



Office of
Environment
& Heritage

DOC17/367057-3
DA 49/94 Mod 9 & DA 08_0102 Mod 7

Mr Alexander Grierson
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Dear Mr Grierson

Rix's Creek - (DA 49/94 Mod 9) and Rix's Creek North (DA 08_0102 Mod 7)

I refer to your e-mail dated 10 July 2017 seeking advice on the proposed modifications of the Rix's Creek Coal Mine. If approved, these modifications would allow for the transfer of dried tailings refuse and overburden between mining operations covered by the two different consents. It would also allow for exploration drilling on the land adjacent to both active open cut mines.

OEH reviewed the Environmental Assessment prepared for the proposed modifications and focused on the area of the proposed exploration drilling program. OEH recommends targeted survey for *Diuris tricolor* during the flowering season prior to any works commencing, and replacing any trees cleared for the works in the rehabilitation efforts. In relation to Aboriginal cultural heritage, OEH accepts the recommendations provided in the EA. Further details are provided in **Attachment A**.

If you require any further information regarding this matter please contact Robert Gibson, Regional Biodiversity Conservation Officer, on 4927 3154.

Yours sincerely

R. Hughes 21 July 2017

ROB HUGHES
A/Director Hunter Central Coast
Regional Operations

Enclosure: Attachment A

ATTACHMENT A: OEH REVIEW OF THE PROPOSED MODIFICATIONS TO THE RIX'S CREEK MINING OPERATIONS (DA 49/94 MOD 9 & DA 08 0102 MOD 7)

OEH reviewed the Environmental Assessment (Bloomfield Collieries Pty Limited, 2017) (the EA) prepared for the proposed modifications to the Rix's Creek coal mines in relation to Aboriginal cultural heritage and threatened biodiversity matters. The review focused on the proposed exploration program under DA 08_0102 Mod 7 which involves less than 1 ha of clearing of native vegetation and ground disturbance for the placement of up to eight drill holes. These are discussed below.

ABORIGINAL CULTURAL HERITAGE ASSESSMENT

OEH reviewed the Aboriginal cultural heritage component of the Environmental Assessment for proposed modification (AECOM, 2017) and notes that the assessment identified no known or new Aboriginal archaeological sites in the modification footprint. No further heritage works or reporting were considered necessary, however if any Aboriginal objects were found during construction then specific management actions were recommended. OEH acknowledges that the overall Aboriginal archaeological sensitivity for the modification area is considered to be low due to the landforms present, the nature and extent of past ground disturbance, and the results of previous archaeological assessments in the local area.

OEH is of the view that the recommendations in the Aboriginal cultural heritage assessment (AECOM, 2017), including suggested management in the event that an Aboriginal object is found, are appropriate. OEH has no other concerns with respect to Aboriginal cultural heritage in relation to both modifications being approved.

THREATENED SPECIES

OEH reviewed the ecological assessment of the drill hole exploration area (Forest Fauna Surveys Pty Ltd & Eastcoast Flora Survey, 2017). The largest potential impact on threatened biodiversity is from the ca. 400m² of clearing around each of the eight proposed drill holes and the access roads between them. This would clear or disturb <0.5 ha of vegetation that meets the definition of *Central Hunter Grey Box-Ironbark Woodland in the New South Wales North Coast and Sydney Basin Bioregions Endangered Ecological Community* (EEC). The area also contains habitat for several threatened species, such as Squirrel Gliders (URS, 2009).

The ecological assessment was based on previous survey work and a site inspection of each drill hole location conducted on 13 June 2017. No formal vegetation quadrats appear to have been conducted. The site inspection included consideration for *Diuris tricolor*, which would have been in leaf on the day of survey but is only identifiable when it flowers in September and October. The EA concluded that the proposed activities may clear <0.5 ha of EEC vegetation, that none of the drill hole sites would likely support threatened species, and that the proposed works would be unlikely to have a significant impact on threatened biodiversity. No offset was proposed. Instead drill hole locations are to be preferentially located on cleared land to minimise impacts on environment. Any soil removed to prepare the site will be stockpiled and returned to the site. Rehabilitation outcomes for the site are stated as being to return each site to a safe and stable state that allows for the current land use. Future monitoring is planned with the scope for remedial action to ensure that long-term outcomes for each site are achieved. However, those long-term objectives do not appear to be stated in the EA.

The policy setting for the environmental assessment in this EA is not clear. Under the current *NSW Biodiversity Offsets Policy for Major Projects* (OEH, 2014a) the environmental assessment would require a Biodiversity Assessment Report which would be completed in accordance with the Framework for Biodiversity assessment (OEH, 2014b). This applies to any area of impact, however, no BAR was provided in the EA.

Given the context of this project as a modification of existing consents, with most impacts likely to be temporary, rehabilitation outcomes have been poorly defined, and for which the biodiversity

assessment has yet to fully consider a local threatened orchid species OEHL recommends the following conditions for any consent issued:

1. The areas of proposed disturbance must be surveyed for *Diuris tricolor* during its known flowering time (mid-September to mid-October) prior to any works being undertaken, utilising at least one reference population in the Hunter Valley (e.g. Thomas Mitchell Drive population) as a guide to the suitability of survey time. Any plants found must either be avoided or, if harmed, then appropriately offset (e.g. retiring appropriate biodiversity 'species credits').
2. Areas disturbed by proposed exploration drilling must be rehabilitated within 12 months after exploration works have been completed.
3. In areas, where any trees > 2 m tall are cleared for exploration works, the same species of tree must be put back in the disturbed area in at least a 2:1 ratio. Those new trees must be established within 12 months of the completion of works, with any losses being replaced.
4. Where the drilling works lead to any permanent harm to threatened biodiversity then those impacts must be offset in accordance to the *NSW biodiversity offset policy for major projects*.

References

AECOM (2017) *Aboriginal Archaeological due diligence assessment for exploration drilling at Rix's Creek Mine*. 28 June 2017. AECOM Australia Pty Ltd, Sydney. [In Bloomfields Collieries Pty Limited (2017)]

Bloomfield Collieries Pty Limited (2017) *Environmental Assessment for Proposed Modifications to Rix's Creek DA 49/94 N90/-356 (Mod 9) and Rix's Creek North Open Cut Project 08_0102 (Mod 70)*. July 2017. Bloomfield Collieries Pty Limited, Camberwell.

Forest Fauna Surveys Pty Ltd and Eastcoast Flora Survey (2017) *Rix's Creek North Mine: Borehole Exploration Area Ecological Assessment*. Report to Rix's Creek North Mine. 26 June 2017. Forest Fauna Surveys Pty Ltd and Eastcoast Flora Survey, Adamstown Heights/ Kotara Fair. [In Bloomfields Collieries Pty Limited (2017)]

OEHL (2014a) *NSW Biodiversity Offsets Policy for Major Projects*. September 2016. NSW Office of Environment and Heritage, Sydney. <http://www.environment.nsw.gov.au/resources/biodiversity/140672biopolicy.pdf>

OEHL (2014b) *Framework for Biodiversity Assessment*. NSW Biodiversity Offsets Policy for Major Projects. September 2014. NSW Office of Environment and Heritage, Sydney. <http://www.environment.nsw.gov.au/resources/biodiversity/140675fba.pdf>

URS (2009) *Integra Open Cut Project Biodiversity Assessment*. June 2009. URS Australia Pty Ltd, North Sydney. http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=2701

OEHL – JULY 2017

