



Office of  
Environment  
& Heritage

Your reference  
Our reference:  
Contact:

MP 11\_0062  
DOC12/47838; FIL12/4609  
Robert Gibson, 4908 6851

Mr David Mooney  
Senior Planner, Mining Projects  
Department of Planning & Infrastructure  
GPO Box 39  
SYDNEY NSW 2001

Dear Mr Mooney

**RE: DRAYTON SOUTH COAL PROJECT (MP 11\_0062)**

I refer to your email of 7 November 2012 seeking comments from the Office of Environment and Heritage (OEH) on the proposed Drayton South Coal Project. OEH understands this is a Major Project under Part 3A provisions of the *Environmental Planning and Assessment Act 1979* (EP&A Act).

OEH received a printed copy of the 'Drayton South Coal Project Environmental Assessment' (the EA) on 15 November 2012 and has reviewed this document for potential impacts on Aboriginal cultural heritage, threatened biodiversity. As a result of this review, OEH has found that the Aboriginal cultural heritage aspects of the project have been appropriately dealt with. However a number of issues with the proposed biodiversity offset have been identified. A more comprehensive assessment of this project, in addition to some recommended conditions of approval are provided in **Attachment 1**.

If you require any further information regarding this matter please contact Robert Gibson, Regional Biodiversity Conservation Officer, on 4908 6851.

Yours sincerely

21 DEC 2012

**RICHARD BATH**  
Head – Hunter Planning Unit  
Regional Operations

Enclosure: Attachment 1

**ATTACHMENT 1: REVIEW OF THE DOCUMENT TITLED 'DRAYTON SOUTH COAL PROJECT: ENVIRONMENTAL ASSESSMENT: NOVEMBER 2012' (MP 11\_0062) WITH RECOMMENDED CONDITIONS OF APPROVAL FOR ABORIGINAL CULTURAL HERITAGE AND THREATENED BIODIVERSITY ISSUES**

OEH has reviewed the Environmental Assessment (EA) for the proposed modification to the Drayton South Coal Project with regards to Aboriginal cultural heritage and threatened biodiversity issues and provides the following comments and recommended conditions of approval.

**ABORIGINAL CULTURAL HERITAGE**

OEH has reviewed the Aboriginal cultural heritage aspects of this proposed development; particularly Sections 6.4, 8.9 and Appendix K of the EA. This assessment was conducted to consider potential impacts of the project on Aboriginal cultural heritage, and was done in accordance with OEH's Aboriginal cultural heritage assessment guidelines and the requirements of Part 6 of the *National Parks and Wildlife Act 1974* (NPW Act). Further details with recommended conditions of approval are provided below:

**Aboriginal cultural heritage assessment**

OEH acknowledges that the Aboriginal cultural heritage assessment has been undertaken in accordance with OEH's Aboriginal cultural heritage assessment requirements. The results of the Aboriginal cultural heritage assessment for the project area are also acknowledged.

OEH notes that the proponent is committed to updating the existing Aboriginal Cultural Heritage Management Plan for the project area to incorporate the additional strategies developed to manage the likely impact on Aboriginal cultural heritage values associated with this project.

**Legislative requirements**

The importance of protecting Aboriginal cultural heritage is reflected in the provisions of the NPW Act. Please note that the requirements of the NPW Act have been amended. It is strongly recommended that the proponent familiarises itself with the new requirements during the development and any subsequent assessment and/or development processes.

**Conclusion**

OEH has no additional concerns with the Aboriginal cultural heritage assessment for the major project development application and recommends that the following conditions of approval for Aboriginal cultural heritage are reflected in any approval conditions for the project.

**RECOMMENDED CONDITIONS OF APPROVAL FOR ABORIGINAL CULTURAL HERITAGE**

1. The proponent must consult with and involve all the registered local 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 update the existing Aboriginal Cultural Heritage Management Plan for the project area in consultation with the registered Aboriginal parties to detail procedures for managing all Aboriginal cultural heritage values associated with the project area. This process must be undertaken prior to commencing any ground disturbance or development works subject to the development.
3. In the event that ground disturbance identifies a new Aboriginal object/s within the project area, all works must halt in the immediate area to prevent any further impacts to the object(s). A suitably qualified cultural heritage specialist and representatives of the local Aboriginal community must be contacted to determine the nature, extent and significance of the finds. The site is to be registered in the Aboriginal Heritage Information Management System (AHIMS) (managed by OEH) and the



management outcome for the site included in the information provided to AHIMS. The proponent must consult with representatives of the local Aboriginal community, and the cultural specialist to develop an appropriate management strategy for all objects/sites which complies with the requirements of the NPW Act.

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 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 OEHL's Environment Line on 131 555 and representatives of the local Aboriginal community. No works are to continue until OEHL provides written notification to the proponent.
5. All Aboriginal sites impacted by the project must have an Aboriginal Site Impact Recording form completed and be submitted to OEHL's AHIMS Register within three months of being impacted.
6. An Aboriginal Cultural Education Induction 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.

## THREATENED BIODIVERSITY

OEHL has conducted an assessment of the proposed biodiversity offset for the impact of the proposed development and has found that all of the extensive rehabilitation planned is unlikely to contribute to the biodiversity offset package; that the impact on *Diuris tricolor* does not appear to have been adequately offset; and that there is uncertainty over the application of White Box – Yellow Box Blakely's Red Gum Woodland ('WBYBBRG Woodland') endangered ecological community (EEC) to some vegetation types. These matters are discussed below in addition to some comments on proposed monitoring of the overall offset proposal and coordination of rehabilitation along Saddlers Creek with Mount Owen.

### Biodiversity offsets

According to the EA, the proposed Drayton South Coal Mine, and associated infrastructure would clear a total of about 1,928 hectares (ha) over a period of 27 years that includes:

- about 460 ha of EEC and Vulnerable Ecological Community (VEC) vegetation - including about 181 ha of WBYBBRG Woodland and derived grassland
- a number of threatened plants (2 clumps of Weeping Myall (*Acacia pendula*) and 30 plants of Pine Donkey orchid (*Diuris tricolor*))
- one plant of Tiger Orchid (*Cymbidium canaliculatum*) which is part of the Endangered Population of *Cymbidium canaliculatum* in the Hunter Catchment
- known suitable habitat for a range of threatened flora and fauna species.

The proposed biodiversity offset strategy, developed in accordance with 'Principles for the use of biodiversity offsets in NSW' (OEHL, 2011) comprises 3,653 ha of vegetation that includes the following:

- an on-site offset of 85 ha of remnant woody vegetation that includes Central Hunter Box – Ironbark Woodland EEC; rehabilitation of Central Hunter Box Woodland EEC and Narrabeen Footslopes Slaty Box Woodland VEC on the Drayton South disturbance footprint, and restoration of 86 ha of vegetation along Saddler Creek
- an offsite offset of 2,079 ha that is about 28 kilometres north-north-west of Murrurundi, and is in the Namoi River catchment. This offsite offset contains about 1,672 ha of reported White Box – Yellow Box – Blakely's Red Gum woodland EEC, including 898 ha in its derived grassland form. Six threatened fauna species have been detected so far on this property.



OEH notes that most of the on-site component of the Biodiversity Offset package comprises restoration and rehabilitation, which appears consistent with the argument presented in the EA that most of the ecological impacts of the mine are reversible if appropriate effort is put into subsequent restoration and rehabilitation (e.g. Appendix J, p. 7.35). Theoretically this may be true, however, OEH has limited scope for the acceptance of revegetation as a Biodiversity Offset in the framework of the 'Principles for the use of biodiversity offsets in NSW'. This stems from three issues: (i) that there is no guarantee of success of recreating natural vegetation communities and full ecosystem function (Principles 5, 6, 9 & 10); (ii) that there will be a time lag in planted vegetation being able to provide food and shelter resources for threatened species (Principle 7); and (iii) that a proportion of this planned revegetation may be an existing requirement of other obligations, such as under the *Mining Act 1992*, and thus may not be supplementary with other requirements (Principle 12).

### Securing biodiversity offsets

Section 9.5 of Appendix J of the EA discusses how the offset lands will be permanently protected and lists five mechanisms that may be used to secure these offsets. OEH no longer supports rezoning of the land or the application of conservation covenants under Section 88 of the *Conveyancing Act 1919* as means of securing offsets. This is because both of these options can be readily removed, and therefore they do not provide permanent protection of such land for conservation. OEH recommends that the conservation measures listed in Section 126L of the *Threatened Species Conservation Act 1995* (TSC Act) are considered as ways as securing the offsets for this proposal; noting that not all of these options will be applicable for a Major Project.

### Rehabilitation as part of the offset package

OEH notes that the proponent wishes to revegetate the post-mined landscape of the Drayton South Mine with a range of trees, shrubs and forbs propagated from indigenous species (EA, Appendix J, section 8.2.2) to ultimately create about 777 ha of Central Hunter Box – Ironbark Woodland EEC and about 555 ha of Narrabeen Foothills Slaty Box Woodland (EA, Appendix J, section 9.2.3); these are EEC and Vulnerable ecological communities (VECs). The proponent also intends to restore riparian vegetation along the full length of Saddlers Creek to the west of the proposed mine (EA, Appendix J, section 9.2.1), which includes retaining and improving 24 ha of remnant woodland and restoring about 62 ha of Hunter Floodplain Red Gum Woodland. OEH commends these plans, but takes this opportunity to state that available information on projects to date to recreate EEC or VEC vegetation have been largely unsuccessful. In addition, and as recognised in the EA (Appendix J, section 9.2.4), such plantings require time before trees and shrubs reach flowering size, or for trees to develop hollows, and thus there is a lag time of years or decades before the area will be able to provide food and shelter resources for a range of local threatened fauna species (particularly microbats and declining woodland birds).

### BioBanking assessment of the proposed development and offsets

OEH acknowledges that the proponent has not used BioBanking to formulate its offsetting package and thus has not conducted an assessment of this project with the BioBanking credit calculator. BioBanking offers a way of quantifying biodiversity values using a standard approach and so has run data from the EA through the credit calculator (version 2.0). Where required data was not available from the EA assumptions were made (such as all wooded vegetation communities being at benchmark condition). The results of this assessment are summarized in Table 1.

**Table 1.** Summary of results of a BioBanking assessment of the proposed development and offsets

	Development Site	Onsite Offset	Offsite Offset	Total Offset
<b>Ecosystem Credits</b>	32150	804	11434	12238
<b>Species Credits</b>	515	0	60	60



This assessment revealed that the proposed offsets provide about 40 per cent of the required number of the ecosystem credits and about 12 per cent of the species credits for the project, and further that none of the vegetation communities in the offsite offset were identified as appropriate vegetation communities to offset the vegetation communities to be cleared.

#### Interim offsetting policy assessment of the proposed development and offsets

OEH has also reviewed the proposal in light of the 'NSW OEH interim policy on assessing and offsetting biodiversity impacts of Part 3A, State significant development (SSD) and State significant infrastructure (SSI) projects' (OEH 2011). OEH acknowledges that the proponents have not chosen to use this policy in the preparation of their offset package, however, OEH is using this policy framework as a guide to assessing the offset proposal. This interim policy is also based on the BioBanking Assessment Methodology and has a three-tiered approach in which Tier 1 ('Improve or maintain') is the full application of BioBanking. OEH notes that the remnant vegetation in the on-site offset does not generate as many credits as the same vegetation types in the development site, and that the vegetation communities in the offsite offset do not match the offset options by way of vegetation type and thus does not enable the offsetting requirements to be fully met in the context of the BioBanking assessment methodology; therefore the project as described does not meet 'Tier 2' (No net loss) of the Interim Policy.

The 'Tier 3' (mitigated net loss) outcome in the policy allows for clearing of 'Red Flag' vegetation, not necessarily retiring all credits generated from the development but providing at least twice the amount of remnant woody vegetation in the offset package than that which will be cleared. This project, as described in the EA is consistent with the first two criteria and by the inclusion of about 1,290 ha of woody remnant vegetation in the offset package, thereby providing about 3.3 times the amount of woody vegetation to be cleared also meets the third criteria for this interim, policy. Therefore, based on a cursory assessment, it appears that this project could meet the 'Tier 3' outcome of the interim policy.

#### **White Box – Yellow Box – Blakeley's Red Gum Woodland assessment**

According to the EA many of the vegetation communities in the development site and the offsite-offset are considered to meet the definition of 'White Box - Yellow Box - Blakeley's Red Gum woodland' (WBYBBRG Woodland) EEC as per Schedule 1 of the TSC Act (e.g. Tables 5.1 and 10.1 in Appendix J of the EA). Note that for this assessment only state-listed threatened entities are being considered. The final determination of this EEC includes the derived grassland version of the original grassy woodland where the characteristic tree species are now missing. However, the EA does not clearly explain how vegetation communities were determined to be WBYBBRG Woodland primarily because it does not include an assessment of each nominated vegetation community against each section of the NSW Scientific Committee Determination. In addition, Figure 4.4 in Appendix J of the EA suggests that all 22 vegetation quadrats conducted in the offsite offset targeted woody vegetation rather than derived grasslands. Therefore, it is not clear what data has been collected to support the allocation of derived grasslands in the offsite offset as WBYBBRG Woodland. The EA does not provide data (such as dominant groundcover species, slope, aspect soil and underlying geology) that would allow the reader of the EA to assess the different vegetation communities identified against the criteria for WBYBBRG Woodland EEC. Whilst OEH acknowledges that this EEC is likely to be present on some of the offsite offset, the widespread recognition of this EEC on the offsite offset appears to be unsubstantiated. This is particularly so where the vegetation is derived grassland. Two examples are described below:

- River Oak riparian woodland

As described in Section 10.2.6 of Appendix J of the EA the 'River Oak riparian woodland' is an open creek or forest that occurs along creeks on the offsite offset property. A cursory check of available drainage maps indicates that this vegetation community occurs along Class 3 drainage lines (as per the Strahler stream classification system (Strahler 1952)). The vegetation type, as described in the EA is a riparian community whereas White Box – Yellow Box – Blakeley's Red Gum Woodland occurs on '...undulating midslopes and lower slopes' (Catchment Management Authority, undated) rather than from riparian communities. In addition, most of the species described in this vegetation community are



not listed as characteristic species for the EEC. Therefore, based on the position in landscape of this vegetation community, and its composition it does not appear to meet the definition of WBYBBRG Woodland EEC.

- Low Diversity Derived Grassland

Section 10.2.9 of Appendix J of the EA describes the 'Low Diversity Derived Grassland' on the offsite offset. The final section of the description suggests that "...some areas are likely to conform to the TSC Act listing for WBYBBRG Woodland." Whilst trees of Yellow Box and White Box – Grey Box intergrades have been found in this vegetation community (which are characteristic trees of this EEC) the EA provides little additional data to support any of this vegetation community matching the Scientific Committee determination for WBYBBRG Woodland. Despite this, all 555 ha of this vegetation community on the onsite offset (EA, Appendix J; Table 10.1) is attributed to this EEC. From the information provided OEH does not support this generous allocation of EEC status to this vegetation community.

In conclusion, OEH currently considers that the biodiversity offset provides less White Box – Yellow Box – Blakely's Red Gum woodland EEC than the 1,672 ha (774 ha woody; 898 ha grassy) stated in the EA (Main Report, Table 54). The exact area of vegetation that conforms to this EEC is not clear (e.g. section 10.2.9 of Appendix J). Therefore, OEH recommends that the proponent provides further information to demonstrate how the different vegetation communities meet the NSW Scientific Committee determination of this EEC. In the event that less of this EEC is present in the biodiversity offset than claimed OEH recommends that some additional land is included in the offset package that contains extant unambiguous examples of this EEC, such as from the eastern side the proposed development footprint (as shown in Figure 61 of the Main Report of the EA).

### Threatened plant species

The proposed development site contains about 30 plants of *Diuris tricolor* and two clumps of Weeping Myall (*Acacia pendula*); both of which are threatened species. It also contains one plant of Tiger Orchid (*Cymbidium canaliculatum*) which is part of the threatened population in the Hunter Catchment. These species are not represented in the onsite offset. Whilst a plant of Tiger Orchid has been found in the offsite offset, this is in the Namoi River catchment, and is therefore not part of the endangered population. OEH considers that the offset package does not adequately offset the loss of these plants, particularly *Diuris tricolor* and recommends that this is addressed, particularly by the addition of land containing extant plants of these species.

In the case of *Diuris tricolor*, OEH is aware that plants of this species occur in the Drayton Wildlife Refuge, however, the status of this refuge does not ensure their conservation in perpetuity. The Drayton Wildlife Refuge was established in 1987 under provisions in Part 4, Division 11 of the NPW Act. It should be noted that under these provisions a wildlife refuge may be revoked at any time.

The proponent may be able to offset the impacts on *Diuris tricolor* by ensuring that portions that contain this rare orchid are protected in perpetuity parts of the Drayton Wildlife Refuge (particularly on the northern side of Thomas Mitchell Drive) are protected by such means as the placement of a Conservation Agreement under Part 4, Division 12 of the NPW Act or a BioBanking Agreement under Part 7A, Division 2 of the TSC Act on that land. The additional protection of the Drayton Wildlife Refuge would also serve to improve the security of land containing extant EEC vegetation, such as Hunter Lowland Red Gum Forest, which is also being affected by this project.

Indigenous plants of Weeping Myall in the Hunter Valley are barely fertile but tend to be long-lived and suckering plants that naturally form nearly monospecific clumps (Bell *et al.*, 2007). To date there is no evidence that plants of this taxon can be successfully translocated. However, the epiphytic Tiger Orchid is able to grow on many different hosts and available evidence suggests it may be successfully translocated. If this option is undertaken, which OEH normally does not endorse, then OEH recommends that the 'Guidelines for the Translocation of threatened plants in Australia' (Vallee *et al.* 2004) are followed, and that



that plant is moved to suitable remnant woody vegetation as close as possible to the site where the plant naturally occurs. OEH does not support translocation of this plant outside of the Hunter catchment (see below).

### **Monitoring of mine site rehabilitation and other vegetation**

OEH notes that the proponent is planning on monitoring mine site rehabilitation and revegetation, and comparing results against local reference sites (EA, Appendix J, section 8.3). OEH supports this approach, especially as it includes data analysis in which the results may be used to trigger adaptive management. OEH recommends that the data analysis includes appropriate statistical analysis, perhaps 'Analysis of similarity (ANOSIM)', that would enable trends to be detected before they become obvious, and thus will enable adaptive management to be implemented thereby enabling the best use of resources and providing a better chance of rehabilitation outcomes for the project being achieved.

Natural regeneration of native vegetation following removal of livestock has been raised in different parts of the EA (e.g. Appendix J, section 5.1) as a way of improving the biodiversity values of offset land. Whilst native vegetation does indeed respond favourably when grazing pressure is removed not all species may return to a vegetation community. This may be due to local extinction of grazing-sensitive species or that established plants, including perennial exotic tussock grasses, may now prevent certain species from becoming re-established. Statistical analysis of quadrats in regenerating native vegetation would enable the rate of vegetation recovery, based on species diversity to be measured and thus test the hypothesis that stock exclusion alone can lead to full recovery of at least some native vegetation communities. It would also enable adaptive management to be implemented where this was proving not to be the case, which, for example, may then require the local reintroduction of some grazing-sensitive species.

### **Relocation of threatened plants**

It should be noted that OEH normally does not endorse the relocation of threatened species. This is due to the usually limited chance of success and also due to unforeseen circumstances with how translocated organisms may interact with individuals of the same species already in situ. However, epiphytic orchids like the Tiger Orchid (*Cymbidium canaliculatum*) appear to have a higher chance of successful translocation than other species. Therefore, if endorsed by DP&I, OEH recommends that any translocation attempt for the plant of this species recorded in the Drayton South development footprint is done in accordance with the 'Translocation Guidelines for Threatened Plants in Australia: Second edition' by Vallee *et al.* (2004).

OEH notes that a plant of Tiger Orchid (*Cymbidium canaliculatum*) has been found on the proposed offsite offset. As noted in the EA (Appendix J, p. 10.33) this record occurs outside of the Hunter catchment and is therefore not part of the Endangered *Cymbidium canaliculatum* population in the Hunter Catchment. Whilst there is value in protecting this species across its range the plant on the offsite offset is not part of the endangered population and therefore is not able to offset the loss of the plant on the development site.

### **Saddlers Creek Rehabilitation and Conservation**

The section of Saddlers Creek immediately upstream of the Drayton South lease is covered by the Saddlers Creek Conservation Area that protects both Aboriginal cultural heritage and threatened biodiversity on the Mount Arthur Coal Complex Mine Lease (e.g. as per PA 06\_0091). OEH therefore recommends that the proponent works collaboratively with the operators of the Mount Arthur Coal Complex to ensure that their planned revegetation compliments the work being done on the Mount Arthur land. Interestingly, the assessment of poor water quality and low biological activity in Saddlers Creek downstream of areas of rehabilitation from the Mount Arthur lease (EA, Appendix J, section 6.5), suggests that restoration of this aquatic ecosystem and its associated riparian corridor will take considerable time and effort.



## Conclusions

The proposed offset package includes remnant woody vegetation, native derived vegetation, revegetation of disturbed vegetation and recreation of vegetation on a post-mined landscape. Whilst the proposed revegetation of the post-mined landscape and restoration of vegetation along Saddlers Creek are positive works they are unable to make more than a small contribution to the offset package for this project under the offsetting policy framework chosen. It is not yet clear how much post-mining rehabilitation, and of what type, will be required under the Mine Operation Plan (under the *Mining Act 1992*), and how this will be identified from additional rehabilitation for restoring local biodiversity.

The offset package includes a larger area of remnant woody vegetation than that which will be cleared and largely meets OEH's offsetting requirements, as defined by the 'Principles for the use of biodiversity offsets in NSW'. However, not all vegetation types in the proposed offset areas necessarily meet the 'like for like or better' component, particularly if their EEC determinations are now supported. This is particularly so of White Box – Yellow Box – Blakeley's Red Gum Woodland EEC which has not been adequately demonstrated to hold for a number of vegetation communities. If the proponent is unable to justify how the vegetation communities considered to be WBYBBRG woodland meet the NSW Scientific Committee determination for this EEC, then OEH recommends additional offset land with extant stands of this EEC are provided. OEH also considers that the offset does not adequately offset the impacts on *Diuris tricolor* or the Tiger Orchid and suggests ways in which this may be addressed.

Finally, OEH recommends that data obtained from monitoring is analysed using appropriate statistical analysis. This will enable trends to be detected before they become obvious and can thus enable adaptive management to be implemented to ensure that available resources are efficiently used to achieve the stated biodiversity outcomes.

## RECOMMENDED CONDITIONS OF APPROVAL FOR THREATENED BIODIVERSITY

1. That any clearance of threatened species, populations or communities, or their habitats, or harm caused by mine subsidence due to this development must be offset in accordance with OEH offsetting policy. That is, either the 'Principles for the use of biodiversity offsets in NSW' (DECC, 2011) or the 'NSW OEH interim policy on assessing and offsetting biodiversity impacts of part 3A, State significant development (SSD) and State significant infrastructure (SSI) projects (OEH, 2011).
2. That the proponent demonstrates that the proposed offset package contains as much White Box – Yellow Box – Blakeley's Red Gum Woodland endangered ecological community as stated in the EA. In the event that the offset package contains less of this EEC than claimed, that additional offset land containing this EEC is included in the offset package; such as from remnant Upper Hunter White Box – Ironbark Grassy Woodland from the eastern side of the project area (EA, Main Report, Figure 61).
3. That the proponent provides land with extant plants of *Diuris tricolor* as part of the offset package. This could be achieved by providing in-perpetuity protection to land with *Diuris tricolor* plants currently in the Drayton Wildlife Refuge. Appropriate increased protection of land currently in the Drayton Wildlife Refuge could be achieved by the implementation of a Conservation Agreement under Part 4, Division 12 of the *National Parks and Wildlife Act 1974*, or a BioBanking Agreement, under Part 7A, Division 2 of the *Threatened Species Conservation Act 1995*.
4. That the proponent's monitoring of rehabilitation and restoration and reference sites includes analysis by appropriate statistical analysis and that the monitoring data, statistical analysis and underlying assumptions are made freely and publically available within six months of data collection. This will ensure that lessons learnt from this project may be able to be applied to other rehabilitation projects in the Hunter Valley as soon as possible.
5. That pre-clearing surveys are conducted by a suitably qualified and experienced ecologist (as per DEC, 2004).



6. That the translocation of any threatened flora from the development site is conducted in accordance with the 'Guidelines for the Translocation of Threatened Plants in Australia: Second Edition' (Vallee *et al.*, 2004) and
7. That the proponent coordinates its proposed rehabilitation works along Saddlers Creek with the adjacent Saddlers Creek Conservation Area on the Mount Arthur Mine lease.

References:

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