



Our ref: DOC19/348989

Your ref: SSD 6456

Mr Steve O'Donoghue
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Planning and Assessment Group
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Dear Steve

Narrabri Gas Project (SSD 6456) – Supplementary Response to Submissions

Thank you for your invitation on 8 April 2019 for the Biodiversity and Conservation Division (BCD) to comment on the supplementary response to submissions for the Narrabri Gas Project.

BCD notes that the assessment for the Narrabri Gas Project is partly conceptual as the final footprint of the project is yet to be determined. BCD has assessed the Supplementary RTS against the Framework for Biodiversity Assessment (FBA) and the NSW Biodiversity Offsets Policy for Major Projects.

BCD's recommendations are provided in **Attachment A**. Our detailed comments are provided in **Attachment B**.

Apart from the items discussed in the attachments, BCD is satisfied that all other issues raised in our response to the RTS have been appropriately addressed.

If you require any further information regarding this matter please contact David Geering, Senior Conservation Planning Officer, via david.geering@environment.nsw.gov.au or (02) 6883 5335.

Yours sincerely

A handwritten signature in black ink, appearing to read 'S. Cox', with a long horizontal stroke extending to the right.

13 November 2019

Steven Cox
A/Director North West Branch
Biodiversity and Conservation Division

Enclosure: Attachments A and B

BCD's recommendations

Narrabri Gas Project – Supplementary Response to Submissions

Biodiversity

1. The Field Development Protocol should include a procedure for when the ground-truthed PCT is not in the same vegetation class as the mapped PCT, the impact should be tracked against the ground-truthed PCT and not the mapped PCT.
2. An additional component should be added to draft consent condition B52(g) requiring the outcomes of the koala research program to be made publicly available.
3. Micro-siting protocols, to be described in the Field Development Protocol, should adhere to the NSW Guide to Surveying Threatened Plants, with survey periods conducted at the appropriate time to detect the species, as listed in the Threatened Biodiversity Data Collection.

Aboriginal cultural heritage

4. A component should be added to draft consent condition B61 requiring a suitably qualified archaeologist should be involved in the pre-clearance surveys, to assist in the identification of Aboriginal heritage and provide adequate management advice.

BCD's detailed comments

Narrabri Gas Project – Supplementary Response to Submissions

Biodiversity

1. Ground-truthing, mapping and tracking of PCTs during micro-siting is required

Ground-truthing of PCTs

The proponent has committed to no adverse outcomes to Threatened Ecological Communities (TECs) outside mapped areas.

Draft consent condition B2(d)(iii) requires the Field Development Protocol to describe the process of in-field micro-siting, including ground-truthing of locational criteria (which includes biodiversity). The Field Development Protocol should include a requirement to confirm if the plant community types (PCTs) being impacted conform to those that had been mapped prior to the field scouting.

Tracking disturbance limits against vegetation class

The proponent suggests that it may be difficult for ecologists to assign vegetation classes in the field. BCD advises that this is not required.

BCD recommends that where PCTs identified in the field are not as is currently mapped then the impact may be tracked against the upper disturbance limit for any other mapped PCT that is in the same vegetation class as the ground-truthed PCT. This is a desktop exercise as all PCTs are assigned to a vegetation class in BCD's Vegetation Classification Database.

Draft consent condition D9(b) requires the Annual Review to report on the associated actual versus proposed surface disturbance for each stage. BCD is satisfied that this requirement will provide outcomes of the ground-truthing, including identifying the area of each PCT being impacted.

Recommendation 1

The Field Development Protocol should include a procedure for when the ground-truthed PCT is not in the same vegetation class as the mapped PCT, the impact should be tracked against the ground-truthed PCT and not the mapped PCT.

2. Results from the proposed koala research program should be used to guide future management of the local koala population

BCD acknowledges that the results of the koala research program, as described in draft consent condition B52(g), will guide adaptive management of the koala population in the project area and in any land-based offsets that have been secured to retire species credits for the koala. BCD recommends that the results of the research program are made publicly available so that the outcomes can inform koala management outside of the project and offset areas.

Recommendation 2

An additional component be added to draft consent condition B52(g) requiring the outcomes of the koala research program to be made publicly available.

3. It is unclear how detection of *Lepidium aschersonii* and *Lepidium monoplacoides* during micro-siting will be maximised

The Supplementary RTS does not address BCD's concerns relating to the detectability of some threatened species during the micro-siting process. Surveys should adhere to the NSW Guide to

Surveying Threatened Plants, with surveys conducted at the appropriate time to detect the species.

Recommendation 3

Micro-siting protocols, to be described in the Field Development Protocol, should adhere to the NSW Guide to Surveying Threatened Plants, with survey periods conducted at the appropriate time to detect the species, as listed in the Threatened Biodiversity Data Collection.

4. A monitoring report framework is required to document tracking against upper disturbance limits

BCD requested a monitoring report framework documenting the clearing of all PCTs and threatened flora and fauna habitat areas within the proposed upper disturbance limits. The proponent has committed to a reporting framework to document tracking against upper disturbance limits.

BCD is satisfied that reporting of clearing against upper disturbance limits will be captured in the Annual Review as described in draft consent condition D9(b).

5. The Biodiversity Offset Strategy should conform to the NSW Biodiversity Offset Policy for Major Projects.

A biodiversity offset package within the Biodiversity Offset Strategy (BOS) indicates that suitable offset land is available to meet the entire offset obligations of the project. However, the BOS proposes that the credit obligation will be met through a combination of like-for-like land-based offsets, supplementary measures such as feral animal control, and compensatory measures such as funding a koala research project.

Currently, the BOS is not compliant with the NSW Biodiversity Offsets Policy for Major Projects (herein referred to as the “offsets policy”). Principle 6 of the offsets policy states that supplementary measures can be used when appropriate offset sites cannot be found. However, before supplementary measures can be enacted the proponent must take reasonable steps to locate like-for-like offset sites (as outlined in Appendix A of the offsets policy), and evidence of these steps must be provided.

The proponent has advised that suitable offset land is available to meet the offset obligations of the project, however supplementary measures, including a nil-tenure pest animal control program, have been proposed that will comprise one third of the total offset liability of the project. Insufficient evidence has been provided to justify how the pest animal control program will lead to long-term benefits to biodiversity given that it is proposed for a 20-year period, not in-perpetuity. Additionally, the BOS does not demonstrate how the credit liability for each ecosystem credit and species credit species will be satisfied beyond the theoretical framework that is provided.

BCD is satisfied that the draft consent conditions B45 (Tables 7, 8 and 9) and B52(f) will address the issues that currently exist with the BOS, including:

- B52(f) requires that a BOS be prepared in consultation with BCD that is consistent with the offsets policy. The BOS must also describe how the credits will be identified, secured and retired.
- B45 states that credits must be retired in accordance with the BC Act
- B52(f)(iv) states that the BOS will prioritise land-based offsets for retiring Phase 2 credits

- B52(f)(vi) states that a description of how threatened species and communities listed under the EPBC Act will be offset

6. Clear justification for the generation of species credits from rehabilitation is required.

Generation of species credits from rehabilitation

The Supplementary RTS does not provide any additional justification for the inclusion of *Lepidium aschersonii*, *Lepidium monoplacoides* and *Polygala linariifolia* as species credit species that respond positively to rehabilitation. BCD requests specific evidence that demonstrates how these species respond positively to disturbance.

Similarly, the Supplementary RTS does not provide adequate justification for the proposed generation of species credits for black-striped wallabies. The species requires dense vegetation for sheltering, whereas restoration of the specific PCTs is likely to result in a dense vegetation state only for a limited period.

BCD is satisfied that the final dot point in draft consent condition B51 will deliver the required evidence for all these species. The condition requires that the applicant demonstrates that relevant species are suitable for ecological rehabilitation.

Monitoring of rehabilitation for species credits

The Supplementary RTS indicates that details of the monitoring protocols for rehabilitation areas is provided in the Rehabilitation Strategy. Data will be collected using the BioBanking Assessment Methodology. There is no information in the Rehabilitation Strategy regarding specific monitoring to quantify the response by the nominated species credit species in rehabilitation areas.

BCD is satisfied that draft consent conditions B51 and B90 provide the basis for establishing appropriate ecological rehabilitation completion criteria for relevant ecosystem and species credit species.

7. A vegetation clearing window should be nominated that will minimise impacts to fauna species.

The months of the year have been categorised into most-preferred to least-preferred clearing windows, although the EIS states that clearing will be managed to minimise clearing during sensitive breeding periods for fauna. BCD notes that up to twenty per cent of clearing will be during the least preferred September-January period when fauna, including threatened species, are likely to be breeding.

BCD is satisfied that draft consent condition B52(h)(ii) will address this issue. This requires that the Biodiversity Management Plan must describe targeted clearing windows that will minimise impacts during key breeding seasons for threatened birds and bats.

Aboriginal Cultural Heritage

BCD has reviewed the supplementary response to submission report and is satisfied that the proponent has adequately addressed matters regarding the Cultural Heritage Management Plan, the additional research program, communication and the site avoidance and buffer distances. Comments and associated recommendations regarding the sensitivity mapping and landform data and pre-clearance surveys are provided below.

8. Annual appraisal of sensitivity mapping is necessary

BCD maintains that an annual appraisal of the sensitivity mapping is necessary. The proponent has raised concerns that the project area is too large, and that no information may be obtained in the first 12 months. However, no new data of Aboriginal sites is useful information because it still contributes to developing an understanding of the likely areas of sensitivity across the project area.

BCD acknowledges that the proponent will update the sensitivity mapping through the CHMP proposed research program. However, the research program is focused primarily on anthropological and historical studies which investigates contemporary and intangible aspects.

An annual report/audit on numbers of sites/objects encountered during preclearance work should be provided, especially given the uniqueness of the construction approach and that the environmental assessment has been based on predictive modelling due to the uncertainty of knowing the location of all development footprints.

BCD is satisfied that the third dot point in draft consent condition B61(d)(i) captures the requirement of the applicant to review and update Aboriginal cultural heritage sensitivity mapping within the Aboriginal Cultural Heritage Management Plan (ACHMP). Draft consent condition B61(b) requires that the ACHMP must be prepared in consultation with BCD.

9. A suitably qualified archaeologist should participate in the pre-clearance surveys

BCD reiterate that archaeological expertise is critical for supporting the pre-clearance teams. Archaeological skills are required in stone artefact identification particularly, quartz and quartzite technology due to the graded track history of the Pilliga forest which creates features that mimic quartz and quartzite artefacts. The development of the sensitivity mapping will need to be based on reliable data for adequate decision making and potentially compliance and auditing.

BCD understands and acknowledges that archaeological expertise will be used by the proponent for test excavations etc. The technical person referred to in the proponent's response should be an archaeologist. This should be captured in draft consent condition B61 which describes the contents of the Aboriginal Cultural Heritage Management Plan.

Recommendation 4

A component should be added to draft consent condition B61 requiring a suitably qualified archaeologist should be involved in the pre-clearance surveys, to assist in the identification of Aboriginal heritage and provide adequate management advice.