



## Office of Environment & Heritage

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Director, Mining and Industry Projects  
Major Projects Assessment  
Department of Planning and Infrastructure  
GPO Box 39  
SYDNEY NSW 2001

Attn: Elle Donnelley

19 November 2013

Dear Ms Donnelley,

### **Re: Northparkes Mine Step Change Project (MP 11\_0060) Response to Submissions**

I refer to an email received on 24 October 2013 seeking comment from the Office of Environment and Heritage on the Response to Submissions document for the Northparkes Mine Step Change Project, and a further email received on 5 November 2013 providing further information on biodiversity issues in an addendum document. A detailed response to the information provided in both documents is included at **Attachment A**.

The proposed offset for the Grey Box Grassy Woodland EEC remains inadequate. No additional area of the EEC, or no alternative vegetation types of the same or better conservation value have been proposed to be added to the offset strategy. The reliance on restoring the derived native grassland to a woodland state to provide a sufficient offset for the vegetation to be cleared is not a preferred option. OEH's previous request to secure an additional area of Grey Box Grassy Woodland EEC remains unchanged.

OEH would like to commend the proponent's proposed realignment of the haul road that would otherwise have impacted on 142 individuals of the recently identified Pine Donkey Orchid population in the disturbance area. The installation of temporary fencing around the population during the haul road construction and the provision of appropriate information to personnel involved with the construction of the haul road on the location of the population will both assist in minimising disturbance to the plants. The development of a species management plan for the two populations of the orchid identified at the mine site will also provide valuable information on the resilience of the populations over time and how they respond to different management activities.

Concerns previously raised by OEH regarding the proposed conservation mechanism have not been addressed. It is still unclear how management activities will be resourced and who will have responsibility for the implementation of management activities beyond the life of the mine when the deed of agreement between the

proponent and the landowner ceases. It is again requested that the Kokoda offset site be secured by an in-perpetuity conservation mechanism to the satisfaction of OEH.

If you have any questions regarding the items within this response please contact myself on 02 6883 5313.

Yours sincerely

A handwritten signature in black ink, appearing to read 'SArdill'.

**SONYA ARDILL**  
**Senior Team Leader Planning**  
**North West Region**

Attachment A: OEH response to Northparkes Mine biodiversity issues

## Attachment A: OEH response to Northparkes Mine biodiversity issues

### Northparkes Mine Step Change Project

### Comment on the Response to Submissions document

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#### Acronyms used within this document:

DNG	derived native grassland
EA	environmental assessment
EEC	endangered ecological community
OEH	Office of Environment and Heritage
RTS	Response to Submissions

#### 1. Grey Box Grassy Woodland EEC

The RTS document and the addendum refer to the proposal achieving a Tier 3 mitigated net less outcome under OEH's *interim policy on assessing and offsetting biodiversity impacts of Part 3A, State significant development (SSD) and State significant infrastructure* for the Grey Box Grassy Woodland EEC.

Achieving a Tier 3 outcome is the least preferred option when negotiating biodiversity offsets and should only be investigated if all other offset alternatives have been exhausted. In addition, a 2:1 offset to clearing ratio is the absolute minimum target that should be achieved. The proponent's claim that a 2.9:1 offset ratio has been achieved is only correct when both woodland and derived native grassland (DNG) at the offset site are included in the calculation. As outlined in OEH's response to the publicly exhibited environmental assessment (EA), including the restoration of DNG in the offset calculation is not a preferred option as it does not provide an acceptable offset ratio for the impacts that will occur in the short term, and it does not account for the uncertainty surrounding the regeneration of the grassland to a functioning ecological community.

In addition to these issues, OEH's interim policy clearly states that for projects where the BioBanking Assessment Methodology has not been used (as is the case for this project) then offsets are to be negotiated in accordance with OEH's offsetting principles (see <http://www.environment.nsw.gov.au/biodivoffsets/oehoffsetprincip.htm>). A Tier 3 offset outcome is therefore not relevant for this Project. When considering the principles for the use of biodiversity offsets in NSW the following applies to the offsetting of the Grey Box Grassy Woodland EEC:

- Principle 5 – offsets must be underpinned by sound ecological principles. The premise of this principle is that reconstruction of ecological communities (as proposed for this EEC) involves high risks and is generally less preferable than other management strategies.
- Principle 8 – offsets should be agreed prior to the impact occurring and offsets should minimise ecological risks from time-lags. The regeneration of DNG to an ecological community is likely to require many decades and therefore an immediate like-for-like offset is not achieved.
- Principle 9 – offsets must be quantifiable. The best available science should be used to measure the loss in biodiversity from the clearing and the gain in biodiversity from the offset. Management actions should be deliverable and

enforceable and should be secured in perpetuity (relates to Section 3 in this response).

The classification of the Grey Box Grassy Woodland EEC DNG into three regeneration zones is noted and supported as an important tool for identifying appropriate management actions to maximise the success of restoring the original ecological community. Figure 2.5 in the RTS document suggests that a substantial portion of the Kokoda offset site will require active regeneration. It is acknowledged that the proponent has successfully implemented a native vegetation planting program at the mine site. However, the ability to successfully implement a restoration program in a different landscape from a derived native grassland to a functioning ecological community remains unproven. As a result, the proposed 109 ha offset for the EEC may not be fully realised, or if it is it will occur over an extended timeframe that is beyond the life of the mine.

In the response to the publicly exhibited environmental assessment OEH requested that an additional area of Grey Box Grassy Woodland EEC be secured, and/or vegetation types of an equal or higher conservation value could be added to the offset strategy. The proponent has not acted on this request. For the reasons outlined in this discussion OEH again recommends that the proponent undertakes this course of action.

### **Recommendation**

- 1.1** An additional area of Grey Box Grassy Woodland EEC should be secured to satisfy biodiversity offset requirements. The quantum of the offset should be determined using a robust assessment methodology. The offset strategy may include the conservation of a vegetation type/s of equal or higher conservation value to the Grey Box Grassy Woodland EEC.

## **2. Presence of the Pine Donkey Orchid**

It is noted that a September 2013 survey for the Pine Donkey Orchid identified a population covering 1.9 ha and containing 947 individuals. It is also noted that 156 individuals would potentially be removed given the current proposed haul road location.

OEH would like to commend the proponent's initiative to alter the location of the haul road to substantially avoid the individual orchid plants, and to place a 20 metre buffer area alongside the road. This avoidance measure will substantially protect the orchid population at this site. OEH agrees that no direct offsetting for this species is required given the proposed minimal impact.

To minimise inadvertent adverse impacts during construction of the haul road it is recommended that temporary fencing is installed around the mapped extent of the Pine Donkey Orchid. In addition, personnel involved in the construction of the haul road should be briefed on the presence and location of the orchids and made aware of the importance of minimising disturbance within the immediate area. It is expected that the proposed permanent fencing would provide ongoing protection to the population from haul road traffic and maintenance work into the future.

OEH also recommends that a species management plan be developed for the two known populations of the Pine Donkey Orchid identified at the mine site, specifically:

- the previously identified population to north of the Project area near Adavale Road containing 234 individuals; and

- the newly identified population within the Project area and the approved E48 subsidence zone containing 947 individuals.

The broad objective of the management plan is to monitor and report on the two populations over time in terms of changes in extent, changes in individual numbers, and the response of the populations to management actions. The management plan should include (but not be limited to):

- Objectives for the population (ie. maintenance/expansion of current population extent and/or individuals).
- Proposed management activities (eg. permanent fencing of site to exclude stock/human disturbance, management of groundcover competition to maximise germination including potential burning regimes, etc. Given the seasonal flowering of this species, specific consideration should be given to the timing of management activities).
- Proposed monitoring and reporting activities, including timeframes for each.
- Trigger points for the enactment of contingency measures (eg. if the number of individuals reduces by x% then the following management actions will be undertaken).

OEH is willing to provide the proponent with further guidance on the content of the management plan and at the very least would request that our agency be provided with the opportunity to review the management plan prior to its finalisation. Given that the information collected within the monitoring and reporting component of the management plan has the potential to enhance the current understanding of this species, OEH requests that each monitoring report be forwarded to the agency.

### **Recommendations**

- 2.1** Install temporary fencing around the mapped extent of the Pine Donkey Orchid during construction of the haul road to minimise impacts to the species and its habitat.
- 2.2** Personnel involved in the construction of the haul road should be briefed of the presence and location of the orchids and made aware of the importance of minimising disturbance within the immediate area.
- 2.3** A species management plan should be prepared for the two populations of the Pine Donkey Orchid identified at the mine site. Each monitoring report prepared as a component of the management plan should be forwarded to OEH.

## **3. Conservation mechanism details**

OEH previously identified concerns regarding the proposed conservation mechanism with regards to providing security for the resourcing required for the ongoing management of the offset site, and how the mechanism will reflect who is responsible for the management actions over time. The RTS document indicates that the deed of agreement between the Kokoda landowner and the proponent will be valid over the life of the mine but once mining has been completed the obligations under the covenant will revert to the landowner. OEH's original concerns about this proposal remain. Given that part of the offset strategy for the Project relies on the restoration of an EEC and that management and reporting activities will need to occur beyond the life of the mine, OEH again questions the ability of the proposed mechanism to achieve these outcomes.

As stated previously OEH's preferred offsetting mechanisms include:

- a BioBanking Agreement;
- addition to the NSW national parks estate; or
- purchase and retirement of biodiversity credits under the BioBanking scheme.

Second order priority offsetting mechanisms that OEH may consider include:

- establishment of a conservation agreement with the Minister for the Environment under the NPW Act;
- establishment of a trust agreement with the Nature Conservation Trust under the *Nature Conservation Trust Act 2001*;
- establishment of a planning agreement by a planning authority under the *Environmental Planning and Assessment Act 1979*; or
- establishment of a property vegetation plan under the *Native Vegetation Act 2003*.

### **Recommendation**

- 3.1** The Kokoda offset site should be secured by an in-perpetuity conservation mechanism to the satisfaction of OEH.

## **4. Bimble Box – White Cypress Pine Woodland offset**

The proponent has proposed that 151 ha of Dwyer's Red Gum – Grey Box – Mugga Ironbark – Black Cypress Pine Forest should be used as an offset for the 13.7 ha Bimble Box – White Cypress Pine Woodland to be cleared, given that the offset vegetation community has a higher conservation value than the vegetation to be cleared. A review of the conservation status of these two communities in other vegetation databases has produced an inconclusive result regarding whether the offset community is actually of a higher conservation value.

When considering the threatened fauna assemblages that the two vegetation types support, the community to be cleared supports a greater number of threatened species compared to the offset community as identified within the Threatened Species Profile Database. In addition, differences exist between the threatened species that utilise the two vegetation communities.

Despite the uncertainty around the relative conservation value of the two vegetation types and the fauna assemblages they support, OEH is willing to accept the offset proposal given the quantum of offset proposed at the Kokoda offset site.

### **Recommendation**

No further action is required for the Bimble Box – White Cypress Pine Woodland offset.

## **5. Presence of Sloane's Froglet**

OEH notes the additional survey that was undertaken for the Sloane's Froglet in September 2013 and accepts the finding that either the froglet no longer occurs within the disturbance area or was not detected within suitable habitat during the targeted survey.

OEH suggests that if the froglet is detected in the future that our agency should be notified. Additionally, appropriate management, monitoring and reporting activities should be developed and included within the biodiversity management plan.

**Recommendation**

No further action is required for the Sloane's Froglet.

**6. Development of a biodiversity management plan**

The proponent's commitment to developing a biodiversity management plan is again noted and supported. The delineation of the Kokoda offset site into natural, potential and active regeneration zones requiring different management actions and restoration targets is also acknowledged and supported.

As stated within OEH's response to the publicly exhibited EA, it is vital that clear targets and outcomes for the restoration of the DNG at Kokoda are included within the BMP. OEH welcomes the opportunity to review and comment on the content of the BMP to ensure that environmental outcomes are maximised.

**Recommendation**

No further action for the BMP is required at this stage.