

Your reference:

SSD-5156

Our reference: Contact: DOC13/46164; FIL12/4055 Steve Lewer, 4908 6814

Mr Paul Freeman Senior Planner, Mining Projects Department of Planning and Infrastructure GPO Box 39 SYDNEY NSW 2001

2 8 OCT 2013

Dear Mr Freeman

RE: REVIEW OF ENVIRONMENTAL IMPACT STATEMENT FOR GLOUCESTER RESOURCES LTD ROCKY HILL COAL PROJECT, GLOUCESTER (SSD-5156)

I refer to your email dated 23 August 2013 requesting comments and any recommended conditions of consent for the exhibited Rocky Hill Coal Project. The Office of Environment and Heritage (OEH) understands the Environmental Impact Statement (EIS) was on public exhibition from 28 August 2013 to 28 October 2013.

OEH has undertaken a review of the document 'Environmental Impact Statement for Rocky Hill Coal Project – Gloucester Resources Ltd' (authored by R.W. Corkery & Co. Pty Limited, including its appendices, dated December 2012) and has provided detailed comments in **Attachment A**. OEH acknowledges that with respect to Aboriginal cultural heritage and biodiversity (including threatened species matters), the EIS generally addresses OEH's interests and concerns. Some minor issues are detailed below:

- further clarification on how the Squirrel Glider and Grey-crowned Babbler will be either conserved in situ (i.e. along and in the vicinity of McKinley's Lane) and/or how appropriate mitigation measures will be used to offset impacts on the local populations of these two threatened species
- with respect to the vegetation types recorded on the development site and proposed biodiversity
  offset area further clarification and explanation of Community 4: Giant Stinging Tree / Fig Rainforest
  Gullies is required. In particular justification of how this community fits 'Lower Hunter Valley Dry
  Rainforest in the Sydney Basin and NSW North Coast Bioregions' vulnerable ecological community
  and not the 'Lowland Rainforest in the NSW North Coast and Sydney Basin Bioregions' endangered
  ecological community
- further justification on underlying assumptions used in the BBAM and/or re-running of the BBAM credit calculator over both the development proposal and biodiversity offset areas (as described in detail in Attachment A)
- specific details on the proposed method of securing long-term conservation and management of the proposed offsets, notably whether or not OEH supports the use of a 'conservation agreement' and if not an alternative proposal
- incomplete evidence of the Aboriginal community consultation process. Additional evidence is required from the local Aboriginal community in support or otherwise of the proposed development as per recommended condition of approval.

In summary, OEH still has minor concerns with some sections of the EIS with respect to biodiversity and Aboriginal cultural heritage that should be resolved prior to approval. These issues are discussed further in the attachment. OEH has provided some advice with respect to recommended conditions of approval for some of these matters and will provide further advice once the above issues have been resolved.

If you require any further information regarding this matter please contact Steve Lewer, Regional Biodiversity Conservation Officer, on 4908 6814.

Yours sincerely

RICHARD BATH

Acting Regional Manager Hunter Central Coast Region

# ATTACHMENT A: OEH REVIEW OF ROCKY HILL COAL PROJECT EIS - OUTSTANDING ISSUES

## THREATENED SPECIES

Although in general, OEH is of the opinion that the 'Terrestrial Biodiversity Assessment' (authored by Ecotone Ecological Consultants Pty Ltd and dated April 2013, 'the ecology report') of the EIS is adequate, the following matters need attention before OEH can properly assess the proposal:

- further clarification on how the Squirrel Glider and Grey-crowned Babbler will be either conserved in situ (i.e. along and in the vicinity of McKinley's Lane) and/or how appropriate mitigation measures will be used to offset impacts on the local populations of these two threatened species
- with respect to the vegetation types recorded on the development site and proposed biodiversity
  offset area further clarification and explanation of Community 4: Giant Stinging Tree / Fig Rainforest
  Gullies is required. In particular justification of how this community fits 'Lower Hunter Valley Dry
  Rainforest in the Sydney Basin and NSW North Coast Bioregions' vulnerable ecological community
  and not the 'Lowland Rainforest in the NSW North Coast and Sydney Basin Bioregions' endangered
  ecological community
- further justification on underlying assumptions used in the BBAM and/or re-running of the BBAM credit calculator over both the development proposal and biodiversity offset areas (as described in detail below)
- specific details on the proposed method of securing long-term conservation and management of the proposed offsets, notably whether or not OEH supports the use of a 'conservation agreement' and if not an alternative proposal.

## Baseline flora and fauna surveys

As stated in previous correspondence (dated 14 January 2013), OEH was of the opinion that the majority of the flora and fauna survey components of the EIS appeared to be adequate, however, further clarification was requested as to how the stratification units were determined and how the survey design was applied which would help determine the adequacy of these surveys. Specifically, OEH requested that the proponent provide details on the sampling methods and survey effort per stratification unit, including size of each unit, timing of surveys (not just the survey, but each specific component), prevailing climatic conditions at time of survey; and notably how they meet the minimum requirements in OEH survey guidelines (DEC 2004).

With respect to adequacy of the flora surveys undertaken, Table 11 in Volume 3, Part 7: Terrestrial Biodiversity Assessment (the 'biodiversity report') of the EIS indicates the survey effort. OEH has reviewed this report and is of the opinion that the survey effort undertaken is consistent with our guidelines. Furthermore, the proponent has utilised the 'BioBanking Assessment Methodology' (BBAM) (DECC 2008) to assess both the development site and the proposed Biodiversity Offset Area. This assessment requires a minimum number of plots and/or transects to be undertaken to meet the methodology requirements. OEH confirms that the plots surveyed adequately represent OEH's survey requirements under the BBAM and are appropriately located within different vegetation types (including differing vegetation condition classes) on both the development site and proposed biodiversity offset area ((as schematically shown in Figure 8). Floristic surveying has been conducted during a variety of seasons (i.e. different months), and as such would have been undertaken at appropriate times suitable for determining the vegetation types present on the site.

Similarly, OEH requested that survey effort for fauna also be expressed in a similar tabular format. OEH confirms that Table 15 of the biodiversity report adequately details the survey effort per stratification unit (i.e. vegetation / habitat type), including any explanation where survey effort and/or methodologies differ from that described in the DEC (2004) guidelines. Furthermore, OEH verifies that the timing of surveys was appropriate to detect all likely species and / or guilds (as presented in Section 3.2.1), and that surveys were undertaken at appropriate climatic conditions.

As such OEH is that the flora and fauna survey components of the EIS area adequate, meet OEH's survey guidelines, and have provided further clarification of how the stratification units were determined with respect to survey design.

### Targeted surveys - flora

Previously OEH were unsure whether or not adequate targeted surveys were undertaken for potential flora species on site given that the EIS does not provide any specific details on such surveys. OEH specifically requested that the proponent provide details on location, survey methodology (e.g. observation technique, random meander, parallel belt transects etc...), timing, seasonal / climatic conditions, duration / effort and habitats searched for each of the potential flora species targeted (as per Appendix 4) as per OEH guidelines (DEC 2004). Table 12 of the biodiversity report provides these details. In general OEH is of the opinion that this table indicates that adequate targeted surveying has been undertaken for the majority of the potential threatened flora, and for a number of species surveys have been undertaken at multiple times to cover various growth stages (e.g. flowering and fruiting). OEH notes that the biodiversity report does not provide a schematic representation of the areas targeted for threatened flora, notably the random meanders. However, given that the majority of the intact vegetation communities / habitat on the development proposal is represented by linear remnants, associated with drainage lines (e.g. rainforest areas along riparian areas) and roadsides, the descriptive content under 'Habitat / Area(s) Targeted' in Table 12 provides enough insight to determine the locality and effort of such surveys / random meanders.

## Threatened species assessment

OEH has completed a review of the biodiversity and threatened species sections (including the 'assessment of significance' components) of the EIS, namely Volume 3, Part 7: Terrestrial Biodiversity Assessment (the 'biodiversity report') as authored by Ecotone Ecological Consultants Pty Ltd (February 2013), and generally concurs with their conclusions and outcomes of the assessment utilising the 'BioBanking Assessment Methodology' (BBAM) (DECC 2008). As a result of this assessment the proponent is offering essentially a 'like for like' biodiversity conservation offset based on the provision of similar (i.e. vegetation types) and appropriate number of 'ecosystem' credits. In general, OEH is of the opinion that proposed biodiversity offset area will likely provide commensurate or better compensatory habitat compared to that occurring on the proposal, given that the majority of the above listed species are highly mobile were either recorded as 'flying over' and/or utilising the subject site for foraging. However, two threatened species recorded on the site have potential breeding and/or roosting habitat to which OEH is concerned the proposal will have a potential significant impact on local populations:

• Squirrel Glider – the biodiversity report states that the proposal would removal up to 15.8 ha of foraging, sheltering and breeding habitat for this species. This species was specifically captured in Vegetation Community 2 (Ironbark / Grey Gum / Spotted Gum / White Mahogany open forest / woodland) along the northern section of McKinleys Lane. This population may well be currently isolated from other potential populations to the north-east of this area. Although roadside vegetation along parts of the northern half of McKinleys Lane is proposed for retention, indirect impacts may have an adverse impact. This could change roosting and foraging behaviour, or displacement in the vicinity of new infrastructure (including loss of tenuous connective links). In the absence of existing knowledge on the extent and dynamics of the potentially larger local population (if it exists), it is unknown whether or not the proposal could cause the local extinction of a small / sub-population, which is estimated to comprise of one or two family groups. OEH is concerned this will represent a significant impact on this species at a local level. Furthermore, given that specific fauna trapping does not appear to have been conducted in the proposed biodiversity offset area, it is unknown whether or not the species will be specifically offset.

Although OEH acknowledges that potential habitat (based on vegetation type) may occur in the biodiversity offset area, and that this species utilises linear remnants (Holland et al 2007), however OEH requests further clarification and/or effort regarding the retention of habitat and specific habitat features along McKinleys Lane to ensure the long-term survival of this sub-population; and/or

additional investigations (i.e. population study) to show that the loss of 1-2 family groups will not have a significant impact on the overall local population (if present). Although part of this area will be retained, Holland *et al* (2007) concluded in their studies of habitat utilisation by Squirrel Gliders in linear roadside remnants in Victoria that the retention of large hollow-bearing trees were essential for maintaining den sites and ensuring the long-term survival of the species. As such OEH expects these features to be retained along with the foraging habitat along McKinleys Lane. However, OEH is unsure whether or not these features will be retained or impacted upon.

OEH acknowledges that one of the conclusions of the biodiversity report is ongoing monitoring of the population, however, this will not provide an indication of the current population status nor whether or not the proposal will lead to its overall decline, particularly if it is isolated from other populations. This should be done prior to any approvals so that there is a complete understanding of the proposal's impact on the local Squirrel Glider population. OEH concurs that mitigation measures, such as the erection of glider poles will improve connectivity to potential habitat to north, but translocation of the existing family groups should be considered (as a last resort), particularly if it is likely that they will be adversely impacted upon by indirect impacts, providing an appropriate assessment of the habitat is undertaken to ensure no adverse impacts on existing usage / territories.

<u>Grey-crowned Babbler</u> – similarly this species was recorded in Vegetation Community 2 (Ironbark / Grey Gum / Spotted Gum / White Mahogany open forest / woodland) along the northern section of McKinleys Lane. The proposal will also remove 15.8 ha of foraging, roosting and breeding habitat for this species.

The biodiversity report concludes that these records likely represent individuals from the two family groups known to occur in the southern half of the Gloucester township. OEH acknowledges that known habitat on site will be retained and that the recorded resilience of the species likely supports the long-term survival, however it can not be guaranteed that the proposal will not adversely impact this family group. The biodiversity report concludes that the proposal could have an adverse impact on the local group. Further investigations into the dynamics of the local population and whether or not the biodiversity offset area offers potential habitat or known records, would alleviate OEH's concerns.

With respect to the vegetation types recorded on the development site and proposed biodiversity offset area (as specified in Section 3.1.3.1), further clarification and explanation of Community 4: Giant Stinging Tree / Fig Rainforest Gullies is required. In particular justification of how this community fits 'Lower Hunter Valley Dry Rainforest in the Sydney Basin and NSW North Coast Bioregions' vulnerable ecological community (VEC) and not the 'Lowland Rainforest in the NSW North Coast and Sydney Basin Bioregions' endangered ecological community (EEC). OEH is of the opinion that Community 4 equally if not better fits the Lowland Rainforest EEC, given that (i) more of the dominant species listed in the EIS are considered 'characteristic / diagnostic species' of this EEC (as per Paragraph 2 of the Final Determination), (ii) it has a closed structure, with a high diversity of rainforest trees, shrubs and vines consistent to Floyd (1990) Dendrocnide excelsa - Ficus spp. Alliance, which is considered to be a Lowland Rainforest type, (iii) it is located within the Stroud Valley within the Manning Valley which is consistent with the geographical distribution of the EEC in comparison to the VEC which appears to be restricted more to the Hunter Valley (i.e. the VEC Final Determination does not list Gloucester LGA as part of its geographic distribution), (iv) it occurs on the appropriate landscape features and substrate, that being steep drainage lines on footslopes / foothills on basalt, and (v) this EEC includes more structurally complex forms of dry rainforest, and as such better matches that described in the report.

OEH has also reviewed the threatened species 'assessment of significance' undertaken in Section 4.2.3 of the biodiversity report, and generally supports the conclusions, albeit the comments above.

OEH acknowledges that the impact assessment on threatened species, ecological communities and their habitat on both the development site and proposed biodiversity offset area has utilised the 'BioBanking Assessment Methodology' (BBAM) (DECC 2008) as defined under Section 127B of the *Threatened* 

Species Conservation Act 1995 (TSC Act) and the 'BioBanking Assessment Methodology and Credit Calculator Operational Manual' (OEH 2011a). OEH supports this approach as this is consistent with how threatened species impacts can be formally assessed under other parts of the *Environmental Planning and Assessment Act* 1979.

OEH notes that the biodiversity report indicates that the development footprint will result in the clearing of 41.1 hectares of native vegetation / habitat (as per Section 7 – Conclusions), with an additional 473.2 ha of cleared open pasture which is dominated by exotic species with scattered paddock trees (Community 1), and 0.4 ha of planted pine plantation. The latter two types are not considered habitat for threatened species and were not included in the BBAM. OEH notes that the area to be cleared stated in Table 19 (in Section 4.2.2) differs from Section 7, indicating that 51.8 ha will be disturbed. However, Section 4.1 clearly indicates that Community 2 (dry sclerophyll forest) was divided into two categories in the BBAM: moderate to good (15.8 ha) and low (30.6 ha), with the latter further being adjusted to effective clearing areas. Under the BBAM low condition vegetation can be adjusted into 'effective clearing area' based on a modified canopy cover via clustering of paddock trees (as explained in Section 5.2 of the biodiversity report). OEH confirms that the application of this process is permissible under BBAM and as such the adjusted area of clearing for Community 2 is 35.7 ha, which coupled with Community 3 (riparian forest) at 1.1 ha and Community 4 (rainforest) at 4.3 ha equates to 41.1 ha.

OEH understands that a BBAM has been undertaken which indicates development would require the retirement of 1564 'ecosystem' credits. A proposed biodiversity offset area is located to the east of the proposed development on the footslopes of 'Rocky Hill' and it generates 1700 'ecosystem credits'. Section 5.5 and Table 26 provides details of the biodiversity credits for both the development and offset areas, indicating that that the proponent will match ecosystem credits on a 'like for like' basis, with a small number of surplus credits.

To assess whether or not the BBAM has been applied correctly OEH required the proponent to submit the relevant credit calculator files and documentation as outlined in previous correspondence. OEH confirms that the proponent has submitted the relevant calculator files via the OEH BioBanking portal.

# Use of BioBanking Methodology for Development Site

The biodiversity report indicates that the BBAM has assessed the development footprint to determine the quantum and type of offsets required to compensate for the loss of native vegetation (including EEC and threatened species) on the proposed development site. Section 5 and Appendix 6 (BBAM methods and underlying assumptions) provides details on how the BBAM was applied to both the development site and the biodiversity offset area. OEH notes that Table 25 of the report provides a breakdown of the biometric vegetation types (BVT) that will be impacted upon: (i) Spotted Gum Ironbark forest dry open forest of the lower foothills of the Barrington Tops, North Coast (HU630), (ii) River Oak riparian woodland of the North Coast and northern Sydney Basin (HU598), and (iii) Fig - Whalebone Tree - Stinging Tree dry rainforest of the southern North Coast (HU541); with the remaining vegetation to be impacted upon considered to be disturbed / cleared vegetation that does not represent threatened species habitats. One of these BVT's represents an EEC - that being the rainforest type, which OEH is of the opinion that it best matches 'Lowland Rainforest in the NSW North Coast and Sydney Basin Bioregions' EEC, not the dry rainforest VEC (as explained above). Although an EEC will be impacted upon which 'red flags' the proposal under BBAM, this scenario does not apply to State Significant Projects. In addition this community will be offset on a 'like for like' basis at the appropriate credit ratio on the proposed biodiversity offset area, with a further 127 ecosystem credits of this type to conserved. As such OEH supports the loss of a small area of fragmented EEC given that a much large area will be conserved in perpetuity on the offset area. In general, this biodiversity offset area will conserve and manage similar vegetation types and EEC on a 'like for like' basis thus meeting an 'improve or maintain' outcome.

OEH has reviewed the information submitted, and that outlined in the biodiversity report, and is generally satisfied that the developments impacts have been appropriately assessed under BBAM, though notes a number of operational issues described below that may require the re-running of the credit tool. The current

BBAM has calculated that the proposal will need to retire 1564 ecosystem credits and no species credits. BBAM operational issues that need to be addressed before OEH supports the proposal:

- With respect to the biometric vegetation types (BVT) recorded on the development site, requests further justification why the rainforest type (Community 4) best fits 'Fig Whalebone Tree Stinging Tree dry rainforest of the southern North Coast (HU541)' in comparison to 'Giant Stinging Tree Fig dry subtropical rainforest of the North Coast and Brigalow Belt South (HU548)' which appears to be a better fit based on the species descriptions in Section 3.1.3.1. This is a subtropical rainforest type, known to occur in dry gullies and lower slopes, to which OEH is of the opinion the BVT it should be annotated with the 'Lowland Rainforest in the NSW North Coast and Sydney Basin Bioregions' EEC (a subtropical rainforest) rather than 'Lower Hunter Valley Dry Rainforest in the Sydney Basin and NSW North Coast Bioregions' VEC (as explained above). OEH requires further justification of HU541 and the retention of the VEC status, or re-running the BBAM credit calculator.
- The mid-storey / groundcover condition has been entered at 'PFC mid-storey/groundcover at >25% of the lower BM', however OEH is of the opinion for assessment circle SE and part NE the cover in the 1000 ha circles would incorporate the undisturbed vegetation associated with the ranges to the east of the proposal and as such would likely be in benchmark. Further justification why at least SE is not benchmark is required or re-run credit calculator with recommended change.
- For assessment circle NE mid-storey / groundcover condition has been entered at 'PFC mid-storey/groundcover at <25% of the lower BM' for after the development, this appears to be an error and inconsistent with the underlying assumptions given in Appendix 6. Correct and re-run credit calculator. This is likely why the landscape score for this circle is extremely low 1.00 in comparison to the most disturbed assessment circle W which has a score of 12.</li>
- Adjacent remnant for assessment circle W is stated as >500 ha (i.e. 501), OEH is of the opinion this
  is incorrect as it does not directly adjoin the larger remnants of vegetation to the east as
  assessment circles NE and SE. Although some connectivity occurs along the riparian areas, the
  vegetation associated with these would be best described as fragmented. OEH recommends reassessment and re-running the credit calculator, unless adequate justification can be provided.

Based on OEH's technical review of the submitted credit calculator files, OEH would expect in addressing the above issues, the BBAM tool will need to be re-run and as such it is likely that this will result in a change to the number of biodiversity credits that will be required to be retired. Although OEH acknowledges that these issues are likely of a minor operational manner, we will require the proponent to address these prior to OEH lending its full support to the proposal.

# Provision of offsets / compensatory habitat - BBAM

OEH has completed a review of the proposed offsets and mitigation measures in Section 5 and the recommendations in Section 6 of the biodiversity report (Volume 3, Part 7 of the EIS), and generally supports the proposed biodiversity area that is located to east of the proposal (as shown on Figure 7). A BBAM assessment has been undertaken which indicates the development would require the retirement of 1564 'ecosystem' credits. The BBAM assessment of the generates 1700 'ecosystem credits'. As such this offset will conserve and manage similar vegetation types (including EEC) that will be lost on the proposed development site, likely achieving an 'improve or maintain' outcome. OEH supports this approach providing the application of BBAM credit calculator and offset policy is correct, and the appropriate quantum and type of offsets is conserved and managed in perpetuity.

# Use of BioBanking Methodology for the proposed Biodiversity Offsets Area

OEH has reviewed the information submitted, and that outlined in the biodiversity report, and is generally satisfied that the biodiversity offset area has been appropriately assessed under BBAM, though notes a number of operational issues described below that may require the re-running of the credit tool. The current BBAM has calculated that the offset area will generate 1700 ecosystem credits and no species credits. BBAM operational issues that need to be addressed before OEH supports the proposal:

- As with the 'development proposal' BBAM OEH requires further justification of HU541 and the retention of the VEC status, or re-running the BBAM credit calculator (as specified above).
- The overstorey condition and mid-storey / groundcover condition has been entered at 'PFC >25% of lower BM' and 'PFC mid-storey/groundcover at >25% of the lower BM' respectively for before Biobank. OEH is of the opinion for both assessment circles (North and South) the cover in the 1000 ha circles would incorporate the undisturbed vegetation associated with the ranges and as such would likely be in benchmark. OEH notes that for the southern assessment circle the overstorey condition as been entered at benchmark, why has this not been similarly applied to the northern circle?

The small areas of disturbed vegetation that will undergo revegetation do not justify a drop on the mid-storey / groundcover. In general the bulk of the native vegetation cover within the two assessment circles are likely minimally disturbed (based on aerial photograph / satellite interpretation). Further justification and evidence would need to be provided to indicate that this vegetation is in low condition to justify these drops in cover class. OEH recommends re-running the credit calculator at benchmark.

 Further justification is required on the 'additional management' actions proposed for Community 2 (Vegetation Management Zones 4 and 8) as specified in Appendix 6 to justify the increases in the management score / site value score. Specifically OEH requests an expansion on the detail for the management actions proposed, namely a description of what is involved in 'strategic planting', 'site preparation and replanting of local provenance species', 'relocation of hollow logs

Based on OEH's technical review of the submitted credit calculator files, OEH would expect in addressing the above issues, the BBAM tool will need to be re-run and as such it is likely that this will result in a change to the number of biodiversity credits that will be generated. Although OEH acknowledges that these issues are likely of a minor operational manner, we will require the proponent to address these prior to OEH lending its full support to the proposal.

# Conservation in perpetuity of offset lands and management plan

OEH understands that the proponent has proposed that the biodiversity offset area be conserved and managed through a conservation agreement issued under the *National Parks and Wildlife Act 1974*. The Draft Statement of Commitments in the EIS states within 12 months of approval the proponent will finalise a conservation agreement for the site.

OEH identified in previous advice on this project that the use of conservation agreements was one of a number of acceptable offsetting mechanisms. It should be noted that OEH's position on the use of conservation agreements for State Significant Projects is currently under review and this approach may no longer be an acceptable conservation outcome for this project. The Conservation Partners Program section of OEH administer the use of conservation agreements and have recently advised that for commercial developments, the preferred method of securing an offset is under the Biobanking provisions of the *Threatened Species Conservation Act 1995* (i.e. a registered BioBanking Agreement site). This is consistent with the recently revised NSW offset principles for major projects (state significant development and state significant infrastructure - <a href="https://www.environment.nsw.gov.au/biocertification/offsets.htm">www.environment.nsw.gov.au/biocertification/offsets.htm</a>), in particular Offset Principle 5 which states 'for terrestrial offsets, a BioBanking Agreement or addition to the NSW national parks system are the preferred mechanisms for securing an offset site'. OEH recommends that the proponent either consider the use of a BioBanking Agreement or contact OEH's Conservation Partners Program group to determine whether or not the use of a conservation agreement for the proposed biodiversity offset area would be supported.

If a BioBanking Agreement is entered into then a management plan will be part of that process that addresses standard management actions as outlined in Appendix 6. Similarly if OEH's Conservation Partnerships Program group agrees to the biodiversity offset area being secured under a conservation agreement (under the NPW Act), then a management plan will also be part of this process. Under this

scenario a management document will need to show that the management costs required to meet the 'site value' score gain assigned to each vegetation types (including additional management actions for rehabilitation) as entered in the BBAM credit calculator area adequately accounted for and appropriately costed. If neither of these options are utilised then a stand alone management plan needs to be produced clearly documenting how the offset area(s), any retained vegetated areas or habitat features and proposed habitat management within the development footprint (e.g. buffer zones, habitat trees and nest boxes) will be managed and implemented with respect to long-term conservation and viability, including clear details on how they will be funded. The plan should cover, but not be limited to, the issues outlined in our previous correspondence.

#### References

DEC (2004) Threatened Biodiversity Survey and Assessment: Guidelines for Developments and Activities. Working Draft. November 2004. Department of Environment and Conservation (NSW). This document is available at: <a href="https://www.environment.nsw.gov.au/resources/nature/TBSAGuidelinesDraft.pdf">www.environment.nsw.gov.au/resources/nature/TBSAGuidelinesDraft.pdf</a>.

DECC (2008) BioBanking Assessment Methodology. Department of Environment and Climate Change NSW.

Floyd A (1990) Australian rainforests in New South Wales. Volume 1. Surrey Beatty and Sons: Sydney.

Holland, G.J., Bennett, A.F. and van der Ree, R. (2007) Time-budget and feeding behaviour of the squirrel glider (*Petaurus norfolcensis*) in remnant linear habitat. *Wildlife Research*, 34: 288-295.

OEH (2011a) BioBanking Assessment Methodology and Credit Calculator Operational Manual. Office of Environment and Heritage (NSW), Goulburn Street, Sydney. <a href="https://www.environment.nsw.gov.au/biobanking/calculator.htm">www.environment.nsw.gov.au/biobanking/calculator.htm</a>

OEH (2011b) NSW OEH interim policy on assessing and offsetting biodiversity impacts of Part 3A, State significant development (SSD) and State significant infrastructure (SSI) projects. NSW Office of Environment and Heritage, Sydney, June 2011.

### ABORIGINAL CULTURAL HERITAGE ASSESSMENT

A review of the documentation, including Appendix 11 of the Draft EIS (dated August 2013) prepared for the proposed Rocky Hill Mine Project was undertaken by OEH to assess the adequacy of the Aboriginal cultural heritage assessment. OEH considers that the EIS and Aboriginal cultural assessment are largely consistent with the requirements of OEH. OEH notes that the Consultation sections of the Draft EIS do not contain any evidence of correspondence received by the proponent from Aboriginal stakeholders or comments on the draft archaeological assessment.

OEH recommends that any such documentation be included in the final EIS.

### Management of Aboriginal cultural heritage values

OEH provides below recommended conditions of approval to address the management of the Aboriginal cultural heritage values of the project area.

### Conclusion

OEH considers that the Indigenous Archaeological Report (Appendix 11) largely satisfies all requirements for an Aboriginal cultural assessment.

It is recommended that the following conditions of approval for Aboriginal cultural heritage are included in any approval conditions for the project.

### RECOMMENDED CONDITIONS OF APPROVAL FOR ABORIGINAL CULTURAL HERITAGE

 The proponent must consult with and involve all the registered Aboriginal parties for the project, in the ongoing management of the Aboriginal cultural heritage values. Evidence of this consultation must be collated and provided to the consent authority upon request.

- 2. The proponent must prepare an Aboriginal Heritage Management Plan (AHMP) to detail procedures for managing the Aboriginal cultural heritage values associated with the project area. The AHMP is to be implemented in consultation with the registered Aboriginal parties. The plan must also detail the involvement and responsibilities of the Aboriginal stakeholders in the implementation of all cultural heritage management actions; details of the responsibilities of all other stakeholders; details of all mitigation and management strategies (including monitoring program, further investigations, etc); procedures for the identification and management of previously unrecorded sites (including human remains); details of an appropriate keeping place agreement with local Aboriginal community representatives for any Aboriginal objects salvaged through the development process; details of the Cultural awareness program for all contractors and personnel associated with construction activities; and compliance procedures in the unlikely event that non-compliance with the AHMP is identified. This process must be undertaken prior to commencing any ground disturbance or development works subject to the development.
- 3. All Aboriginal sites impacted by the project must have an Aboriginal Site Impact Recording (ASIR) form completed and be submitted to the AHIMS Registrar within 3 months of being impacted.
- 4. If human remains are located in the event that surface disturbance occurs, all works must halt in the immediate area to prevent any further impacts to the remains. The NSW Police are to be contacted immediately. No action is to be undertaken until the NSW Police provide written notification to the proponent. If the skeletal remains are identified as Aboriginal, the proponent must contact the OEH's Enviroline on 131 555 and representatives of the local Aboriginal community. No works are to continue until the OEH provides written notification to the proponent.
- 5. A Cultural Awareness Program must be developed for the induction of all personnel and contractors involved in the construction activities on site. Records are to be kept of which staff/contractors were inducted and when for the duration of the project. The program should be developed and implemented in collaboration with the registered Aboriginal parties.