



Office of
Environment
& Heritage

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Ms Margaret Kirton
Senior Planner – Resource Assessments
Department of Planning and Environment
via email: Margaret.Kirton@planning.nsw.gov.au

Dear Ms Kirton

Gunlake Quarry extension project (SSD 7090)

Thank you for referring the Environmental Impact Statement (EIS) for Gunlake Quarry Extension Project (SSD 7090) to the Office of Environment and Heritage (OEH) on 1 April 2016 for our review. We have reviewed the sections of the EIS that relate to biodiversity and Aboriginal cultural heritage matters.

In regards to Biodiversity, OEH considers that the Biodiversity Assessment Report is not adequate and additional information is required to properly assess whether the Environmental Impact Statement is compatible with the NSW Government Framework for Biodiversity Assessment (FBA). The FBA must be wholly applied to all State Significant Developments. Furthermore, it is not exactly clear, but it appears that the proponent is attempting to re-use pre-existing offset areas that were secured under previous approvals on site. These issues, among others, are described in **Attachment One**, along with our specific requests for information and/or action.

In regards to Aboriginal cultural heritage, OEH is satisfied that the Aboriginal cultural heritage assessment (Appendix M) meets our requirements. We support the preparation of an updated Aboriginal Heritage Management Plan (AHMP) in conjunction with Registered Aboriginal Parties and OEH. The AHMP must be updated by a qualified archaeologist. The safeguards outlined in section 13.4 and the commitments included in Table 17.1 of the EIS must be included as conditions of consent. These matters are described in detail in **Attachment Two**.

Should you require any additional assistance or wish to discuss the matter further please contact Suzie Lamb on (02) 6229 7117 in relation to biodiversity issues or Christine Gant-Thompson on (02) 6229 7097 for issues relating to Aboriginal cultural heritage.

Yours sincerely


20/5/16
ALLISON TREWEEK
Senior Team Leader Planning - South East
Regional Operations Group – South

Enclosure:

ATTACHMENT 1 – Biodiversity comments on the Gunlake Quarry extension project EIS

ATTACHMENT 2 – Aboriginal cultural heritage comments on the Gunlake Quarry extension project EIS

Attachment one: Biodiversity comments on the Gunlake Quarry extension project EIS

OEH has reviewed the EMM Biodiversity Assessment Report (BAR), Appendix I, in the Environmental Impact Statement (EIS) against requirements set out in the NSW Government Framework for Biodiversity Assessment (FBA).

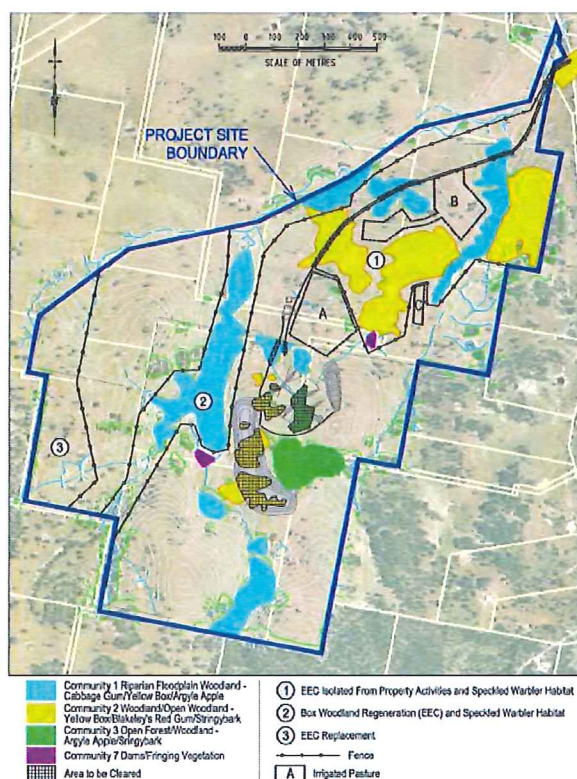
It was a requirement in the Secretary's Environmental Assessment Requirements for this project to apply the FBA method. A number of components within the BAR are not compliant with the FBA, as explained below.

Ref	Detail of matter	What information OEH needs to properly assess this matter	Why this is important
1	<p>Vegetation mapping – location of plots.</p> <p>According to the FBA methodology, at least 12 vegetation plots need to be undertaken (~4 in most veg zones on site) based on the area to be impacted. However, only two of the vegetation plots are actually within the impact area (see Fig 2.1 of the BAR). The results of these vegetation plots should lead to the classification of the vegetation communities. For example to help define what community the derived grasslands may have originated from, as described below in Ref 2.</p> <p>If the consultant wants to use plots beyond the impact area, throughout the whole vegetation zone, then they should work out the higher number of plots required for the larger vegetation zones (as per table 3 in the FBA).</p> <p>The area of each vegetation zone across the whole site is not in the report. However they are likely to be over 50 hectares in each vegetation zone, which would require 5 plots/transect in each zone.</p>	<p>OEH requires a map of the vegetation plot locations overlayed on the vegetation zone areas.</p> <p>OEH requires the correct number of plots to be undertaken across each zone, as per Table 3 in the FBA.</p>	<p>Accuracy of the environmental assessment depends on the quality of vegetation mapping. The minimum number of plots has been set in the FBA so that they can be sufficiently representative of the site.</p>
2	<p>Vegetation mapping - Derived native grasslands.</p> <p>Throughout the BAR, EMM refer to previous environmental assessments that came to different conclusions on the type of vegetation communities on site. However, it is not clear in the current BAR assessment, how the areas of Derived Native Grassland (DNG) areas were assigned to either the Box Gum Woodland vegetation community or the Broad-leaved Peppermint/Red Stringybark community.</p> <p>Much of the site was previously mapped as Box Gum Woodland derived grassland, but has since been changed to Broad-leaved Peppermint/Red Stringybark derived grassland.</p>	<p>A discussion in the EIS about the method used to identify which vegetation community the grassland is likely to be derived from and why.</p>	<p>Box Gum Woodland is an endangered ecological community under NSW legislation and subsequently impacts to this community need to be assessed and offset appropriately and transparently.</p>
3	<p>Striped Legless Lizard habitat requirements across the site.</p> <p>EMM have assumed the presence of this species in the development site. However, the habitat for this species has only been assumed to be 8.4 hectares of vegetation on site. It is not explained how this figure was worked out. OEH expects the</p>	<p>For the assessment to be compliant with the FBA, they need to provide a map, outlining the potential habitat for this species. It is</p>	<p>The area used to determine the assumed habitat area needs to be discussed in the BAR.</p>

	<p>potential habitat to encompass all of the derived native grassland across the impact area, which is 41.9 hectares at least.</p> <p>Note, the sporadic rock rolling surveys are insufficient for this species – high density tile surveys are best practice and recommended by OEH.</p>	<p>known as a “species polygon” in s6.5.1.19 of the FBA.</p> <p>A description of how the habitat was identified and delineated is also required.</p>	
4	<p>Striped Legless Lizards cannot be assumed to be present on the offset site.</p> <p>EMM have assumed the presence of the Striped Legless Lizards on the offset site, which is not allowed under the FBA method. Species can only be assumed to be present on the development/impact sites.</p> <p>Surveys need to be conducted in the offset areas to confirm whether the offset site is suitable. Tile surveys will need to be undertaken in the appropriate season and weather.</p>	<p>OEH will require proof that the Striped Legless Lizard inhabits the offset site area. This approach would require tile surveys. Alternatively, the proponent can purchase credits for this species on the market and fulfil offset requirements offsite.</p>	<p>The offset site must be able to compensate for the loss of habitat on the impact site so that species do not go extinct over the longer term.</p>
5	<p>Offset requirements have not been transparently identified.</p> <p>In the BAR it appears that an Offset Calculator has only been used for the development site. It does not appear to have been used for the offset area. Instead the area has been estimated using a ‘hectares to credit equation’. Considering that plot data has been collected across the site, it should be easy for the proponents to use the calculator to work out the specific credit outputs of the proposed offset areas, rather than estimate the areas.</p>	<p>Can the proponent and their consultants please confirm whether the offset calculator has been used on both the development and offset sites.</p>	<p>The ratio of offsets required varies per site, based on the condition of vegetation on both the development and offset site. Entering the vegetation plot data into the Credit Calculator for the offset site is important to ensure the offset requirements are correct.</p>
6	<p>FBA Calculator Credit reports.</p> <p>It is a requirement in the FBA that the credit calculator reports are provided in the BAR. In Appendix F of the BAR, the ‘offset calculator results’ have been included but this information appears to be for the Commonwealth Calculator.</p>	<p>The BAR must contain the output of the FBA credit calculator for the development and offset site so that OEH can check what requirements came from the calculator for each vegetation zone and species.</p>	<p>This allows OEH to verify that the correct calculator was used for this project, that credit requirements are accurate and that the offsets are sufficient to compensate for the loss of habitat on the impact site.</p>
7	<p>The proponents cannot use previously committed offset sites.</p> <p>In the BAR, EMM refer to ‘leftover offsets’ from previous consents for Gunlake Quarry. As highlighted in our letter to DP&E regarding Modification 2 on 21 November 2014 and 12 February 2015, OEH does not support this approach as it conflicts with the NSW Government offsetting principle that “offsets must</p>	<p>OEH requires a map and information delineating:</p> <ul style="list-style-type: none"> • The location, area and habitat in previously consented offsets (per approval) 	<p>As there are other similar quarries in the area, all presently applying for modifications, it is vital that assessments and offsets are done in a transparent manner,</p>

be additional to other legal requirements". The previously agreed offsets should be already in place and be managed to achieve compliance with previous consent conditions. In addition to this, the impact area for the proposed extension area impinges on previously identified offset areas that were previously committed to in the original approval 07-0074 (see image below from original approval). OEH has received an email from Ed O'Neil from Gunlake Quarry stating that they have modified where the offsets would be positioned on the block but it has not been shown how this would be compliant with previous consent conditions or their intent – or where the offset areas are.

APPENDIX 6
VEGETATION OFFSET PLAN



The above plan is amended by:

- deletion of irrigation area B in Offset Area 1; and
- additional fencing to be provided on the southern side of Chapman's Creek between Offset Area 2 and Offset Area 3.

- The management actions that are currently being undertaken in previously agreed offset areas
- The area and locations of the current offset proposal

all applying the same method and policies. Other quarries in the areas are not re-using previously assessed and secured offsets.

8

Selecting suitable offsets for this proposal

The biodiversity Offset Strategy (section 7 of the BAR) and in particular Figure 7.1 does not identify where offsets for previous approvals (e.g. the original approval and mod 2 approval) are on site – and which sections are intended to fulfil the offsetting requirements for the current proposal. All the offsets are in one lump on a map. Similar to issues described above, the offset strategy does not allow for a transparent review of whether offsets are compliant with current NSW Government policy and/or whether the proponents are "double-dipping".

OEH requires a map and table delineating:

- The location, area and habitat in previously consented offsets (per approval)
- The area and locations of the current offset proposal

As there are other similar quarries in the area, all presently applying for modifications, it is vital that assessments and offsets are done in a transparent manner, all applying the same method and policies.

9	<p>BioBanking agreement to be used as the covenant option.</p> <p>In the BAR (section 7.7 and others), it states that "offset areas will be secured where possible using a BioBanking agreement". OEH questions the "where possible" caveat and contends that a BioBanking Agreement must be used to secure all of the offsets for this project, as per the FBA.</p>	<p>The consultant needs to qualify what they mean by "where possible" in regards to using a BioBanking Agreement.</p>	<p>Implementing BioBanking Agreements are the best practice in ensuring offsets comply with the offsetting principles and are secured, with management funds, in perpetuity.</p>
10	<p>Revegetation of the impact areas.</p> <p>In section 6.4.7 of the EIS, it states that the disturbed land on the overburden emplacement embankment will be regenerated using a "non-persistent cover crop and pasture seed". It is best practice to use native species for regeneration to minimise impacts of the project across the landscape.</p> <p>The canopy species listed are all native and OEH supports this, but would like to see the cover-crop/grass species to be native too.</p>	<p>Revisions in the EIS committing to the use of native species for the cover-crop, where possible. Except for potentially one sterile introduced species to aid quick growth and cover of exposed areas.</p>	<p>According to the EIS it is a predominately native area. Using native seed reduces the environmental risk of weeds spreading in the Marulan area.</p>

Attachment two: Aboriginal cultural heritage comments on the Gunlake Quarry extension project EIS

Recommended conditions of consent

In order to ensure adequate protection for Aboriginal Cultural Heritage values within the development footprint OEH recommends that the following requirements be included must be included as conditions of consent;

- Aboriginal sites GL4, GL12, GL13 and GL15 must not be harmed.
- The existing Aboriginal Heritage Management Plan (AHMP) must be updated by a qualified archaeologist, in consultation with Registered Aboriginal Parties and OEH prior to commencement of activities for the extension project. The AHMP must include, but not limited to:
 - description of the measures that would be implemented if any new Aboriginal objects are found;
 - description of the measures that would be implemented if any Aboriginal skeletal material is uncovered;
 - an outline of the process that will be followed for continuing consultation with the Aboriginal stakeholders and OEH;
 - an outline of the process for how the AHMP procedures will be managed and adhered to during the operational life of the extension project; and
 - an outline of measures to protect those Aboriginal sites that will be avoided. This must include fencing the boundary of each site and inclusion of site locations on all operational maps and plans to avoid inadvertent harm.
- The safeguards and mitigation measures outlined in section 13.4 and the commitments included in Table 17.1 of the EIS are followed.
- All site workers and contractors be provided with induction training on the identification of Aboriginal objects, Aboriginal cultural awareness and procedures that must be followed in the event of discovery of Aboriginal objects.