

1 July 2014

Manager Mining Projects  
NSW Planning and Environment  
GPO Box 39  
SYDNEY NSW 2001

Attention: Mr Mike Young

Dear Mike,

**BENGALLA MINING COMPANY DEVELOPMENT CONSENT MODIFICATION 5 ENVIRONMENTAL  
ASSESSMENT - RESPONSE TO SUBMISSIONS**

**1 INTRODUCTION**

Bengalla Mining Company (BMC) is seeking a Modification to its existing Development Consent (DA 211/93) under Section 75W of the *Environmental Planning and Assessment Act 1979* (EP&A Act) to facilitate the necessary geotechnical investigations to complete the detailed design for the proposed relocation and creation of future water reticulation facilities (the Modification).

In correspondence from the Department of Planning and Environment (DP&E) dated 27 May 2014, it was confirmed the Modification Environmental Assessment (EA) would be made publicly available on the DP&E website. In addition, copies would be provided to key regulatory authorities including Muswellbrook Shire Council (MSC), Environment Protection Authority (EPA), Office of Environment and Heritage (OEH), NSW Trade and Investment – Division of Resources and Energy (DRE) and the NSW Office of Water (NOW).

BMC submitted the *Bengalla Mine Development Consent Modification Environmental Assessment* (Bengalla EA) (Hansen Bailey, 2014) to DP&E on 5 June 2014. The Bengalla EA was subsequently distributed to the relevant regulatory authorities and exhibited on the DP&E website.

Following the regulatory and public review period, DP&E has provided responses to the Bengalla EA from the MSC, OEH, EPA and a draft response from NOW. Comments have yet to be received from DRE. This document provides response to the issues raised to date by each of the relevant regulators as required.

## 2 RESPONSE TO SUBMISSIONS

The following section addresses the issues raised by regulators and explains how these issues have been resolved. A copy of all regulatory responses is provided in **Attachment 1**.

### 2.1 MUSWELLBROOK SHIRE COUNCIL

MSC provided comment in relation to the Bengalla EA dated 13 June 2014. MSC noted that they had no objection to the Bengalla EA. As a result of this correspondence no further response is required.

### 2.2 ENVIRONMENTAL PROTECTION AUTHORITY

EPA provided comment in relation to the Bengalla EA dated 23 June 2014. EPA noted they had no objection to the Modification proceeding as described in the Bengalla EA. EPA did note however that BMC should ensure that all disturbed areas and water generated by the geotechnical investigations must be managed to prevent the pollution of waters.

To accommodate this comment BMC has amended Statement of Commitment (see **Table 1**, Ref 13).

### 2.1 NSW OFFICE OF WATER

NOW provided a draft response in relation to the Bengalla EA dated 27 June 2014. NOW noted that they support the proposed mitigation measures provided in the Bengalla EA, however stated that if a borehole intersects the water table then it should be decommissioned to restore aquifer isolation to that which existed prior to the bore construction within 28 days of following completion of the bore.

To accommodate this comment BMC has amended Statement of Commitment (see **Table 1**, Ref 19).

In addition, NOW noted that for any geotechnical investigations proposed within 40 m of Dry Creek then the Guidelines for Controlled Activities on Waterfront Land should be considered prior to commencement of these works.

To ensure the geotechnical activities will not impact on Waterfront Land, all relevant test pits currently within 40 m of Dry Creek (TP 601, 603, 604 and 607) will be relocated to a suitable location further than 40 m from the Dry Creek bank. This commitment has been reflected in **Table 1** (Ref 16). All revised locations will be subject to both ecological and archaeological due diligence assessments prior to completion of the geotechnical investigations.

### 2.2 OFFICE OF ENVIRONMENT AND HERITAGE

OEH provided comment in relation to the Bengalla EA dated 17 June 2014. The following section responds to the issues raised by OEH in relation to potential archaeological and ecological impacts.

#### 2.2.1 Potential Impact to Aboriginal Objects

##### **Issue**

*OEH notes that the proposed geotechnical activities 'may' disturb at least 21 recorded Aboriginal objects (isolated artefacts) and that the archaeological significance of these is considered to be low. The proponent has previously indicated that they would obtain a Section 90 Aboriginal Heritage Impact Permit (AHIP) under the National Parks and Wildlife Act 1974 to either destroy or salvage these artefacts before any construction works start.*

*To ensure that this modification does not impact both the known and unknown Aboriginal objects within the modification footprint, OEH recommends that the following conditions of consent be issued.*

1. *That a Due Diligence Aboriginal Archaeological Assessment under current 2010 OEH guidelines for each test pit and borehole site be undertaken by a suitably qualified heritage professional;*
2. *All recorded Aboriginal objects be clearly marked and suitably fenced off to ensure no impact occurs;*
3. *Access to the test pit and borehole locations is clearly demarcated to ensure that all disturbance is contained within the designated footprint;*
4. *Should any new Aboriginal objects be recovered during the proposed works, all works will cease, objects recorded and secured, and appropriate measures are undertaken to ensure that no further harm occurs. Any Aboriginal objects recovered must be managed in accordance with the existing BMC Aboriginal Cultural Heritage Management Plan.*
5. *All staff and contractors undertaking the proposed works are to be inducted and informed of the presence of Aboriginal cultural heritage objects and made aware of their location within the development footprint to ensure no impact occurs.*

## Response

Section 5.2.1 of the Bengalla EA states that the geotechnical activities have been specifically designed to avoid all previously identified Aboriginal artefacts to ensure no impacts occur to any items/place of Aboriginal cultural significance as a result of the Modification.

Further to the above, Section 5.2.2 of the Bengalla EA states that in order to ensure no impacts will occur to previously identified or unidentified Aboriginal archaeology a due diligence assessment will be completed by a suitably qualified person prior to disturbance and test pits and boreholes relocated as required.

Given the abovementioned mitigation measures, the Modification will not impact on any Aboriginal artefacts (known or otherwise) and no Section 90 AHIP would be required.

However in response to OEH's comments, BMC has amended the Bengalla EA Statement of Commitments to include OEH's recommendations as required (see **Section 3**).

## 2.2.2 Potential Impact to Threatened Biodiversity

### 2.2.3 Issue

*OEH notes that the number of test pits is indicative only and that the EA states 'approximately 51' test pits will be excavated though it does not provide any information regarding to what degree that location and number may vary.*

## Response

Section 3.2.1 of the EA notes that the geotechnical activities will comprise of approximately 51 test pits and two boreholes. This is the upper limit of disturbance and in actual fact the final number of test pits may be less than that assessed in the Bengalla EA.

In regard to the final position of the test pits and boreholes, Section 5.2.2 of the EA states that the final position will be determined following the completion of a due diligence assessment to ensure no significant impacts to Aboriginal artefacts. In addition to this commitment, BMC will also complete an ecological due diligence assessment for the proposed geotechnical activities (see **Table 1**, Ref 8). The final location will be within close proximity of the currently proposed sites in order to obtain the most relevant data.

As stated in 5.1.2 of the EA following the completion of the geotechnical activities all sites will be rehabilitated in accordance with the BMC Rehabilitation Management Plan and Ground Disturbance Permit requirements and as such no ecological offsets are required.

**Issue**

*The EA states that the excavation of the test pits will result in the surface disturbance area of no greater than 4m x 4m but does not provide details as to what activities will be restricted to that 4m x 4m. The EA does not appear to make allowances for temporary stockpiling of topsoil and spoil nor does it appear to allow for the placement of excavation equipment.*

**Response**

Section 5 of the EA states that the geotechnical activities footprint (including machinery) will be contained within an area of approximately 4m x 4m for test pits and 10m x 10m for the two boreholes. This area will provide for the excavation of the test pit and borehole and associated temporary topsoil stockpile. It is not expected that any necessary machinery will cause any additional significant impacts to ecology.

The actual disturbance associated with the test pits will be approximately 3m x 0.5m with that disturbance area contained within the 4m x 4m area.

**Issue**

*Section 5.1.2 of the EA provides mitigation and management measures to minimise impacts from the proposal but is the first instance that the 'clearing' of access tracks may be required has been raised. In addition, there are no details as to what level of disturbance will occur as a result of track clearing and why consideration of this has not been included within the total area of disturbance.*

**Response**

Section 5.1.2 of the EA provides a number of mitigation and management measures proposed to avoid impacts to ecology associated with gaining access to each site including:

- To the extent practical, access will only take place along existing tracks. Careful navigation across grassland and avoidance of trees and shrubs will be planned and executed where deviation from tracks is required;
- Existing tracks will be identified prior to clearing of any new access tracks. The use of existing cleared tracks will always take preference over clearing new tracks, despite an additional distance;
- Trees with a Diameter at Base Height (DBH) of greater than 100 mm will not be impacted; and
- Clearly demarcate the access and the site for the test pit/borehole using appropriate measures (e.g. flagging tape, etc.) to ensure that all disturbance is tightly contained within the designated footprint.

'Clearing' in the context above is slashing an appropriate access track where required (estimated 5 m wide) to assist with limiting the number of access routes, gaining safe access to each site and to ensure no unexpected impact to Aboriginal archaeology or ecology (see **Table 1**, Ref 3).

In addition, following completion of the works described in this EA an audit report will be completed by a relevantly qualified person and will include:

- Review against the recommendations of the due diligence assessment (by relevantly qualified ecologist and archaeologist) referred to in **Table 1** (Ref 6 and 8);
- Details of the final location and number of test pits as well as the location of slashed tracks displayed on a figure overlaying Archaeological sites and vegetation mapping;
- Details of the mitigation measures applied;
- Confirmation of adequacy of rehabilitation of the site;
- Photographs of each site taken immediately following rehabilitation; and
- The final area of disturbance will be documented.

These commitments have been updated in the revised statement of commitments (see **Section 3**).

### 3 REVISED STATEMENT OF COMMITMENTS

This section provides a summary of the additional management and monitoring commitments from this correspondence.

#### 3.1 SUMMARY OF MITIGATION MEASURES

**Table 1** provides a consolidated summary of the proposed environmental management and monitoring measures included in the Bengalla EA and its source.

Additional management and monitoring commitments from this correspondence have been included in 'bold'.

**Table 1**  
**Statement of Commitments**

Ref	Description	Section(s)
1.	The test pits and borehole footprint will be restricted to approximately 4m x 4m <b>and 10m x 10m area respectively including machinery, earthworks and temporary topsoil stockpile.</b>	<b>5 and This Correspondence</b>
2.	To the extent practical, access will only take place along existing tracks. Careful navigation across grassland and avoidance of trees and shrubs will occur where deviation from tracks is required.	<b>5.1.2, 5.2.2 and 5.3.2</b>
3.	<b>Access tracks may be required to be slashed (estimated 5m wide) to assist with gaining safe access to each site and to limit access routes to ensure no unexpected impact to Aboriginal archaeology or ecology.</b>	<b>This Correspondence</b>
4.	The site access and each test pit/borehole will be clearly demarcated using appropriate measures (e.g. flagging tape, etc.) to ensure that all disturbance is tightly contained within the designated footprint.	<b>5.1.2 and 5.2.2</b>
5.	No trees with a DBH of greater than 100 mm will be removed for the Modification.	<b>5.1.2</b>
6.	In order to ensure no impacts will occur to previously identified or unidentified Aboriginal archaeology a due diligence assessment will be completed by a suitably qualified <b>professional</b> prior to disturbance and test pits and boreholes relocated as required.	<b>5.2.2 and This Correspondence</b>
7.	Should an item / place of Aboriginal heritage be identified within a test pit / borehole site, activities will cease, appropriate measures will be taken to ensure no harm to the object or place has occurred. Any Aboriginal heritage material would be managed in accordance with the existing BMC Aboriginal Cultural Heritage Management Plan.	<b>5.2.2</b>
8.	<b>In order to ensure no significant impacts to biodiversity an ecological due diligence assessment will be completed by a suitably qualified professional prior to disturbance and test pits and boreholes relocated as required.</b>	<b>This Correspondence</b>
9.	<b>All staff and contactors whom undertake the proposed works will be informed of the presence of Aboriginal cultural heritage objects and made aware of their location within proximity to activities associated with the Modification to ensure no impact occurs.</b>	<b>This Correspondence</b>
10.	All equipment will be examined by the Maintenance Department and daily pre-start inspections undertaken.	<b>5.3.2</b>

Ref	Description	Section(s)
11.	In the event of unacceptable visible dust being generated in trafficked areas, a water cart (or similar) will be contracted to wet down the access track.	5.3.2
12.	Geotechnical activities will be confined to the hours of operation between 7:00 am to 5:30 pm on Monday to Friday.	5.4.2
13.	Appropriate sediment bunding will be placed around each site to prevent any dirty water runoff <b>and pollution of waters</b> as required.	5.5.2 and This Correspondence
14.	Works will not be conducted during periods of intense rainfall to maintain riparian habitat and to limit surface disturbance.	5.5.2
15.	The geotechnical activities will not be located within a creek or riparian zone where any it would impede any natural surface flow following rainfall events.	5.5.2
16.	<b>Geotechnical investigations will not be completed within 40 m of the Dry Creek bank.</b>	This Correspondence
17.	All land disturbed by the proposed geotechnical investigations will be rehabilitated to pre disturbance conditions following the completion of each test pit/bore hole.	5.6.2
18.	<b>All boreholes will be backfilled with the same material as that extracted during drilling to pre disturbance conditions as far as practicable.</b>	This Correspondence
19.	<b>If, during the course of the geotechnical investigations, a borehole intersects the water table then it will be decommissioned to restore aquifer isolation to that which existed prior to the bore construction within 28 days of following completion of the bore.</b>	This Correspondence
20.	<p>Following completion of the works described in the EA, a review will be completed by a suitably qualified person which will include:</p> <ul style="list-style-type: none"> <li>• Review against the recommendations of the due diligence assessment (previously completed by qualified ecologist and Archaeologist);</li> <li>• Details of the final location and number of test pits as well as the location of slashed tracks displayed on a figure overlaying Archaeological sites and vegetation mapping;</li> <li>• Details of the mitigation measures applied;</li> <li>• Confirmation of adequacy of rehabilitation of the site;</li> <li>• Photographs of each site taken immediately following rehabilitation; and</li> <li>• Documentation of the actual final area of disturbance.</li> </ul>	This Correspondence

#### 4 CONCLUSION

We trust that the above response is satisfactory to DP&E. Should you require any additional information please do not hesitate to contact me on (02) 6575 2010.

We look forward to receiving approval of the Modification to DA 211/93 at your earliest possible convenience.

Yours sincerely

**HANSEN BAILEY**



Jason Martin  
*Environmental Scientist*



Dianne Munro  
*Principal*



***ATTACHMENT 1***  
***REGULATORY CORRESPONDENCE***

Enquiries  
Please ask for Steve McDonald  
Direct 02 6549 3700  
Our references  
Your reference

13 June 2014

**Ms Carolyn McNally  
Acting Secretary  
Department of Environment and Planning  
GPO Box 31  
SYDNEY NSW 2001**

Dear Ms McNally,

**Reply to Response to Submissions: Bengalla Continuation Project**

I refer to the Response to Submissions provided by the Bengalla Mining Company ("the proponent") with respect to the Application for the Bengalla Continuation Project. Council appreciates the opportunity to provide its reply to the Response to Submissions prepared by the proponent, and apologises for the delay in responding.

Council submits as follows:

1. Except insofar as 2 is concerned, Council is supportive of the application.
2. Council notes that it will be the consent authority for any road closure and accordingly, does not propose to comment on the merit or otherwise of the proposal to close and realign Bengalla Link Road. It is noted, however, that the proposed alignment, in Council's preliminary view, is unlikely to be successful given the substantial impact on the efficiency of the local road network. Council notes recent traffic counts already disclose unanticipated movements on Wybong Road east of the present alignment of Bengalla Link Road. In Council's view the proponent should provide a statement of commitments to review the mine plan and its approvals framework following the finalisation of the Mine Affected Roads Network Plan and Strategy. Such commitment may require a modification to its present consent concerning the proposed realignment of Bengalla Link Road. With respect to any s138 application under the *Roads Act* to dig up or disturb the surface of Bengalla Link Road, along its existing alignment, it is Council's preliminary view that while the application is likely to be successful, it would be conditional on the reconstruction of the road along the present (or more favourable) alignment post-mining and require the provision of an alternative road prior to disturbing the surface of the road.
3. Council has no objection to the recently lodged Part 3A Modification for geotechnical investigation.

Thank you for the opportunity to comment.

Yours faithfully,



Steve McDonald

**Muswellbrook Shire Council** ABN 86 864 180 944

Address: **GENERAL MANAGER** The General Manager Mail PO Box 122 Muswellbrook NSW 2333 Phone 02 6549 3700  
Fax 02 6549 3701 Email [council@muswellbrook.nsw.gov.au](mailto:council@muswellbrook.nsw.gov.au) Web [www.muswellbrook.nsw.gov.au](http://www.muswellbrook.nsw.gov.au)



Our reference: DOC14/107108, EF13/2634  
Contact: Kurt Sorensen: (02) 4908 6827  
Electronic correspondence to: [hunter.region@epa.nsw.gov.au](mailto:hunter.region@epa.nsw.gov.au)

Department of Planning & Environment  
GPO Box 39  
SYDNEY NSW 2001

Attention: Mr Kane Winwood  
email: [kane.winwood@planning.nsw.gov.au](mailto:kane.winwood@planning.nsw.gov.au)

Dear Mr Winwood,

**BENGALLA MINING COMPANY – MODIFICATION TO DA – GEOTECHNICAL INVESTIGATIONS**

I refer to your email of 5 June 2014 and the document titled: "*Bengalla Mine Development Consent Modification Environmental Assessment*" (the EA) prepared by Hansen Bailey and dated June 2014, requesting comments from the Environment Protection Authority (EPA) regarding the project.

The EPA understands this project is being considered under section 75W of the *Environmental Planning and Assessment Act 1979* to modify the existing development consent. The modification includes geotechnical investigations which are necessary to complete future water management infrastructure. The modification is generally comprised of the following geotechnical activities:

- Test pits at three proposed dam locations associated with the relocation of the BMC Discharge Dam, Hunter River Raw Water Dam and Washery Dam;
- Test pits and two boreholes at the site of the proposed Clean Water Diversion Dam; and
- Test Pits along the pipeline alignment from Clean Water Diversion Dam to the clean water discharge point adjacent to the relocated BMC Discharge Dam.

The EPA has no objection to the project proceeding as described in the EA. The EPA is satisfied that the current conditions on Environment Protection Licence (EPL) 6538 can accommodate geotechnical investigations as outlined in the EA.

The Proponent should note that all disturbed areas and any water generated by the geotechnical investigation must be managed to prevent the pollution of waters.

Please contact Kurt Sorensen on (02) 4908 6827 if you require any further information regarding this matter.

Yours sincerely

A handwritten signature in black ink, followed by the date '23.6.14'.

**BILL GEORGE**  
**A/Head Regional Operations Unit – Hunter Region**  
**Environment Protection Authority**

PO Box 488G Newcastle NSW 2300  
117 Bull Street, Newcastle West NSW 2302  
Electronic correspondence to  
[hunter.region@epa.nsw.gov.au](mailto:hunter.region@epa.nsw.gov.au)  
Tel: (02) 4908 6800 Fax: (02) 4908 6810  
ABN 43 692 285 758  
[www.epa.nsw.gov.au](http://www.epa.nsw.gov.au)

## Jason Martin

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**From:** Kane Winwood <Kane.Winwood@planning.nsw.gov.au>  
**Sent:** Friday, 27 June 2014 3:55 PM  
**To:** Jason Martin  
**Subject:** FW: Bengalla Coal Mine (DA 211\_93 Mod 5)

Hi Jason,

Below for your information is the Office of Water's advice on the Bengalla modification, it is likely we'll receive their formal response next week so I thought I'd send this through now.

Regards,  
Kane

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From: Wayne Jones [mailto:wayne.jones@dpi.nsw.gov.au]  
Sent: Monday, 16 June 2014 4:33 PM  
To: Kane Winwood  
Subject: Bengalla Coal Mine (DA 211\_93 Mod 5)

Hi Kane

Please see following draft DPI comments on the above project. Formal response should follow shortly.

Regards  
Wayne

Wayne Jones | Land Use Planning Coordinating Officer  
Department of Primary Industries  
Level 48, MLC Centre, 19 Martin Place Sydney NSW 2000  
T:02 9338 6708 | E: [wayne.jones@dpi.nsw.gov.au](mailto:wayne.jones@dpi.nsw.gov.au)

OUT14/16960

Mr Kane Winwood  
Mining Projects  
NSW Department of Planning and Environment  
GPO Box 39  
SYDNEY NSW 2001

[Kane.Winwood@planning.nsw.gov.au](mailto:Kane.Winwood@planning.nsw.gov.au)

Dear Mr Winwood,

**Bengalla Coal Mine (DA 211\_93 Mod 5)  
Proposed Modification**

I refer to the email from Matthew Sprott dated 11 June 2014 requesting advice from the Department of Primary Industries (DPI) in respect to the above matter.

Comment by NSW Office of Water

The NSW Office of Water has reviewed the Environmental Assessment (EA) for the proposed Bengalla Coal Mine Modification Application (Mod 5). The Office of Water understands the modification is limited to geotechnical investigations to support the preparation of detailed design of future water management infrastructure. These investigations include 51 soil test pits to a maximum depth of 5 metres and 2 boreholes to a maximum depth of 12 metres. The following comments are provided for consideration in finalising the assessment.

- The soil test pits and boreholes are defined as minimal impact aquifer interference activities under the NSW Aquifer Interference Policy. The Office of Water supports the proposed mitigating measures, in particular the

measures to rehabilitate all land disturbed by the geotechnical investigations to pre-disturbance conditions and to fill completed boreholes. If a borehole intersects the water table, the Office of Water recommends it be decommissioned to restore aquifer isolation to that which existed prior to bore construction within a period of 28 days following completion of the bore.

- Section 5.5.1 of the EA indicates Dry Creek is in proximity to the test pits and boreholes, however there is no proposal to impede the natural surface flows. As there is the potential for the proposed activities to occur within 40m of Dry Creek the NSW Office of Water recommends works within waterfront land be carried out in accordance with the Guidelines for Controlled Activities on Waterfront Land which can be accessed at the following link: <http://www.water.nsw.gov.au/Water-Licensing/Approvals/Controlled-activities/default.aspx>

For further information please contact Tim Baker, Senior Water Regulation Officer (Dubbo Office) on 6841 7403 or at [tim.baker@water.nsw.gov.au](mailto:tim.baker@water.nsw.gov.au).

Comment by Office of Agricultural Sustainability and Food Security

In accordance with procedures for mining projects that affect agricultural land, the Office of Agricultural Sustainability and Food Security will respond direct to your Department.

For further information please contact Rob Williamson, Leader Land Use Planning (Orange office) on 6391 3166, or at: [robert.williamson@dpi.nsw.gov.au](mailto:robert.williamson@dpi.nsw.gov.au).

Fisheries NSW advise no issues.

Regards  
Wayne

Wayne Jones | Land Use Planning Coordinating Officer  
Department of Primary Industries  
Level 48, MLC Centre, 19 Martin Place Sydney NSW 2000  
T:02 9338 6708 | E: [wayne.jones@dpi.nsw.gov.au](mailto:wayne.jones@dpi.nsw.gov.au)

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**Office of  
Environment  
& Heritage**

Your reference: DA 211/93  
Our reference: DOC14/101507-01; EF14/1125  
Contact: Ziggy Andersons, 4908 6820

Mr Mathew Sprott  
Planning Officer, Mining Projects  
Department of Planning and Environment  
GPO Box 39  
SYDNEY NSW 2001

Dear Mr Sprott

**RE: REVIEW OF BENGALLA MINE – MODIFICATION 5 ENVIRONMENTAL ASSESSMENT – SECTION 75W MODIFICATION (DA 211/93)**

I refer to your email dated 11 June 2014 requesting comments from the Office of Environment and Heritage (OEH) on the Bengalla Mine Modification 5 Environmental Assessment (EA). This application represents a modification to the approved Bengalla Mine Development Consent (DA 211/93).

OEH understands that the proposed modification involves geotechnical activities that include multiple test pits and two bore holes which are required to assess the nature of the soil and substrate within the pipeline corridor and proposed dams.

OEH has undertaken a review of the EA titled 'Bengalla Mine Development Consent Modification Environmental Assessment', prepared for Bengalla Mining Company Pty Ltd by Hansen Bailey Environmental Consultants and dated June 2014. OEH has determined that the EA lacks a clear quantification of the scale of the impacts of the proposal. Specific issues identified in the EA include:

- the number of test pits to be excavated is only approximate
- the test pit surface disturbance area doesn't appear to allow for activities associated with the excavation of the test pits
- the pipeline route and therefore location of the test pits hasn't been confirmed
- it is unclear to what extent any new tracks will require 'clearing'.

In summary, clarification is required as to the actual area of disturbance and therefore what Aboriginal objects and area of Box Gum Woodland endangered ecological community will potentially be impacted upon.

OEH recommends that prior to approval; the Department should be satisfied that the above issues have been clarified. OEH has provided detailed comments and recommended conditions of consent in **Attachment 1**.

If you require any further information regarding this matter, please contact Ziggy Andersons, Regional Biodiversity Conservation Officer, on 4908 6820.

Yours sincerely

A handwritten signature in black ink, appearing to read 'R Bath', with a long horizontal stroke extending to the right.

17 JUN 2014

**RICHARD BATH**  
**Senior Team Leader Planning, Hunter Central Coast Region**  
**Regional Operations**

Enclosure: Attachment 1

## **ATTACHMENT 1: COMMENTS AND RECOMMENDED CONDITIONS OF APPROVAL FOR PROPOSED BENGALLA MINE – SECTION 75W MODIFICATION 5 TO DA 211/93**

OEH has reviewed the Environmental Assessment (EA) for Aboriginal cultural heritage issues and threatened biodiversity.

### **ABORIGINAL CULTURAL HERITAGE ASSESSMENT**

OEH notes that the proposed geotechnical activities 'may' disturb at least twenty-one (21) recorded Aboriginal objects (isolated artefacts) and that the archaeological significance of these artefacts is considered to be low. The proponent has previously indicated that they would obtain a Section 90 Aboriginal Heritage Impact Permit (AHIP) under the *National Parks and Wildlife Act 1974* to either destroy or salvage these artefacts before any construction works start. OEH had no objection to this course of action.

The current environmental assessment for the Bengalla Development Consent Modification with respect to Aboriginal Archaeology now proposes that the impact assessment is documented within both the 'Aboriginal Archaeological and Cultural Heritage Impact Assessment prepared for the Continuation of Bengalla Mine Environmental Impact Statement 2013' prepared by AECOM (2013a) and the 'BMC Aboriginal Cultural Heritage Management Plan' that was completed for the modification. These documents state that the geotechnical activities have been specifically designed to avoid all previously identified Aboriginal objects and to ensure that no impacts occur to any objects or places of Aboriginal cultural significance.

To ensure that this modification does not impact both the known and unknown Aboriginal objects within the modification footprint, OEH recommends that the following conditions of consent be issued.

1. That a Due Diligence Aboriginal Archaeological Assessment under current 2010 OEH guidelines for each test pit and borehole site be undertaken by suitably qualified heritage professional.
2. All recorded Aboriginal objects be clearly marked and suitably fenced off to ensure that no impact occurs.
3. Access to the test pit and borehole locations is clearly demarcated to ensure that all disturbance is contained within the designated footprint.
4. Should any new Aboriginal objects be recovered during the proposed works, all works will cease, objects recorded and secured, and appropriate measures are undertaken to ensure that no further harm occurs. Any Aboriginal objects recovered must be managed in accordance with the existing BMC Aboriginal Cultural Heritage Management Plan.
5. All staff and contractors undertaking the proposed works are to be inducted and informed of the presence of Aboriginal cultural heritage objects and made aware of their location within the development footprint to ensure no impact occurs.

### **THREATENED BIODIVERSITY ASSESSMENT**

OEH has reviewed the EA for potential impacts to the terrestrial ecology within the application area and based on below recommends that the Department request additional information before approving this application.

The EA states that the location of the pipeline and Wybong Road test pits are indicative only as the route of the pipeline has yet to be confirmed, in addition the EA states that 'approximately 51' test will be excavated though it does not provide any information regarding to what degree that location and number may vary.



In addition the EA states that the excavation of the test pits will result in a surface disturbance area of no greater than 4m x 4m but does not provide details as to what activities will be restricted to that 4m x 4m. The EA does not appear to make allowances for the temporary stockpiling of topsoil and spoil nor does it appear to allow for the placement of the excavation equipment. Both these impacts can potentially be mitigated and managed but no details as to how this will be achieved have been provided.

Section 5.1.2 provides mitigation and management measures to minimise impacts from the proposal but is the first instance that the 'clearing' of access tracks may be required has been raised. In addition there are no details as to what level of disturbance will occur as a result of track clearing and why consideration of this has not been included within the total area of disturbance. In general OEH supports the mitigation measures that are proposed within the EA and recommends that they be included in the conditions of consent for the proposed modification.

The endangered ecological community (EEC) that portions of this proposal occur within is predominantly native groundcover. Therefore any activity that may impact upon the groundcover component of this community is considered an impact to the EEC. OEH recommends that prior to approval; the Department should be satisfied that the above issues have been clarified. The Department may wish to request the following additional information:

- a description of what activities will occur within the proposed test pit footprints needs to be provided. If any activities associated with the excavation of the test pits cannot be confined to the 4m x 4m footprint then measures to mitigate these activities need to be provided. If the activities cannot be satisfactorily mitigated then the additional area required will need to be included into the total area of disturbance
- an upper limit of the number of test pits is to be provided with the impacts to biodiversity considered based on this upper limit, this area will then need to be included into the total area of disturbance
- in regards to the access tracks that may require 'clearing', details of what is involved in the clearing of these tracks needs to be provided. If track clearing will require any form of topsoil disturbance or if repeated access to the sites may result in damage to groundcover vegetation through compaction mitigation measures to prevent this occurring needs to be provided. If the activities cannot be satisfactorily mitigated then the additional area will need to be included into the total area of disturbance.

The proposal is a modification of an existing consent and therefore needs to be considered in isolation of the pending determination. However, OEH does acknowledge that the proposed modification falls within the boundary of the Bengalla Continuation Project and that all impacts associated with this proposal will be offset by the Bengalla Biodiversity Offset Package.

Therefore based on the above OEH recommends that the conditions of consent should include:

1. A project report shall be submitted upon completion of works and will include;
  - a. Details of the final location and number of test pits as well as the location of cleared tracks displayed in a figure overlaying Archaeological sites and vegetation mapping;
  - b. Details of mitigation measures applied;
  - c. Photographs of each site taken immediately following rehabilitation; and
  - d. The final area of disturbance must be provided and include types and areas of communities impacted upon.
2. If within 12 months of the modification approval the Bengalla Continuation Project does not receive approval, then Bengalla Mine will provide offsets for the total area of disturbance in accordance with OEH offset principles.