**  
**Acting Director Hunter Central Coast Branch**  
**Biodiversity and Conservation Division**  
11.11.2019

Enclosure: Attachments A and B

## BCD's recommendations

### **Bulga Optimisation Project (SSD 4960 MOD 3) and Bulga Underground Mine (DA 376-8-2003 MOD 7) – Review of Statement of Environmental Effects**

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BCD recommends that all data requirements under the Framework for Biodiversity Assessment (FBA) are met so that BCD can complete its assessment of biodiversity impacts of the project and biodiversity values of the proposed offset site.

BCD recommends that the mine-rehabilitation component of the Bulga Optimisation Project's biodiversity offset package affected by the project is assessed in accordance with the FBA. If this assessment generates ecosystem credits or species credits that they must be offset in accordance with the FBA.

BCD recommends that the four extant Aboriginal heritage sites be salvaged under the *Bulga Coal Complex Aboriginal Cultural Heritage Management Plan*, should the proposed modification be approved.

BCD recommends that the proposed salvage of the four extant Aboriginal sites be integrated into the *Bulga Coal Complex Aboriginal Cultural Heritage Management Plan* in consultation with all the registered Aboriginal parties and submitted to BCD for approval.

BCD recommends that the Aboriginal cultural heritage constraints and obligations identified for the Cultural Values Area, be integrated into the *Bulga Coal Complex Aboriginal Cultural Heritage Management Plan*, in consultation with all the registered Aboriginal parties and submitted to BCD for approval.

## BCD's detailed comments

### Bulga Optimisation Project (SSD 4960 MOD 3) and Bulga Underground Mine (DA 376-8-2003 MOD 7) – Review of Statement of Environmental Effects

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#### Biodiversity

1. All data for the biodiversity assessment report required by the Framework for Biodiversity Assessment should be submitted to BCD

Biodiversity impacts of the development and biodiversity values of the proposed Vere offset are being assessed in accordance with the Framework for Biodiversity Assessment (FBA). Appendix 7 of the FBA lists the data to be provided in a Biodiversity Assessment Report (BAR) and to BCD. However, not all of this data has been provided. The following information is requested so that BCD can complete its assessment:

#### Development footprint – Biodiversity Assessment Report

- A. An assessment of the post-mine rehabilitation in the development footprint that forms part of an exiting offset package in accordance with the FBA (see Recommendation 2, below)
- B. Weather conditions during the species-credit flora surveys and species-credit fauna surveys
- C. Landscape Tg values per vegetation zone and a note on whether any Tg value has changed due to species exclusion
- D. A discussion on the indirect impacts of sedimentation and run-off from the project and measures to minimise those impacts
- E. A copy of the native vegetation extent shapefile that was shown in Figure 3.1 of the BAR

#### Vere Offset – Biobank credit calculator (Management zone attribute scores)

- F. The 'score with management' value of the 'native ground cover (other)' attribute in Vegetation Zone 2 (HU815\_Moderate/Good\_other) was kept at the current score of 2 rather than changed to the default score of 3. The reason for this change is required since all other scores went to the default value
- G. The 'score with management' value of the 'exotic plant cover' attribute in Vegetation Zone 3 (HU815\_Moderate/Good\_derived grassland) was kept at the current score of 2 rather than changed to the default score of 3. The reason for this change is required since all other scores went to the default value

#### Vere Offset – Biodiversity Assessment Report

- H. A discussion is needed on any existing management actions required for the proposed offset land and how they may affect credit yield
- I. A discussion on the vegetation communities in the Vere offset and how they were matched to Plant Community Type is required. It would help with the assessment process if this was in the same format of Section 3.2.1 of the BAR

- J. Details of weather conditions during targeted surveys for threatened species is required
- K. A discussion on ecosystem credits and species credits to be created at the offset site, including future site value scores for each vegetation zone at the offset site is required
- L. A discussion on the change in landscape value score, and the number of ecosystem credits created for the improvement in biodiversity values for each vegetation zone at the offset site is required, and
- M. Tables 7.4 and 7.5 in the BAR are difficult to relate to individual vegetation zones. Instead a revised credit-matching table is required that clearly shows how all vegetation zones in the development footprint are matched to vegetation zones in the Vere offset using both the standard FBA rules, and those applying the variation of the offset rules for ecosystem credits (Section 10.5.4.2) of the FBA. BCD recommends that the format of the new table follows the one prepared by Umwelt for the United Wambo project.

### Recommendation 1

BCD recommends that all data requirements under the Framework for Biodiversity Assessment are met so that BCD can complete its assessment of biodiversity impacts of the project and biodiversity values of the proposed offset site.

2. Biodiversity values of the biodiversity offset land to be cleared for the project need to be assessed by the Framework for Biodiversity Assessment

Section 6.12.3 of the Statement of Environmental Effects (SEE) describes the proposed clearing of about 200 hectares of post-mine rehabilitation which would subsequently be replaced on a 1:1 ratio. At the meeting on 29 October 2019 it was said that about 50 hectares of this post-mine rehabilitation is part of the offset for the Bulga Optimisation Project. However, no assessment of the biodiversity values of the rehabilitation offset was provided in the BAR. BCD recommends that the biodiversity values of this rehabilitation offset are assessed in accordance with the FBA. This can include the use of existing BioBanking quadrats already in Bulga's post-mine rehabilitation area that have been conducted as part of an annual monitoring program. The FBA assessment of the rehabilitation offset may generate ecosystem credits or threatened species credits. If so, this would be an additional offset requirement to replacing the rehabilitation to meet existing offset requirements.

### Recommendation 2

BCD recommends that the mine-rehabilitation component of the Bulga Optimisation Project's biodiversity offset package is assessed in accordance with the Framework for Biodiversity Assessment. If this assessment generates ecosystem credits or species credits that they must be offset in accordance with the FBA.

## **Aboriginal cultural heritage**

3. The four extant Aboriginal heritage sites that will be impacted by the proposed modification must be salvaged

Following review of the Statement of Environmental Effects and the *Aboriginal Cultural Heritage Assessment Report, Bulga Optimisation Project Modification 3* (ACHAR) BCD notes that there are four recorded extant Aboriginal sites situated within the Assessment Boundary for the proposed modification that will be directly impacted should the modification be approved.

It is noted that there were another two Aboriginal sites recorded, that are no longer extant, as they were impacted by the construction of an approved laydown area. These sites were unintentionally destroyed, and the proponent self-reported this event to the then Office of Environment and Heritage (OEH) on 6 September 2018.

The ACHAR recommends that the four extant Aboriginal sites to be impacted, should the modification be approved, be salvaged by collection of surface artefacts under the *Bulga Coal Complex Aboriginal Cultural Heritage Management Plan* (OzArk 2019).

### Recommendation 3

BCD recommends that the four extant Aboriginal heritage sites be salvaged under the *Bulga Coal Complex Aboriginal Cultural Heritage Management Plan*, should the proposed modification be approved.

#### 4. The approved Aboriginal Cultural Heritage Management Plan must be updated

The *Bulga Coal Complex Aboriginal Cultural Heritage Management Plan* (ACHMP) must be revised to incorporate any impacts to the four Aboriginal sites as a result of the proposed modification and submitted to BCD for approval. Any revisions to the ACHMP must be in consultation with all the registered Aboriginal parties.

### Recommendation 4

BCD recommends that the proposed salvage of the four extant Aboriginal sites be integrated into the *Bulga Coal Complex Aboriginal Cultural Heritage Management Plan* in consultation with all the registered Aboriginal parties and submitted to BCD for approval.

#### 5. No impacts are to occur within the Cultural Values Area to the north-east of the modification area

The Cultural Values Area as shown on Figure 6-7 of the ACHAR directly to the north-east of the proposed infrastructure area must not be impacted by the proposed modification. Management and mitigation of this area must be included in the *Bulga Coal Complex ACHMP*. The ACHMP must be revised to incorporate management and mitigation of the Cultural Values Area. Any revisions to the ACHMP must be undertaken in consultation with all the registered Aboriginal parties.

### Recommendation 5

BCD recommends that the Aboriginal cultural heritage constraints and obligations identified for the Cultural Values Area, be integrated into the *Bulga Coal Complex Aboriginal Cultural Heritage Management Plan*, in consultation with all the registered Aboriginal parties and submitted to BCD for approval.