



Planning & Environment

Ms Lynelle Briggs AO
Chair
Planning Assessment Commission
GPO Box 3415
SYDNEY NSW 2001

Dear Ms Briggs

**Warkworth and Mt Thorley Continuation Projects (SSD 6464 & SSD 6465)
Additional Information**

I refer to your letter dated 23 September 2015 requesting additional information in relation to the Warkworth Continuation Project (SSD 6464) and the Mt Thorley Continuation Project (SSD 6465).

The Planning Assessment Commission (the Commission) has requested additional information in relation to a number of matters raised during verbal and written submissions made as part of the Commission's second review of the projects. These matters relate to:

- Aboriginal cultural heritage;
- social impact assessment;
- Warkworth Sands Woodland; and
- cumulative impacts.

The Department has prepared a response to each of the matters (see Attachment A), and has also sought additional information from the applicant (see Attachment B).

The Department trusts that this information adequately addresses the Commission's request.

If you have any further queries about this matter, please contact me on (02) 9228 2091.

Yours sincerely

Mike Young
A/Executive Director
Resource Assessments and Business Systems

2.10.15.

Attachment A

Additional Information

The Department of Planning & Environment's (the Department's) response to each of the requests for additional information in the Planning Assessment Commission's (the Commission's) letter dated 23 September 2015 is outlined below. The Commission's requests are included in bold italics for reference.

Aboriginal Cultural Heritage

"The adequacy of the consultation with all relevant Aboriginal stakeholders, with reference to the Aboriginal Cultural Heritage Consultation Requirements for Proponents (Office of Environment and Heritage, 2010)."

The Department's Environmental Assessment Report for the Warkworth Continuation Project¹ states that both the Department and the Office of Environment & Heritage (OEH) are satisfied that the Aboriginal heritage assessment and consultation for the project has been undertaken in accordance with applicable guidelines, including OEH's *Aboriginal Cultural Heritage Consultation Requirements for Proponents (2010)* (the 2010 Guidelines).

The Department has reviewed the Commission's letter and the letter received from Tocomwall dated 16 September 2015, along with Rio Tinto's attached response. Based on this information the Department reconfirms its opinion that the consultation with Aboriginal stakeholders for the projects has been undertaken in accordance with the 2010 Guidelines.

Tocomwall's letter is written on behalf of the Plains Clan of the Wonnarua People (PCWP), and claims that the applicant has not adequately consulted with the PCWP about the cultural values within the project area and not provided a copy of the completed Aboriginal Cultural Heritage Assessment Report to the PCWP.

The 2010 Guidelines require applicants to notify Aboriginal stakeholders about a project, and for interested Aboriginal parties to register an interest in being involved in subsequent Aboriginal cultural heritage assessment. The Department understands that 82 Aboriginal parties registered such an interest in relation to the assessment for the Warkworth Continuation Project. These included the PCWP and 10 of the 12 Wonnarua Traditional Custodian native title applicants.

However, the PCWP subsequently declined invitations to participate in the Registered Aboriginal Party (RAP) consultation process. Nevertheless, Rio Tinto has continued to consult with the PCWP, and Rio Tinto has confirmed that the PCWP was provided with copies of the Aboriginal Cultural Heritage Assessment and a number of other documents in relation to the project.

Rio Tinto's attached response provides further background on the consultation with PCWP, and also contains references to where this issue has been addressed in the EIS.

¹ The Mt Thorley Continuation Project does not involve any increase to the approved disturbance area of the Mt Thorley mine, and is therefore not expected to impact any Aboriginal heritage sites.

Importantly, OEH's submission on the Warkworth Continuation Project also contains specific consideration of the issue, an excerpt of which is reproduced below:

"The [EIS] report does outline that Mr Scott Franks, did register an interest as a Registered Aboriginal Party (RAP) for the Warkworth Continuation Project 2014 on behalf of the Plains Clans of the Wonnarua People native title claimant group, however, the group refused to participate in the [Cultural Heritage Working Group] CHWG RAP consultation process. Mr Franks stated that he did not support the proposal and they did [not] allow other people to make comment or decisions on or for their country, as such they would not attend meetings with other Aboriginal people that were not a part of their registered native title group. OEH notes that the proponent has continued to maintain continuous consultation with Mr Franks despite not supporting the proposed continuation proposal. OEH considers that all reasonable attempts have been made to consult with Mr Franks regarding this proposal and that as long as consultation is maintained, the consultation process to date has been adequate and reasonable."

"The adequacy of the Aboriginal Cultural Heritage Assessment Report in the EIS, including potential impacts to Aboriginal cultural heritage sites."

Following review of the additional information provided by the Commission and the response from Rio Tinto, the Department reconfirms the conclusions of its Environmental Assessment Report. That is, the Department is satisfied that the Aboriginal cultural heritage assessment has been undertaken in accordance with applicable guidelines, and that the project's residual impacts are unlikely to have a significant impact on the Aboriginal heritage values of the region.

Rio Tinto's response includes a detailed response to the claims in Tocomwall's letter regarding the potential for a bora ground and other culturally sensitive sites to be located within the project disturbance area, and the concerns regarding provision of cultural offsets near Bathurst.

With regard to the bora ground, the Department is satisfied that the surveys and other evidence indicate that the bora ground referred to is the Bulga Bora Ground (AHIMS site #37-6-0056). The Bulga Bora Ground is located outside the project disturbance area and within the proposed Wollombi Brook Aboriginal Cultural Heritage Conservation Area. This conservation area is proposed to be protected in perpetuity as part of the project. Rio Tinto's response indicates that PCWP has previously visited the site and agreed that this location (ie. AHIMS site #37-6-0056) is the site of the Bulga Bora Ground.

The proposed 696 hectare Wollombi Brook Aboriginal Cultural Heritage Conservation Area is located immediately to the west of the Warkworth mine. Rio Tinto has confirmed that it does not have any plans to establish any cultural heritage offset land in the Bathurst area.

"The process by which members of the local Aboriginal community will be involved in the protection and restoration of cultural heritage."

The recommended conditions for the Warkworth Continuation Project and/or Mt Thorley Continuation Project include requirements on Rio Tinto to ensure the ongoing involvement of the local Aboriginal community in the protection and management of cultural heritage. These include requirements on Rio Tinto to:

- prepare an Aboriginal Heritage Management Plan in consultation with Aboriginal stakeholders;
- facilitate access to archaeological sites on site for Aboriginal stakeholders;
- develop a program for Aboriginal stakeholder consultation and involvement in the conservation and management of Aboriginal cultural heritage on the site;
- develop a program for Aboriginal stakeholder consultation and involvement in the management of the Wollombi Brook Aboriginal Cultural Heritage Conservation Area; and

- prepare a conservation management plan for the Wollombi Brook Aboriginal Cultural Heritage Conservation Area (and Loders Creek Aboriginal Cultural Heritage Conservation Area for the Mt Thorley project) in consultation with Aboriginal stakeholders.

Rio Tinto has also made a number of additional commitments in relation to ongoing consultation and involvement of the local Aboriginal community, as referred to in its attached response. These measures include preparation of an integrated cultural heritage management plan (covering all of Rio Tinto's mines and landholdings in the locality) in consultation with the Aboriginal community, and involving the Aboriginal community during implementation of all impact management measures (eg. site salvage and investigation).

The Department is satisfied that these measures would provide for the appropriate involvement of the local Aboriginal community in the protection and management of cultural heritage on the site.

Social Impact Assessment

The submission received by the Commission from Dr Michael Askew and Dr Louise Askew raises a number of concerns regarding the adequacy of the social and economic assessments in the EISs for the projects, and the Department's Environmental Assessment Report. These concerns largely reflect those previously raised in submissions by the Bulga Milbrodale Progress Association (BMPA) and other stakeholders.

In summary, the Askews claim that the assessments are inadequate because they:

- do not meet the Secretary's Environmental Assessment Requirements, for reasons including that they:
 - do not adequately address perceived impacts;
 - do not focus on Bulga;
 - do not adequately rate social impacts or provide adequate detail on stakeholder engagement;
- use inappropriate legal precedents, particularly in relation to consideration of perceived impacts;
- contain inadequate detail and consideration of employee and supplier surveys;
- contain inadequate detail and consideration of community complaints and community investment associated with the existing operations;
- provide inadequate consideration of baseline population data and health perceptions for Bulga residents;
- lack detailed consideration of social impacts, including in relation to noise, community and family cohesion, visual amenity, loss of sense of place, education, health and well-being and property values (in Bulga);
- contain inadequate consideration of workforce numbers over time, population changes and volunteering rates by Rio Tinto employees;
- contain inadequate consideration of social impact mitigation measures; and
- use inappropriate inputs and assumptions in the economic impact assessment.

Rio Tinto's response includes a table identifying where each of these specific issues has been previously addressed in the EIS and the Response to Submissions (see Attachment 2 of Rio Tinto's attached response). In particular, the Response to Submissions provides direct and detailed consideration of the matters raised by the Askews (and BMPA previously).

Accordingly, the Department does not propose to address each of these issues in detail. However, the Department has reviewed the submission and confirms that it does not change the conclusions of the Department's assessment in relation to the social and economic impacts of the projects.

The Secretary's Environmental Assessment Requirements for the projects require the Applicant to:

"undertake an assessment of the likely social impacts of the development (including perceived impacts), paying particular attention to any impacts on Bulga village."

The assessment requirements do not refer to any specific methodology that must be adhered to in preparing the social impact assessment, but rather that a social impact assessment must be undertaken.

In accordance with this requirement, both EISs for the projects include detailed social impact assessments. These assessments focused on engagement with near neighbours in the Bulga area. Around 44% of participants were near neighbours, and 20% of Bulga residents participated in the consultation process. This consultation supported the consideration of perceived impacts on the Bulga Village which is addressed in detail in the EISs and Response to Submissions.

The Department acknowledges that social assessments and cost benefit analyses are commonly criticised, with experts differing on what constitutes 'best practice' and the value that should be placed on various costs and benefits.

However, the Department remains satisfied that the assessments adequately address the Secretary's Environmental Assessment Requirements for the projects, including consideration of perceived and actual impacts on Bulga Village.

As outlined in the Department's Environmental Assessment Report, the Department acknowledges that the projects would give rise to a number of social and economic costs, as well as giving rise to a number of social and economic benefits. Like most major mining projects, the benefits would accrue to both the local community (eg. jobs, economic opportunities) and the wider community (eg. affordable energy, economic value add), while many of the costs (particularly amenity impacts such as noise and dust) would accrue more to the local community surrounding the mine site.

The Department has assessed these amenity and other impacts in accordance with applicable NSW policy and guidelines, and recommended conditions requiring Rio Tinto to minimise, manage or at least compensate the residual impacts.

The Department notes that the EISs for the projects include detailed cost benefit analyses that attempt to weigh up all of the projects' costs and benefits based on their full range of environmental, social and economic impacts and benefits. This includes consideration of costs associated with externalities such as impacts associated with noise and vibration, air quality, visual amenity, biodiversity, heritage, traffic, water resources and greenhouse gas emissions.

These analyses indicate that the projects would result in a considerable net benefit to NSW of approximately \$1.5 billion. As outlined in the Department's Addendum Report dated May 2015, the Department's independent economics expert DAE has reviewed and broadly accepts the cost benefit modelling.

The Department agrees with the conclusion of the Commission in its initial review report which stated:

"the Commission must balance the social impacts against the economic benefits associated with the proposal. In this regard, the Commission shares the Department's view that the impacts expected as a result of the Project are acceptable when compared to the standards and performance measures commonly applied to mining projects in NSW."

Accordingly, the Department remains satisfied that Rio Tinto's environmental, social and economic assessments, together with the independent economic peer review undertaken by Deloitte Access Economics (DAE) on behalf of the Department, provide an adequate level of detail to enable the decision maker to consider the social and economic impacts and to determine the projects.

Warkworth Sands Woodland

"The current status of the Warkworth Sands Woodland in State, Commonwealth and international listings."

Warkworth Sands Woodland is currently listed as an endangered ecological community (EEC) under the NSW *Threatened Species Conservation Act 1995* (TSC Act). It is not listed as threatened under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) or the international IUCN Red List.

Dr Stephen Bell's submission to the Commission states that Warkworth Sands Woodland would, in his opinion, qualify as critically endangered under the TSC Act and EPBC Act, and qualify for international listing under the IUCN Red List. Whilst this is not currently the case, both the Department and OEH are fully aware of the limited distribution of Warkworth Sands Woodland, and have taken this limited distribution into consideration in the assessment of the Warkworth Continuation Project².

In this regard, the Department recognises that Warkworth Sands Woodland is a naturally restricted community, as it is only found on Aeolian (wind-blown) sand deposits near Singleton in the Hunter Valley.

However, the Department also believes that it is important to also recognise that similar wind-blown sand deposits are common in coastal areas, and as such the species found in Warkworth Sands Woodland are not unique to the community. The species found are similar to those in coastal dune environments, and include Angophoras, Banksias, Acacias and Melaleucas. This is an important consideration when considering the likelihood of successful regeneration of Warkworth Sands Woodland, as outlined below.

"The Applicant's proposed approach to rehabilitation of the Warkworth Sands Woodland EEC, with particularly reference to the concerns raised by Dr Stephen Bell."

Dr Bell's submission states that Rio Tinto is proposing to regenerate Warkworth Sands Woodland on former agricultural lands and as part of mining rehabilitation plans.

The Department clarifies that Rio Tinto is not proposing to regenerate Warkworth Sands Woodland on mined land (only on land previously cleared for grazing).

With regard to the regeneration of Warkworth Sands Woodland on former agricultural land, the Department acknowledges that these areas have been cleared and subject to grazing in the past. However, it also notes that Warkworth Sands Woodland within the project disturbance area has also been subject to clearing and grazing, as indicated on the historical aerial photographs in the Department's Environmental Assessment Report (pg. 45). These photographs show the area of Warkworth Sands Woodland within the project disturbance area as being largely cleared in 1963, with substantial regrowth clearly visible by 1979.

² The Mt Thorley Continuation Project does not involve any disturbance to Warkworth Sands Woodland.

Rio Tinto has also provided additional information about the regeneration research and trials that it has undertaken over recent years. This was provided to the Commission as an attachment to the Department's Addendum Report dated May 2015.

The research programs undertaken, including those undertaken by the University of New England on behalf of Rio Tinto, indicate that Warkworth Sands Woodland is able to be successfully regenerated, with the regeneration success and technique dependent on the condition of the Warkworth Sands Woodland regeneration site.

In this regard, intact and marginally degraded areas of Warkworth Sands Woodland have been found to successfully regenerate naturally with the removal of grazing pressure and with weed control. Cleared or highly modified areas such as grassland had a limited capacity to naturally regenerate, but responded well to active restoration with tube stock planting.

In 2014, Rio Tinto commenced physical planting for its Warkworth Sands Woodland re-establishment program as required under the existing mine consent. Whilst tube stock planting only commenced in September 2014, Rio Tinto reports that initial results of the program are positive, with a 70 per cent survival rate recorded (from the 8,235 tube stock planted).

This suggests that with standard management measures in place (such as fencing and de-stocking) many of the species that make up the assemblage of the Warkworth Sands Woodland can be successfully regenerated.

Notwithstanding, both the Department and OEH acknowledge that successful regeneration of the full range of species (both under and over-storey) of the Warkworth Sands Woodland is likely to require more careful and prolonged management and monitoring.

That is why the Department has incorporated a comprehensive suite of management obligations, incentives, and potential penalties in the recommended conditions of consent.

These conditions require Rio Tinto to:

- implement the biodiversity offset strategy, which includes restoration and/or long term protection of 235.5 hectares of Warkworth Sands Woodland in the Northern and Southern Biodiversity Areas;
- develop performance criteria for the successful Warkworth Sands Woodland regeneration within 15 years, to the satisfaction of OEH;
- lodge a substantial conservation bond for all the offset land for the full cost of implementing the biodiversity offset strategy; and
- lodge a \$1 million bond for the Warkworth Sands Woodland regeneration, which would be forfeited in the event that the regeneration does not meet the performance criteria.

“The appropriate amount for the conservation bond in the proposed conditions of consent.”

The recommended conditions include two conservation bonds that are relevant to Warkworth Sands Woodland regeneration.

The main conservation bond is required under condition 37 of schedule 3 of the Department's recommended conditions³. This bond covers the whole biodiversity offset strategy, including the proposed regeneration of Warkworth Sands Woodland. The sum of this bond is to be calculated based on the full cost of implementing the offset strategy, with the costing required to be verified by a suitably qualified quantity surveyor. Given that this bond is based on the full cost of implementing the offset strategy, stipulating an ‘appropriate amount’ in the conditions is not considered to be required or warranted.

³ Condition 37 of schedule 3 of the amended conditions for the Warkworth Continuation Project, as attached to the Department's Addendum Report dated May 2015

As outlined in the Department's Addendum Report, Rio Tinto has estimated the total cost to regenerate Warkworth Sands Woodland over 15 years at some \$4.8 million. The conservation bond would be based on this amount.

The second bond is a \$1 million 'incentive' bond for Warkworth Sands Woodland under condition 32(b) of schedule 3 of the recommended conditions. As outlined in the Department's Addendum Report, this bond would not absolve Rio Tinto from its responsibility to restore the Warkworth Sands Woodland in the event that the regeneration does not meet the required performance criteria after 15 years.

In this regard, this bond is intended as an additional incentive to ensure that Rio Tinto commits adequate resources to the Warkworth Sands Woodland regeneration in a timely manner. In the event that the restoration does not meet the performance criteria after 15 years, the \$1 million bond would be forfeited and Rio Tinto would still be required to still be required to complete the restoration works. If Rio Tinto still fails to complete the restoration to agreed standards after this time, then the Department could retain all, or part of, the conservation bond required under condition 37, and arrange for the satisfactory completion of the relevant works.

Cumulative Impacts

"Any development in policy, or the strengthening of the regulation of mining operations, to address the cumulative impacts of final voids."

The Department confirms that policy planning in relation to the regulation of mining operations in NSW (including consideration of policy on final voids) is under active consideration, but is yet to be finalised by the NSW Government.

With regard to the Warkworth Continuation Project and Mt Thorley Continuation Project, the Department considers it is important to note that the proposals provide for a net *decrease* of around 46 hectares in final void area across the mining complex as a result of the backfilling of the approved final void at the Mt Thorley mine.

Consideration of further measures to fill or partially fill the final void at Warkworth is provided in the Department's Addendum Report. Based on cost benefit analysis the Department accepts that the agricultural and conservation value of the land does not warrant the costs and impacts associated with filling the void, and that options to fill the final void are not reasonable and feasible.

However, the Department considers that Rio Tinto should be required to minimise the size and depth of the final void as far as practicable, and ensure that it plans for the future land use of the site in consultation with relevant stakeholders.

To this end, the recommended conditions require Rio Tinto to minimise the size and depth of the void, and to prepare and implement a comprehensive Rehabilitation Management Plan, including a mine closure strategy to minimise the long-term impacts associated with mine closure.

"Any potential amendments to the proposed conditions of consent 17-19 that would ensure compliance with the relevant air quality criteria."

The Department has previously provided consideration of this issue in its Addendum Report in response to a similar recommendation arising out of the Commission's first review.

As outlined in the Addendum Report, the Department sees a number of significant problems with amending the condition in the manner suggested.

First, the Department notes that the air quality criteria are cumulative ambient air quality goals and are not project-specific criteria.

Second, any condition that applies a strict liability for a cumulative standard would be legally unenforceable as it would be very difficult to establish causation where an exceedance occurs.

Third, it could result in a situation where a mine is only contributing a small proportion of the overall concentrations of dust, but is held liable for any exceedances.

To overcome these issues, both the Department and the EPA focus on source control to minimise dust emissions to the greatest extent practicable.

To this end, the EPA has been implementing the 'Dust Stop' program across the mining industry in NSW for some years to drive improvements in dust management practices. It can also impose 'Pollution Reduction Programs' on the Environment Protection Licences where there is a particular issue with dust emissions leaving the site.

While the Department does not have the flexibility to retrospectively alter conditions of consent for mining projects, it does require mining companies to prepare and implement detailed Air Quality Management Plans. These plans must be prepared in consultation with the EPA, incorporate best practice dust avoidance and mitigation measures, and be regularly reviewed and updated to drive improvements in environmental performance over time. The EPA also has the regulatory flexibility to amend the Environment Protection Licence for the mine to impose additional obligations to improve environmental performance as the mine progresses.

Given the above, the Department considers that the conditions should retain the requirements previously recommended.

“The Department’s new compliance monitoring regime in the Hunter Valley.”

In May 2015, the Department announced the expansion of its Hunter compliance team and increased penalties for non-compliance.

The Department’s compliance officers work to ensure coal mines and other state significant developments and infrastructure are operating in accordance with the requirements under their development approvals.

There are now six compliance officers based in the Department’s Singleton office, working across the Hunter with an expanded focus. Coal mines continue to be one of the top priorities, but the increased resourcing means all types of major developments are now regularly visited by the compliance team.

Surveillance and unannounced inspections are two of the many investigation tools at the team’s disposal. The compliance officers also work closely with the community, industry, local councils and other government agencies to investigate potential breaches of conditions and carry out enforcement where necessary.

On-the-spot fines for high impact developments that breach their approval conditions, including coal mines, have been increased five-fold to \$15,000 through recent amendments to the *Environmental Planning and Assessment Regulation 2000*.

“The adequacy of the environmental assessment of the cumulative impacts on endangered species.”

Consideration of cumulative impacts is an inherent component of impact assessment for threatened species, populations and ecological communities.

Firstly, species generally come to be listed as threatened as a result of the accumulation of impacts from land use developments over time (ie. cumulative impacts). The TSC Act and the EPBC Act provide well established mechanisms for the protection and management of species, populations and ecological communities which become threatened as a result of this accumulation of loss.

The *Environmental Planning and Assessment Act 1979* (EP&A Act) also contains mechanisms to ensure that the accumulation of impacts to threatened species, populations and ecological communities is a key consideration in the assessment of development applications.

In this regard, Section 5A of the EP&A Act requires a consent authority, when making decisions under Section 79C (and other sections) of the Act, to consider a number of matters in deciding whether there is likely to be a significant effect on threatened species, populations and ecological communities, or their habitats. These matters include the '7-part test of significance' under Section 5A(2), and the *Threatened Species Assessment Guidelines* (DECCW, 2007) under Section 5A(1). These matters inherently include consideration of cumulative impacts. The *Threatened Species Assessment Guidelines* note that (emphasis added):

*“...the long-term loss of biodiversity at all levels arises mainly from the **accumulation** of losses and depletions of populations at a local level. This is the broad principle underpinning the TSC Act, state and federal biodiversity strategies, and international agreements.”*

The ecological assessment in the EIS for the Warkworth Continuation Project also includes specific consideration of indirect and cumulative impacts on biodiversity values, and Rio Tinto's Response to Submissions includes further consideration of cumulative impacts on endangered ecological communities in the Hunter Valley (which provide habitat for threatened species including the Regent Honeyeater).

Based on the ecological assessments in the EIS and Response to Submissions, OEH's assessment and certification of the biodiversity offset strategy, together with its own assessment, the Department is satisfied that the cumulative impacts of the Warkworth and Mt Thorley projects on threatened species, populations and ecological communities has been adequately considered and compensated for through the implementation of the proposed biodiversity offset strategy.

Attachment B
Rio Tinto's Response Letter

Rio Tinto Coal Australia Pty Limited
GPO Box 391
Brisbane Queensland 4001
Australia
T +61 (0) 7 3625 3000
F +61 (0) 7 3625 3001

27 September 2015

Mr Mike young
A/Executive Director – Resource Assessment & Business Systems
Department of Planning and Environment
GPO Box 39
Sydney NSW 2001

Dear Mr Young

Warkworth Continuation Project (SSD 6464) and Mount Thorley Continuation Project (SSD 6465) – Public Hearing 2: Planning Assessment Commission Request for Further Information

The Department of Planning and Environment (DPE) received a letter from the Planning Assessment Commission (PAC) dated 23 September 2015 requesting further information on the above proposals. The DPE subsequently requested a response from the proponent on 24 September 2014. This letter provides a response from the proponent, as requested.

Background

The Minister for Planning requested the PAC conduct a second review and public hearing with respect to the removal of clause 12AA from the State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007 (Mining SEPP), as outlined in the terms of reference dated 13 August 2015.

As part of this process, the PAC invited written submissions by 8 September 2015 and held a public hearing on 7 and 8 September 2015. The Minister for Planning requested the PAC complete a report on the second review by 21 September 2015.

Following the public hearing, the proponent wrote to the PAC on 11 September 2015 to provide the PAC with further information in response to verbal submissions. A copy of this letter has been provided to the DPE.

Information Request

The PAC's request for further information relates to the following aspects of the proposal:

1. Aboriginal cultural heritage;
2. Social impact assessment;
3. Warkworth Sands Woodland; and
4. Cumulative impacts.

The matters raised in the information request have been raised previously during the assessment process. **Attachments 1 to 4** provides a tabulated response to the matters raised in the PAC letter for each aspect above, respectively, with a cross reference to where this matter was previously addressed.

We note that the process is at an advanced stage of assessment as illustrated in **Attachment 5**. There have been five periods that have enabled the public to provide written submissions on the proposals, four of these occurred prior to the second PAC review. The proposals have therefore been through a very thorough process of public input. The views of opponents and supporters are well documented and available to the decision-makers.

The information requested by the PAC does not appear to have any nexus with the scope of the second PAC review, which relates to the removal of clause 12AA from Mining SEPP.

As outlined in a letter from the proponent to the PAC dated 11 September 2015 (and in previous correspondence), clause 12AA was only relevant to consideration of the proposals under Part 3 of the Mining SEPP. That is, the significance of the resource becomes the principal consideration under Part 3 in respect of the matters to be considered under it. It was never the principal consideration under Section 79C.

The issues raised and the adequacy of assessment has been previously considered with respect to the requirements the consent authority must consider under Section 79C of the EP&A Act.

Notwithstanding the above, a response to each aspect raised is provided below.

Aboriginal Cultural Heritage

The PAC has identified the consultation process with relevant Aboriginal stakeholders and potential impacts on Aboriginal cultural heritage sites as an issue the PAC requires further information. The PAC notes assertions with respect to the consultation and Aboriginal cultural heritage assessment for the Warkworth Continuation Environmental Impact Statement (EIS) made by the 'Wonnarua Aboriginal group' (this is assumed to be persons asserting to speak on behalf of the Wonnarua Traditional Custodians native title group) and Tocumwall Pty Ltd purporting to represent the Plains Clan of the Wonnarua People native title claim group (NSD1680/13).

More specifically the PAC has requested the DPE provide further information in relation to:

1. The adequacy of the consultation with all relevant Aboriginal stakeholders, with reference to the Aboriginal Cultural Heritage Consultation Requirements for Proponents (ACHCR, Office of Environment and Heritage; OEH, 2010);
2. The adequacy of the Aboriginal Cultural Heritage Assessment Report in the EIS, including potential impacts to Aboriginal cultural heritage sites; and
3. The process by which members of the local Aboriginal community will be involved in the protection and restoration of cultural heritage.

A response to the above matters is provided below followed with references to detailed responses previously provided in **Attachment 1**.

1. *The adequacy of the consultation with all relevant Aboriginal stakeholders, with reference to the Aboriginal Cultural Heritage Consultation Requirements for Proponents (ACHCR, OEH, 2010);*

Aboriginal people who assert that they 'hold cultural knowledge relevant to determining the cultural significance of Aboriginal objects and/or places in the area of the proposed project' are required to register their interest in being consulted directly with the proponent under the provisions of Section 4.1 of the Office of Environment and Heritage (OEH) *Aboriginal Cultural Heritage Consultation Requirements for Proponents* (ACHCRP) 2010. For the Aboriginal Cultural Heritage impact assessment for the Warkworth Continuation EIS, the proponent undertook consultation with 82 Registered Aboriginal Parties (RAPs), which included 10 of the 12 Wonnarua Traditional Custodian (WTC) native title applicants and the applicants for the Plains Clans of the Wonnarua People (PCWP). Information on the consultation process is detailed in Sections 3 and Appendix 1 of Volume 5, Appendix M of the EIS.

With respect to the assessment of the adequacy of the consultation process under the ACHCRP 2010, this has previously been addressed and found to be compliant by both the OEH and DPE. In the Department's Secretary's Environmental Assessment Report (p.60) for the EIS it is stated that:

'Both the Department and OEH are satisfied that the Aboriginal heritage assessment and consultation for the project has been undertaken in accordance with applicable guidelines, including the OEH's Aboriginal Cultural Heritage Consultation Requirements for Proponents (2010).'

In addition to the comprehensive consultation undertaken prior to and during the development and submission of the EIS the proponent has continued to regularly consult with RAPs with respect to the Warkworth Continuation proposal. Public notices and letters (including an open invitation to register as an Aboriginal Party) have been issued for consultation meetings held in July 2014, October 2014, June 2015 and September 2015 as summarised in **Attachment 6**. At these meetings the proponent has provided updates on the proposal's assessment and approval process and provided the RAPs with the opportunity to review the assessment outcomes and management commitments and to provide any additional information or feedback to the proponent.

2. *The adequacy of the Aboriginal Cultural Heritage Assessment Report in the EIS, including potential impacts to Aboriginal cultural heritage sites; and*

In OEH's submission on the EIS to the Department (8/8/2014, p.3) with regard to the adequacy of the Aboriginal community consultation process, assessment of Aboriginal cultural heritage values, impact assessment and management outcomes it is stated that OEH 'strongly supports all the management commitments proposed with respect to Aboriginal cultural heritage for the proposed Warkworth Continuation Project 2014' and that it had 'no further comments or requirements for Aboriginal cultural heritage within the extension footprint'.

In the Department's Secretary's Environmental Assessment Report (p.60) for the EIS it is stated that both the Department and OEH are satisfied that the Aboriginal heritage assessment for the project has been undertaken in accordance with applicable guidelines. Overall, the Department was 'satisfied the project's residual impacts are unlikely to have a significant impact on the Aboriginal heritage values of the region'.

3. The process by which members of the local Aboriginal community will be involved in the protection and restoration of cultural heritage.

The process by which Aboriginal community stakeholders, and in particular RAPs and Native Title Parties, are to be involved in the protection and restoration of cultural heritage is detailed in Sections 3 and 8 of Volume 5, Appendix M of the EIS. The management commitments detailed in Section 8 are noted in OEH's letter of submission to the Department (8/8/2014, pp.2-4).

OEH states that it 'strongly supports the proposal to ultimately develop a cultural heritage management accord between the proponent and the Aboriginal community that could deliver secure management of important cultural heritage places, as well as a balance of outcomes that could deliver intergenerational equity and enhance the cultural and social strength and cohesion of the Aboriginal community in the Upper Hunter Valley'.

Furthermore OEH states that it strongly supports the proponent's proposed Aboriginal cultural heritage conservation offsets strategy and co-management proposals along with all the other management commitments proposed with respect to Aboriginal cultural heritage for the proposed Warkworth Continuation Project 2014.

Wonnarua Traditional Custodians

The PAC in its letter dated 23 September 2015 makes reference to concerns raised by the 'Wonnarua Aboriginal group' which is presumed to be the persons asserting to speak on behalf of the Wonnarua Traditional Custodians native title group who spoke at the Public Hearing held on 8 September 2015. The PAC acknowledges a letter dated 11 September 2015 from the proponent (cited as Attachment 1 in the PAC letter) which provides some information in relation to the Aboriginal cultural heritage issues raised by this group. The proponent maintains that the information provided in Attachment 1 substantively addresses issues and assertions made by the persons asserting to speak on behalf of the Wonnarua Traditional Custodians native title group.

In the PAC's letter of 23 September it is noted that 'this group claimed that the Applicant had not responded to numerous requests for a meeting with them and has not adequately consulted with the relevant Aboriginal stakeholders...' The question of the adequacy of the Aboriginal community consultation process has been addressed in item 1 above.

To the best of its knowledge, the proponent has never received any correspondence (letter or email) or phone contact from anyone on behalf of the Wonnarua Traditional Custodians native title group to request a meeting nor to register the Wonnarua Traditional Custodians native title group as an Aboriginal Party for the consultation process for the Warkworth Continuation EIS.

It must be stressed, however, that 10 of the 12 applicants for Wonnarua Traditional Custodians native title group's two native title claims are Registered Aboriginal Parties with the proponent and were consulted throughout the Warkworth Continuation EIS Aboriginal community consultation process. Indeed, three of the applicants attended the initial Warkworth Continuation EIS consultation meeting held on 3 April 2014.

Tocumwall Pty Ltd on behalf of the Plains Clan of the Wonnarua People native title claim group (NSD1680/13)

The PAC in its letter dated 23 September 2015 makes reference to a letter (dated 16 September 2015 after submissions closed on 8 September 2015) from Tocumwall Pty Ltd purporting to represent the Plains Clan of the Wonnarua People (PCWP) native title claim group (NSD1680/13) which is cited as Attachment 2 of the PAC letter.

The issues outlined in the Tocumwall letter can be summarised as follows:

- A. Adequacy of the Aboriginal community consultation process and compliance with the Aboriginal Cultural Heritage Consultation Requirements for Proponents (OEH, ACHCRP 2010)
- B. Primacy of PCWP for consultation under the ACHCRP 2010
- C. Provision of a copy of the completed Warkworth Continuation EIS Aboriginal Cultural Heritage Assessment Report
- D. Cultural offsets on land in the Bathurst area
- E. Location of the Bulga Bora Ground within the footprint of the Project Area
- F. Location of other highly significant cultural and scientific Aboriginal object, places and sites
- G. Provision of culturally restricted and confidential information

A - Adequacy of the Aboriginal community consultation process and compliance with the Aboriginal Cultural Heritage Consultation Requirements for Proponents (OEH, 2010)

The general questions of the adequacy and compliance of the Aboriginal community consultation process and Aboriginal cultural heritage assessment has been addressed in items 1 and 2 above. The question of adequacy of the consultation process undertaken with PCWP is specifically addressed in Section 3.4 of the Warkworth Continuation 2014 EIS, Volume 5, Appendix M, Aboriginal Cultural Heritage Study and in OEH's letter of submission to the Department (8/8/2014, p.3). In its letter, OEH states:

'The [EIS] report does outline that Mr Scott Franks, did register an interest as a Registered Aboriginal Party (RAP) for the Warkworth Continuation Project 2014 on behalf of the Plains Clans of the Wonnarua People native title claimant group, however, the group refused to participate in the CHWG RAP consultation process. Mr Franks stated that he did not support the proposal and they did [not] allow other people to make comment or decisions on or for their country, as such they would not attend meetings with other Aboriginal people that were not a part of their registered native title group. OEH notes that the proponent has continued to maintain continuous consultation with Mr Franks despite not supporting the proposed continuation proposal. OEH considers that all reasonable attempts have been made to consult with Mr Franks regarding this proposal and that as long as consultation is maintained, the consultation process to date has been adequate and reasonable.' (OEH, Attachment 1, SSD-6464, p.3)

B - Primacy of PCWP for consultation under the ACHCRP 2010

While native title parties are a key stakeholder for Aboriginal cultural heritage matters, registered native title claimants do not have any special standing with respect to Aboriginal cultural heritage under the *National Parks and Wildlife Act 1974*, the *National Parks and Wildlife Regulation 2008* or the ACHCRP 2010 process.

Under Section 4.1 of the ACHCRP 2010 primacy for consultation is afforded only to native title parties where there has been an approved determination that native title exists in relation to the proposed project area. Native title determination has not been made in respect to the PCWP native title claim.

C - Provision of a copy of the completed Warkworth Continuation EIS Aboriginal Cultural Heritage Assessment Report

Mr Franks claims that 'Rio Tinto has never provided a copy of the completed Aboriginal Cultural Heritage Assessment Report to the PCWP'. As a RAP for the Warkworth Continuation EIS the PCWP through both Mr Franks and Mr Robert Lester were individually provided with the following documents in digital format (on a DVD) in a mail out dated 23 May 2014.

- Aboriginal Cultural Heritage Assessment Report for the Warkworth Continuation 2014 Proposal and Mount Thorley Operations 2014 Proposal Environmental Impact Statements
- Presentation (with maps) from the 7th May 2014 Cultural Heritage Working Group (CHWG) RAP meeting
- Draft minutes of the CHWG RAP meeting held on 7th May 2014
- Final minutes of the CHWG RAP meeting held 3rd April 2014
- Notes from the RAPs Warkworth Continuation 2014 Proposal area site visit held on 29th April 2014

D - Cultural offsets on land in the Bathurst area

Mr Franks asserts that 'Rio Tinto has agreed to undertake a cultural offset on land in the Bathurst area in lieu of the destruction of land in the Hunter Valley'. Neither the proponent nor Rio Tinto currently own, or given any commitment to acquire or propose to establish any cultural offset land in the Bathurst area. The cultural offset area proposed for the Warkworth Continuation 2014 development area is the 698ha Wollombi Brook Aboriginal Cultural Heritage Conservation Area which is located on land owned by the applicant along the western side of the proposals and referred to as the Wollombi Brook Cultural Heritage Conservation Area (WBCHCA). Details on the location and Aboriginal cultural heritage values associated with the proposed WBCHCA are provided in Section 6 of the Warkworth Continuation 2014 EIS, Volume 5, Appendix M, and Aboriginal Cultural Heritage Study.

E - Location of the Bulga Bora Ground within the footprint of the Project Area

Mr Franks claims that the Bulga Bora Ground (OEH AHIMS site #37-6-0056) is located 'within the footprint of the Project Area' and that if the project was 'allowed to go ahead it will destroy a place and ground that represent the basic foundation and fabric of PCWP society, namely the Bora ground'. Furthermore Mr Franks notes that if the proponent had consulted the PCWP '...they would have been informed by the PCWP of the location of a Bora ground within the footprint of the Project Area'. The proponent notes that as the PCWP are a RAP for the Warkworth Continuation EIS they could have provided information about the bora ground at any time during the consultation process for the EIS.

The proponent did in fact consult directly with the PCWP on this very matter at the commencement of the EIS consultation process. The proponent had a phone conversation with Mr Franks of 6th April 2014 during which he advised that he had additional information on the location of the Bulga bora ground. During the call Mr Franks made mention of a map in his possession that he advised had information pertaining to the location of the bora ground. The proponent requested that Mr Franks provide the proponent with the opportunity to review this new information to inform the ongoing management of the bora ground site.

The proponent and Mr Franks discussed holding a meeting to review this information and the proponent agreed to provide reasonable resources to assist Mr Franks and archaeologist Dr Maria Cotter to attend a meeting with the proponent and OEH in Sydney, Newcastle or Brisbane. Mr Franks was to advise the proponent of a suitable date so that the proponent could confirm the date and venue and arrange the meeting.

The proponent then wrote to Mr Franks on 16 May 2014 (refer **Attachment 7**) to reiterate the offer to arrange a meeting to discuss this matter confidentially, or alternatively, for Mr Franks to provide any pertinent information and explanatory notes directly to the proponent. The proponent received no further response from Mr Franks on this matter.

It is noted that Dr Maria Cotter (geo-archaeologist for Tocumwall Pty Ltd) spoke on behalf of the PCWP at the PAC hearing held on 18 December 2014. In her presentation Dr Cotter made a number of claims about an alternative location for the Bulga Bora Ground and that it was situated within the Warkworth Continuation development footprint. The proponent assumes this is the confidential information the PCWP had indicated they had and which the proponent had requested access to and to which Mr Franks had agreed to hold a meeting to discuss with the proponent and OEH during the phone call of 6th April 2014. A detailed response and rebuttal of Dr Cotter's claims on the alternative location of the Bulga Bora Ground is provided in **Attachment 8**.

The issue of the location of the Bulga Bora Ground in relation to the Warkworth Continuation 2014 development area footprint is comprehensively addressed in Section 3.6 of the Warkworth Continuation 2014 EIS, Volume 5, Appendix M, Aboriginal Cultural Heritage Study. The Bulga Bora Ground site, as officially recorded in the OEH AHIMS register as site #37-6-0056, is located within the proposed Wollombi Brook Aboriginal Cultural Heritage Conservation Area and is not located within the development footprint.

F - Location of other highly significant cultural and scientific Aboriginal object, places and sites

Details on the comprehensive Aboriginal cultural heritage assessments that have been undertaken across the entire Warkworth Continuation development footprint and surrounding lands owned by the proponent are provided in Sections 4-8 of Volume 5, Appendix M, and Aboriginal Cultural Heritage Study. These assessments, and the associated Aboriginal community consultation process, have informed the significance assessment and management commitments detailed in Aboriginal Cultural Heritage Study. Although the PCWP are a RAP, the PCWP have chosen not to provide any additional information on the presence of any other potentially highly significant cultural and scientific Aboriginal object, places and sites associated with the Warkworth Continuation 2014 development area.

G - Provision of culturally restricted and confidential information

The consultation process with RAPs provides the opportunity for any RAP to provide culturally sensitive information with confidentiality. RAPs are provided with a confidential information feedback form that they can submit at any time, or otherwise contact the proponent by letter, email, and phone or in person, should they wish to discuss information confidentially. The proponent has provided the PCWP with the opportunity to provide culturally sensitive information with confidentiality with respect to information about the Bulga Bora Ground as noted in point E above (phone call of 6th April 2014 and letter of 16th May 2014).

The proponent has also previously facilitated a process for both Mr Franks and Mr Lester to provide culturally sensitive information confidentially. In March 2011, the proponent facilitated a meeting with Mr Franks and Mr Lester with representatives from OEH and the DPE to discuss culturally sensitive information they wished to disclose on the location and features of the Bulga Bora Ground. As an outcome of the meeting, the proponent arranged for Mr Franks and Mr Lester to visit the bora ground site location (AHIMS site #37-6-0056) to verify their information. At that time they agreed that this location (AHIMS site #37-6-0056) was indeed the site of the Bulga Bora Ground.

Social Impact Assessment

Mr Paul Mitchell OAM from consultants EMGA Mitchell McLennan, the authors of the Social Impact Assessment (SIA), provided a letter to the PAC dated 10 September 2015 in response to extracts of a submission from Dr Michael Askew and Dr Louise Askew. Mr Mitchell clarified that the Askew's were only involved in the early stages of the SIA and reiterated the conclusions of the SIA.

The full Askew's submission has been reviewed and no new issues have been identified that have not been previously raised at the initial public hearing, public meeting and in the various submissions made on the proposals.

The Askew's concerns in respect of the SIA were raised directly by the Bulga Milbrodale Progress Association at the initial public hearing, and again at the public meeting. All other issues raised have been addressed in detail in the Response to Submissions and considered in DPE Assessment Report and subsequently in the PAC Review Report. This is clearly shown by review of **Attachment 2** which provides a link to where the matters raised in the Askew's submissions was previously raised and addressed.

The assessment of social impacts of the proposals is a matter solely for Section 79C of the EP&A Act. The Mining SEPP plays no role in considering the level of social impact with respect to the determination of project. This includes clause 12AA of the Mining SEPP, which makes no reference to social impact and, as discussed, only had a limited role under Part 3 of the Mining SEPP.

The repeal of clause 12AA of the Mining SEPP has no consequence, legal or otherwise, on social aspects of the proposal.

There is no new evidence raised in the Askew's submission that could rationally be relied on for the PAC to change its view in its initial PAC Review Report, that being:

"In this regard, the Commission shares the Department's view that the impacts expected as a result of the Project are acceptable when compared to the standards and performance measures commonly applied to mining projects in NSW." [see section 5.2.3]

Warkworth Sands Woodland

As outlined in the proponent's letter to the PAC dated 11 September 2015, the conservation status of the Warkworth Sands Woodland (WSW) community in NSW is that it is listed as endangered under the *Threatened Species Conservation Act* 1995 and therefore needs to be considered in this context. What other listing may or may not be available is of no legal or technical relevance to the decision before the PAC.

The extant of remaining WSW on mine owned land has always been a relevant consideration of the conservation significance of this community under the NSW Biodiversity Offset Policy for Major Projects. The proposal allows for a significant long term gain for the conservation of the WSW which reduces the risk of future decline of the woodland. All of the remnant WSW outside the footprint of the proposal on the proponent's lands will be protected in perpetuity. All of the in-situ sands on land owned by the proponent (that previously contained WSW but cleared for grazing) will be re-established, regenerating a net gain in WSW in the long term. The proposal also provides an initiative for managing WSW on land owned by other mining companies through an integrated management plan. The proposal provides long term protection, management and funding which are important for the conservation of this community.

Re-establishment of WSW on in-situ sand is supported by significant research and has always been part of the Biodiversity Offset Strategy (BOS) to offset the impact of the proposal. The clearing, protection and re-establishment of WSW were included in the BOS certified by the relevant Government agency, the OEH under clause 14(3) of the Mining SEPP.

There is no proposal to rehabilitate WSW on previously mined lands as was the case at Tomago sands. It is our understanding that rehabilitation of the Tomago sand beds met its particular performance criteria and was signed off by Government. We further understand that the rehabilitated sand beds now form part of the National Park Estate.

The scientific papers presented by Dr Bell relate to rehabilitation of mined land in Queensland and have little relevance to re-establishment of vegetation on in-situ sands that have not been mined.

As can be seen in **Attachment 3**, the matters raised in the presentation by Dr Bell were previously raised and addressed.

Cumulative Impacts

Final Voids

The PAC has requested the DPE strengthen its policy and regulation in relation to the cumulative impacts of final voids. This is a matter for Government policy/regulation. We note however the applications for the proposals have been made under the policy/regulation that are currently in force and should be assessed accordingly.

The proposals provide for a reduction in the overall size and number of voids. This can only be achieved by using material from Warkworth Mine transported to Mount Thorley Mine to fill the Loders Pit void. The remaining final void at Warkworth Mine will be largely screened from view due to the surrounding landscape and extensive rehabilitation works.

The size of final void for the proposals was compared with the final void size for other mines in a letter from the proponent to DPE dated 10 February 2015 (and included in the DPE Assessment Report). Within the limitations of the available data, it is noted that while the strip ratio is similar between Warkworth Mine, the approved Mount Arthur Mine and those in Queensland, the final void surface area is smaller despite the void being deeper.

Air Quality

The PAC raised concerns in relation to cumulative air quality impacts of the proposal and provided reference to a submission about cumulative dust and health impacts in the Hunter Valley.

A cumulative air quality assessment was undertaken as part of the EIS by modelling emissions from the proposals in combination with other mines, including Bulga Coal Mine, Wambo Coal Mine, Hunter Valley Operations and Rix's Creek Coal Mine. The results of this modelling were compared against established criteria in Government policy/guidelines, including limits to protect health.

Importantly, the Mining SEPP provides non-discretionary standards for cumulative air quality under clause 12 AB(4):

Cumulative air quality level The development does not result in a cumulative annual average level greater than 30 µg/m³ of PM₁₀ for private dwellings.

The Mining SEPP PM₁₀ non-discretionary standard is also a criterion used in the Voluntary Land Acquisition and Mitigation (VLAM) Policy. The cumulative PM₁₀ criterion of 30µg/m³ is satisfied for all properties in Bulga village.

Particulate matter in the 2.5 (PM_{2.5}) micron size is widely used as an indicator for health effects. The predicted PM_{2.5} level in Bulga village is predicated at 0.25µg/m³, which is approximately 3% of National Environment Protection Measure goal (most stringent in the world) and 2.5% of World Health Organisation criteria.

Similar concerns in relation to cumulative impacts and health effects were raised during the public consultation of the EIS and considered in the Response to Submissions. These submissions and responses were considered in the DPE Assessment Report.

The PAC found in its Review Report that the proposal will not result in air quality impacts that do not comply with relevant air quality criteria. With respect to health, the Commission found that as far as practicable all possible measures will be taken to minimise exposure to particulate matter as a result of the proposal.

The PAC has recommended strengthening of conditions 17 to 19. This was a previous recommendation of the PAC Review Report (recommendation 15). The DPE have considered this recommendation in their Addendum Report (refer Section 2.4.2) and advised the conditions remain appropriate.

Noise

Although not specifically raised by the PAC, we note that a cumulative noise assessment was undertaken as part of the EIS. Similar to air quality, this was undertaken by modelling emissions from the proposals in combination with other mines, including Bulga Coal Mine, Wambo Coal Mine and Hunter Valley Operations South. The results of this modelling were compared against established criteria in Government policy/guidelines.

The Mining SEPP provides a non-discretionary standard for cumulative amenity noise levels under clause 12 AB (3):

Cumulative noise level The development does not result in a cumulative amenity noise level greater than the acceptable noise levels, as determined in accordance with Table 2.1 of the Industrial Noise Policy, for residences that are private dwellings.

The EIS identified that the night time amenity criteria of 40 dB(A) $L_{eq, 9\text{hour}}$ is satisfied for all properties in Bulga village.

Compliance Regime

The PAC requested details of the DPE's new compliance monitoring regime for the Hunter Valley. This is a broader matter for the DPE and not relevant to this proposal.

Regent Honeyeater

The PAC requested further information on the adequacy of the assessment of cumulative impacts on the regent honeyeater. An assessment of the potential impacts on the regent honeyeater was undertaken in the EIS in accordance with the the NSW Biodiversity Offset Policy for Major Projects and the cumulative effect of clearing Endangered Ecological Communities (habitat for the regent honeyeater) considered in the Response to Submissions. The BOS to offset the impact of the proposal, including regent honeyeater habitat, was certified by the relevant Government agency, the OEH under clause 14(3) of the Mining SEPP.

As can be seen in **Attachment 4**, the matters raised were previously raised and addressed.

Conclusion

The further information requested by the PAC does not appear to have a nexus with the scope of the second PAC review. The matters raised in the further information request have been previously raised and considered throughout the four prior submissions periods of the assessment process (five in total), which is at an advanced stage. The views of both supporters and opponents are well documented and available to the decision-makers.

Our assessment documents, including our EIS's and public submissions, have consistently identified that clause 12AA does not operate to make the significance of the resource the principle consideration of the matters contained within section 79C.

As outlined in our letter to the PAC dated 11 September 2015, and in previous correspondence to the PAC, clause 12AA was only relevant to consideration of the proposals under Part 3 of the Mining SEPP. That is, the significance of the resource becomes the principal consideration under Part 3 in respect of the matters to be considered under it. It was never the principal consideration under Section 79C.

We believe that our interpretation is consistent with the PAC's view of clause 12AA contained in several review reports.

For example, in the Stratford Coal Mine Modification, the PAC said: *'there appears to be a misperception in some sections of the community that the Mining SEPP makes economic considerations override the requirement to consider the public interest. This is not the case. It is true that the Mining SEPP requires consideration of one aspect of the project, the significance of the resource, with a strong focus on economic benefits. However, the SEPP does not and cannot remove the requirement to consider the public interest when evaluating the project under section 79C of the Act.'*

Therefore removal of clause 12AA does not change the merits of the proposal previously assessed under Section 79C of the EP&A Act in the DPE Assessment Report, the PAC Review Report and the DPE Addendum Report. These assessments found that under Section 79C of the EP&A Act:

- the benefits of the proposals outweigh the costs;
- the proposals are in the public interest; and
- the proposals can be approved.

Should you require any further information or clarification, please do not hesitate to contact Mark Nolan on 02 6575 5815 or the undersigned.

Yours sincerely



Anthony Russo
Manager – Project Approvals

T: 07 3625 4823

M: 0429 480 163

E: anthony.russo@riotinto.com

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Attachment 1	Aboriginal cultural heritage
Attachment 2	Social impact assessment
Attachment 3	Warkworth Sands Woodland
Attachment 4	Cumulative impacts
Attachment 5	Assessment process
Attachment 6	Aboriginal cultural heritage consultation summary
Attachment 7	Letter to Mr Franks dated 16 May 2014
Attachment 8	Response to Dr Maria Cotter's presentation – PAC hearing, 18 December 2014

Attachment 1
Aboriginal cultural heritage

Matter Raised	Reference where matter previously addressed
1. Adequacy of Aboriginal community consultation process	OEH, Warkworth Continuation Project (SSD-6464) Comments on EIS & Request for Additional Information, 8 August 2014, Appendix 1, pp-2-4. (OEH DOC 14/108967-01)
	DPE, State Significant Development Assessment Warkworth Continuation Project (SSD-6464), Secretary's Environmental Assessment Report, November 2014, section 5.6, pp. 60-63.
	Warkworth Continuation 2014 EIS, Volume 5, Appendix M, Aboriginal Cultural Heritage Study, Appendix 1, Aboriginal Community Consultation Undertaken for the Proposals.
2. Adequacy of Aboriginal cultural heritage assessment and potential impacts	OEH, Warkworth Continuation Project (SSD-6464) Comments on EIS & Request for Additional Information, 8 August 2014, Appendix 1, pp-2-4. (OEH DOC 14/108967-01)
	DPE, State Significant Development Assessment Warkworth Continuation Project (SSD-6464), Secretary's Environmental Assessment Report, November 2014, section 5.6, pp. 60-63.
	Warkworth Continuation 2014 EIS, Volume 5, Appendix M, Aboriginal Cultural Heritage Study, sections 3-7 .
	Warkworth Continuation 2014 EIS, Response to Submissions, Volume 1, 6.15, Aboriginal Cultural Heritage
3. Process by which members of the local Aboriginal community will be involved in the protection and restoration of cultural heritage	OEH, Warkworth Continuation Project (SSD-6464) Comments on EIS & Request for Additional Information, 8 August 2014, Appendix 1, pp-2-4. (OEH DOC 14/108967-01)
	Warkworth Continuation 2014 EIS, Volume 5, Appendix M, Aboriginal Cultural Heritage Study, sections 3 and 8.

Attachment 2
Social Impact Assessment

Matter raised	Reference where matter previously addressed
No risk rating or risk assessment of the social impacts	Section 5.3 of the environmental impact statement
Inadequate assessment of Bulga village as requested by Secretary's requirements	Previously addressed in: • Section 21.2 (pp 354) of the environmental impact statement • Section 2.4.1 and 2.4.2 (pp 6-7) of Appendix P (SIA) of the environmental impact statement • Section 6.7.10iv (pp 211) of the response to submissions • Section 6.7.8 (pp 206-207) of the response to submissions • Section 7.2.8i (pp 313) of the response to submissions • Section 6.7.6 (pp 203) of the response to submissions • Volume 2, Appendix G of the response to submissions - see Section 2.6, 2.8
No specifically quoted feedback and qualitative analysis of stakeholder engagement	Previously addressed in: • Section 7.2.8i (pp 313) of the response to submissions • Section 7.2.8ii (pp 317-319) and Table 7.3 of the response to submissions
Insufficient time period between issue of Secretary's requirements and finalisation of SIA	Previously addressed in: • Section 5.2 (pp 68) of the environmental impact statement • Section 7.2.8ii (pp 314) of the response to submissions
Inappropriate use of legal precedents	Previously addressed in: • Section 2.2 of Appendix P (SIA) of the environmental impact statement • Volume 2, Appendix G (response to Professor Albrecht review) of the response to submissions - specifically see Sections 2.1, 2.2, 2.5 • Section 7.2.8i (pp 314) of the response to submissions
Survey questionnaire should be included as an appendix	Provided in full in Volume 2, Appendix K of the response to submissions. Previously addressed in: • Section 7.2.8ii (pp 315) of the response to submissions • Section 6.7.10v (pp211-212) of the response to submissions • Section 6.7.9 (pp 208-209) of the response to submissions
Errors in employee residency data	Previously addressed in: • Section 6.7.10iii (pp 210) of the response to submissions • Section 7.2.8ii (pp 315-316) and Table 7.1 of the response to submissions
Changes in Rio Tinto community investment figures	Previously addressed in Section 7.2.8ii (pp 317) of the response to submissions
Changes in population growth of	Previously addressed in Section 7.2.8ii (pp 317) of the

Matter raised	Reference where matter previously addressed
Broke and Bulga	response to submissions
Inadequate consideration of social impacts:	Provided in full in Volume 2, Table E.1 of Appendix E of the response to submissions. This is an update to Table 5.4 of the SIA with an assessment of social impacts considering perceived impacts and the technical evidence consistent with the method described in the LEC judgment.
Noise	Previously addressed in: - Table 6.2 of Appendix F of the environmental impact statement - Table E.1 of Appendix E of the response to submissions - Section 7.2.1i (pp 257-261) of the response to submissions - Section 7.2.8ii (pp318-320) of the response to submissions
Community and family cohesion	Previously addressed in: - Table E.1 of Appendix E of the response to submissions - Section 6.7.4 (pp 201-202) of the response to submissions
Visual	Previously addressed in: - Table E.1 of Appendix E of the response to submissions - Section 7.2.8ii (pp318-319) of the response to submissions - Section 7.2.14 (pp 331) of the response to submissions
Loss of sense of place	Previously addressed in: - Table E.1 of Appendix E of the response to submissions - Section 6.7.7 (pp 205) of the response to submissions - Section 7.2.8ii (pp320) of the response to submissions
Education	Previously addressed in: - Section 21.4.2 (pp) of the environmental impact statement - Section 4.1.3iii (pp 37-38) of Appendix P (SIA) of the environmental impact statement - Table E.1 of Appendix E of the response to submissions - Section 7.2.1viii (pp276) of the response to submissions - Section 5.4.4 (pp 141) of the response to submissions
Health and wellbeing	Previously addressed in: - Section 4.1.3iv (pp 40-42) of Appendix P (SIA) of the environmental impact statement - Table E.1 of Appendix E of the response to submissions - Section 6.7.5 (pp 203) of the response to submissions

Matter raised	Reference where matter previously addressed
	• Section 7.2.8ii (pp320) of the response to submissions • Section 4.6 (pp 90-91) of the response to submissions • Section 6.5.4 (pp 184-185) of the response to submissions
Use of Stubbs property value analysis	Previously addressed in: • Section 6.7.2 (pp 197) of the response to submissions • Section 7.2.8i (pp 314) of the response to submissions • Section 7.2.9iii (pp 324) of the response to submissions • Section 7.2.11 (pp 326-328) of the response to submissions
Uncertainty of peak workforce numbers and its (overstated) effects on the I-O model	Previously addressed in: • Section 6.6.2iv and Table 6.3 (pp190-191) of the response to submissions • Section 6.6.2vi (pp 191-192) of the response to submissions • Section 6.6.4i (pp 194-195) of the response to submissions • Section 7.2.8ii (pp 315-316) and Table 7.1 of the response to submissions
Concerns regarding volunteering rates at MTW	Previously addressed in Section 7.2.8ii (pp 318) and Table 7.2 of the response to submissions
Insufficient management and mitigation measures proposed	Previously addressed in Section 7.2.8ii (pp 321) of the response to submissions
Over-estimation of Average Annual Wages and Salaries (approximately \$170,000) does not accurately reflect actual yearly disposable income	Previously addressed in Sections 3.5.4 and 3.5.5 (pp 18-19) and Table 3.1 of Appendix H of the response to submissions
Labour market assumptions do not provide for employees to be re-employed on similar wages either in the mining industry or within Rio Tinto's other operations	Previously addressed in: • Sections 7.2.9ii (pp 323-324) of the response to submissions • Sections 3.5.2 and 3.5.3 (pp 15 -17) of Appendix H of the response to submissions
Assessment does not include requisite workforce modelling to adequately assess variability of workforce and associated impacts over life of project	Previously addressed in: • Section 7.2.9ii (pp 323) of the response to submissions • Section 3.5 (pp14-19) of Appendix H of the response to submissions

Attachment 3

Warkworth Sands Woodland

Matter raised	Reference where matter previously addressed
Current status of WSW in State, Commonwealth and international listings	Originally raised in BMPA submission to the Warkworth Continuation 2014 EIS Previously addressed in: • Section 7.2.5iii (pp 295-296) of the response to submissions • Volume 2, Appendix L of the response to submissions - Offset strategy certified as adequate by OEH under clause 14(3) of the State Environment Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007:
Approach to the rehabilitation of WSW	Previously addressed in: • Section 7.2.4 of Appendix H (pp 7.14) of the environmental impact statement • Section 7.2.5x (pp 300-302) of the response to submissions • Section 2.5.3 of the Department of Planning and Environment's Warkworth Assessment Report Addendum, May 2015. • Volume 2, Appendix L of the response to submissions - Offset strategy certified as adequate by OEH under clause 14(3) of the State Environment Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007:
Dr Stephen Bell – regeneration results in development of 'novel ecosystems'	Originally raised in BMPA submission to the Warkworth Continuation 2014 EIS. Previously addressed in: • Volume 2, Appendix J Section 4 of the response to submissions • Volume 2, Appendix L of the response to submissions - Offset strategy certified as adequate by OEH under clause 14(3) of the State Environment Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007:
Appropriate amount of the conservation bond in the proposed conditions of consent	Previously addressed in: • Section 2.4.5 (pp 43) Biodiversity Offsets Strategy (c) Implementation Bond of the response to submissions • Condition 37 of the Department of Planning and Environment's Warkworth Assessment Report Addendum, May 2015 - Attachment I – Recommended Conditions of Consent • Section 2.5.3 of the Department of Planning and Environment's Warkworth Assessment Report Addendum, May 2015

Attachment 4
Cumulative Impacts

Matter raised	Reference where matter previously addressed
Cumulative impacts of final void	• Section 16.3.2viii (groundwater), 23.2.3 (final void) EIS • Section 4.8.2, 6.3.3(ii), 6.7.8, 6.11.4, 6.13.3, 7.2.1 xv, 7.2.4i, 7.2.4vi RTS • Section 5.10, Table 15 DPE Assessment Report • Section 5.7 PAC Review Report • Section 4.5 Response to PAC Review Report • Section 2.6 DPE Addendum Report
Cumulative air quality assessment	• Section 11.3.1(ii) EIS and Section 5.1.2, Vol 2 EIS • Section 4.3.2(ii), 6.5.2, 6.5.3, 6.5.5, 7.2.1vi of RTS • Section 5.3 DPE Assessment Report • Section 5.5 PAC Review Report • Section 2.4.2 DPE Addendum Report
Health Effects	• Section 11.2.2(i) and 11.3.2(vi) EIS and Section 12, Vol 2 EIS • Section 4.6.1, 6.5.4, 7.2.3 of RTS • Section 5.3 DPE Assessment Report • Section 5.5 PAC Review Report • Section 2.4.1 DPE Addendum Report
Regent Honeyeater	• Section 5.4.2 (pp 5.17) of Appendix H of the environmental impact statement - Impacts to fauna species – discusses regional impacts. • Volume 3, Appendix F (pp F.1-F.52) of the environmental impact statement

Attachment 5
Assessment Process

2014	J	Environmental Impact Statement (EIS)
	J	EIS public comment period (25/6-6/8)
	A	
	S	
	O	
	N	Response to Submissions DPE Environmental Assessment Report Minister's request for PAC review, public hearing and report by 20/2/15.
	D	PAC Review: submissions by 11/12/15; hearing on 18&19/12/14.
2015	J	
	F	
	M	PAC Review Report. Response to PAC Review.
	A	
	M	DPE Addendum Report.
	J	PAC Determination: submissions by 26/6/15, public meeting 30/6/15 & 1/7/15.
	J	PAC Determination: additional submissions on Mining SEPP amendment by 31/7.
	A	Minister's request for second PAC review, public hearing and report by 21/9/15.
	S	PAC Second Review: submissions by 8/9/15, public meeting 7&8/9/15. PAC request for additional information 23/9/15.

Highlight denotes public submission periods.

Attachment 6

Aboriginal cultural heritage consultation summary

Consultation Activity	Letter & Information Sent	Notice Advertised	Date of Consultation	Warkworth	Mount Thorley Operations	RTCA / Consultants and RAPs in Attendance or non-attending RAP feedback
CHWG Meeting	24 June 2014	25–27 June 2014	10 July 2014	<u>Warkworth Continuation 2014 proposal (DP&E EP&A, OEH ACHCR 2010)</u> Discussion & review of long term approval proposal for Warkworth Mine including; scope of proposal, Aboriginal cultural heritage impact assessment & proposed management measures Discussion about EIS public exhibition period commencing 25th June 2014. Discussion about site visit held on 29 April 2014 to see the proposed conservation areas and the impact & non-impact areas of the two Proposals.	<u>Mount Thorley Operations 2014 proposal (DP&E, EP&A OEH ACHCR 2010)</u> Discussion & review of long term approval proposal for Mount Thorley Mine including; scope of proposal, Aboriginal cultural heritage impact assessment & proposed management measures Discussion about EIS public exhibition period commencing 25th June 2014 Discussion about site visit held on 29 April 2014 to see the proposed conservation areas and the impact & non-impact areas of the two Proposals.	- Joel Deacon – RTCA Specialist Cultural Heritage - David Cameron – RTCA Manager Cultural Heritage - Georgia Bennett – RTCA Advisor Cultural Heritage - Vicky Slater - Kawul Cultural Services - Suzie Worth – Wanaruah Local Aboriginal Lands Council - Rhonda Ward - Ungooroo Cultural & Community Services - Rhonda Griffiths – Hunter Valley Aboriginal Corporation - Des Hickey – Wattaka Wonnarua Cultural Consultants Apologies: - Arthur Fletcher – Wonn 1 - Tracey Skene – Culturally Aware - Maree Waugh – Wallangan Cultural Services - Terry Matthews - Breeza Plains Culture & Heritage
CHWG Meeting	7 Oct 2014	8 -10 Oct 2014	30 Oct 2014	<u>Warkworth Continuation 2014 proposal (DP&E EP&A, OEH ACHCR 2010)</u> Discussion & review of	<u>Mount Thorley Operations 2014 proposal (DP&E, EP&A OEH ACHCR 2010)</u> Discussion & review of	- Joel Deacon – RTCA Specialist Cultural Heritage - David Cameron – RTCA Manager Cultural Heritage - Georgia Bennett – RTCA Advisor Cultural Heritage - Kylie Devine - RTCA Community

				long term approval proposal for Warkworth Mine including; scope of proposal, Aboriginal cultural heritage impact assessment & proposed management measures Discussion about additional areas being added to the Conservation Areas	long term approval proposal for Warkworth Mine including; scope of proposal, Aboriginal cultural heritage impact assessment & proposed management measures Discussion about the addition of the Loder Creek Conservation Area and the cultural heritage survey done in this area	Relations Officer • Arthur Fletcher – Wonn 1 • Noel Downs – Wanaruah Local Aboriginal Lands Council • Rhoda Perry – Upper Hunter Wonnarua Council Incorporated • Deidre Perkins – Divine Diggers • Gary Perkins - Divine Diggers • Rhonda Ward -Ungooroo Cultural & Community Services • Rhonda Griffiths – Hunter Valley Aboriginal Corporation Apologies: • Clifford Johnson • Deslee Matthews - Deslee Talbot Consultant • Suzie Worth- WLALC • Matthews, Hickey, French, Johnson, Talbot and Saunders families
CHWG Meeting	11 May 2015	13-15 May 2015	4 June 2015	<u>Warkworth Continuation 2014 proposal (DP&E EP&A, OEH ACHCR 2010)</u> Discussion & review of long term approval proposal for Warkworth Mine including; scope of proposal, Aboriginal cultural heritage impact assessment & proposed management measures	<u>Mount Thorley Operations 2014 proposal (DP&E, EP&A OEH ACHCR 2010)</u> Discussion & review of long term approval proposal for Mount Thorley Mine including; scope of proposal, Aboriginal cultural heritage impact assessment & proposed management measures	• Joel Deacon – RTCA Specialist Cultural Heritage • David Cameron - RTCA Manager Cultural Heritage • Georgia Bennett – RTCA Advisor Cultural Heritage • Arthur Fletcher – Wonn 1 • Noel Downs – Wanaruah Local Aboriginal Lands Council • Rhonda Griffiths – Hunter Valley Aboriginal Corporation • Allen Paget – Ungooroo Aboriginal Corporation • Luke Hickey – WTC • Pansy Hickey – WTC

				Discussion about the Public Hearing and the draft PAC consent conditions	Discussion about the Public Hearing and the draft PAC consent conditions	• Coral Williams – Warrabinga Native Title Claimants Aboriginal Corporation • Suzie Worth- WLALC Apologies: • Kathie Kinchela - Yinarr Cultural Services • Maree Waugh - Wallangan Cultural Services • Tracey Skene - Culturally Aware
CHWG Meeting	10 Aug 2015	12-14 Aug 2015	3 Sept 2015	<u>Warkworth Continuation 2014 proposal (DP&E, EP&A, OEH ACHCR 2010)</u> Discussion & review of long term approval proposal for Warkworth Mine including; scope of proposal, Aboriginal cultural heritage impact assessment & proposed management measures Discussion about PAC and consent conditions	<u>Mount Thorley Operations 2014 proposal (DP&E, EP&A OEH ACHCR 2010)</u> Discussion & review of long term approval proposal for Mount Thorley Mine including; scope of proposal, Aboriginal cultural heritage impact assessment & proposed management measures Discussion about PAC and consent conditions	• Joel Deacon – RTCA Specialist Cultural Heritage • David Cameron - RTCA Manager Cultural Heritage • Georgia Bennett – RTCA Advisor Cultural Heritage • Vicki Lee Claydon –RTCA Aboriginal Relations Assistant • Scott L'Oste Brown – CQCHM • Arthur Fletcher – Wonn 1 • Noel Downs – Wanaruah Local Aboriginal Lands Council • Rhonda Griffiths – Hunter Valley Aboriginal Corporation • Rhonda Ward – Ungooroo Cultural & Community Services • Des Hickey – Wattaka Wonnarua Cultural Consultants • Jill Green – Lower Hunter Aboriginal Corporation Apologies • Suzie Worth- WLALC

Attachment 7

Letter to Mr Franks dated 16 May 2014

Rio Tinto Coal Australia Pty Limited
GPO Box 207
Brisbane Queensland 4001
Australia
T +61 (0) 7 3625 3000
F +61 (0) 7 3625 3001

Private and confidential

**Mr Scott Franks
Native Title & Environmental Services Manager
TOCOMWALL PTY LTD
PO Box 76
CARINGBAH NSW 1495**

16 May 2014

Our reference: Bulga bora ground information (AHIMS 37-6-0056))
Your reference

Dear Scott,

I am writing to you to follow up on our phone conversation of 6th April 2014 during which you advised that you had additional information on the location of the Bulga bora ground. In the call you made mention of a map in your possession that you advised had information pertaining to the location of the bora ground. I note that I requested you provide Coal & Allied with the opportunity to review this new information to inform the ongoing management of the bora ground site.

We discussed holding a meeting to review your information and I agreed to provide reasonable resources to hold the meeting with yourself and Dr Maria Cotter (and to invite Roger Mehr from OEH to attend) in either Sydney, Newcastle or Brisbane at a date convenient to you. Some time has now passed since the call and I wanted to confirm if you would still like to meet to discuss the information you spoke about. Alternatively, I would welcome a copy of any pertinent information and explanatory notes you might care to forward to me.

If you would like to either call (0407 649 205) or email me with a proposed date and location (and an estimate of reasonable costs for you and Dr Cotter to attend) I can make the necessary arrangements.

Yours sincerely



Dr David Cameron
Manager Heritage & Aboriginal Relations
Health, Safety, Environment & Communities, Coal Australia

Rio Tinto
Level 25 – 123 Albert Street
Brisbane Queensland Australia
GPO BOX 391 Brisbane QLD 4001

T: +61 (0) 7 3625 5222 M: +61 (0) 407 649 205 F: +61 (0) 7 33625
3001david.cameron@riotinto.com <http://www.riotintocoalaustralia.com.au>

Attachment 8

Response to Dr Maria Cotter's presentation – PAC hearing, 18 December 2014

Proponent's Response to the Plains Clans of the Wonnarua People submissions on the location of the Bulga Bora Ground provided to the Warkworth Continuation PAC Hearing 18 December 2014

(Prepared 26th September 2015)

Dr Maria Cotter – geo-archaeologist Tocumwall Pty Ltd for the Plains Clans of the Wonnarua People presentation to the PAC during EDO session 18 December 2014

In her presentation to the PAC Dr Cotter made a number of claims questioning the location of the Bulga Bora Ground (Office of Environment and Heritage Aboriginal Heritage Information Management System site #37-6-0056) including:

- a. The Warkworth Continuation 2014 EIS relies on information derived from secondary sources and not primary sources and lacks the detail required to support the finding that the probable location of this significant Aboriginal cultural heritage site has been satisfactorily determined as being site #37-6-0056.
- b. The bora ground area was photographed in 1918 and that the current vegetation at site #37-6-0056 is different to that shown in the 1918 images.
- c. Cotter visited site #37-6-0056 in 2011 and asserts that the Bulga Bora Ground was not there.
- d. Cotter questioned on what basis does the proponent refer to the area as being called the Bulga Bora Ground.

(a) The Warkworth Continuation 2014 EIS relies on information derived from secondary sources and not primary sources and lacks the detail required to support the finding that the probable location of this significant Aboriginal cultural heritage site has been satisfactorily determined as being site #37-6-0056.

The location of the Bulga Bora Ground is comprehensively addressed in Section 3.6 of the Warkworth Continuation 2014 EIS, Volume 5, Appendix M, Aboriginal Cultural Heritage Study. The location as referred to in the Warkworth Continuation 2014 EIS is that as recorded in the OEH Aboriginal Heritage Information Management System (AHIMS) sites database as site #37-6-0056 which is described as being the locality of Aboriginal carved trees with a ceremonial ground originally recorded by Australian Museum ethnologist W.W. Thorpe in 1918. The key primary sources used to determine the locality of the Bulga Bora Ground are the sketch plan of the site and notes made by Thorpe during his inspection of the site in 1918 and the glass plate photographs taken during that inspection by a museum photographer. The sketch plan clearly indicates the ceremonial carved tree site #37-6-0056 is located close to the Wollombi Brook on the eastern side of a 'stock route' just north of where the stock route turns 90 degrees from west to north. There is only one location along the section of the Wollombi Brook between Bulga and Warkworth village where a stock route crosses the Brook from west to east and then turns 90 degrees to run north. This is the section of stock route located along the western boundary of what was then Lot 17 (now Lot 2/725566), with site #37-6-0056 being situated within Lot 17.

Substantial research efforts have been made to accurately determine the location of this site. Based on the exhaustive work of Dr Helen Brayshaw and subsequent research undertaken by the

proponent and others, the proponent contends that the site's location is site #37-6-0056 as recorded in the AHIMS database. Furthermore, it is noted that in its submission to the Department (8 August 2014, p.2) the OEH acknowledges that a significant portion of the Bulga Bora Ground (the eastern ceremonial carved trees site #37-6-0056) is located within the Wollombi Brook Aboriginal Cultural Heritage Conservation Area for the Warkworth Continuation proposal and accepts that this locality is the correct location for the site. This location has also been reviewed and confirmed by the Registered Aboriginal Parties (RAP) on the basis of available information and from a number of visits to the area undertaken by RAP representatives in 2009 and as recently as January 2014. It must also be noted that at the invitation of Coal & Allied the applicants for the PCWP group, Mr Scott Franks and Mr Robert Lester, also inspected the location of site #37-6-0056 in 2011 and they acknowledged the area as being the correct location of the scarred trees ceremonial ground.

The proponent has consulted directly with the PCWP on this very matter at the commencement of the Warkworth Continuation EIS consultation process. The proponent had a phone conversation with Mr Franks of 6th April 2014 during which he advised that he had additional information on the location of the Bulga bora ground. During the call Mr Franks made mention of a map in his possession that he advised had information pertaining to the location of the bora ground. The proponent requested that Mr Franks provide the proponent with the opportunity to review this new information to inform the ongoing management of the bora ground site. The proponent and Mr Franks discussed holding a meeting to review this information and the proponent agreed to provide reasonable resources to assist Mr Franks and archaeologist Dr Maria Cotter to attend a meeting with the proponent and OEH in Sydney, Newcastle or Brisbane. Mr Franks was to advise the proponent of a suitable date so that the proponent could confirm the date and venue and arrange the meeting.

The proponent then wrote to Mr Franks on 16 May 2014 to reiterate the offer to arrange a meeting to discuss this matter confidentially, or alternatively, for Mr Franks to provide any pertinent information and explanatory notes directly to the proponent. The proponent received no further response from Mr Franks on this matter. Mr Franks, Mr Lester and Dr Cotter have to date chosen not provided to the proponent with any further information, documentation or other evidence to substantiate their claims for alternative locations for the Bulga Bora Ground.

(b) The bora ground area was photographed in 1918 and that the current vegetation at site #37-6-0056 is different to that shown in the 1918 images.

With respect to Dr Cotter comments on the landform and vegetation associated with site 37-6-0056 it is most pertinent to refer to the description of the area provided by ethnologist W.W. Thorpe who investigated the site in 1918. The carved tree ceremonial area was noted by Thorpe as being located on a 'slight eminence or plateau' on ground that was 'exceptionally level and sandy' and the carved trees were 'red gum (*E. tereticornis*) and apple' (*Angophora floribunda*) species. From Thorpe's description of the landform, viewing the images taken of the site in 1918 (from which several tree species can be determined), and his sketch plan of the area indicating the site's position in relation to the stock route and the Wollombi Brook, it is clear that the area he was describing was a patch of Warkworth Sands Woodland (WSW). The landforms and vegetation communities of the Warkworth area are well understood and accurately mapped.

Site 37-6-0056 is located on a portion of WSW situated in close proximity to the Wollombi Brook and adjacent to the bend in the stock route close to the Wollombi Brook crossing. It is clear from Thorpe's description of the vegetation and from the 1918 photographs that red gum (*E. tereticornis*), apple (*Angophora floribunda*), black cypress pine (*Callitris endlicheri*), bracken fern (*Pteridium esculentum*) and blady grass (*Imperata cylindrical*) are all present and are, collectively, all signature species associated with WSW. The carved trees photographed in 1918 are no longer extant either due to bush fires recorded as having occurred through the area in the early and mid-20th century and/or as a result of land clearing that occurred prior to Warkworth Mine assuming ownership of this land. The vegetation has thickened since the photographs were taken in 1918, this would largely have occurred due to changes in grazing and burning regimes over time which has afforded the WSW vegetation species the opportunity to regenerate over this portion of the sand landform.

(c) Cotter claims to have visited site #37-6-0056 in 2011 and asserts that the Bulga Bora Ground was not present at that location.

To Coal & Allied's knowledge Dr Cotter has not sought nor been given permission to visit site #37-6-0056 which is located on land owned by Coal & Allied. It is noted, however, that in April 2011 at the invitation of Coal & Allied the applicants for the PCWP group, Mr Scott Franks and Mr Robert Lester, did inspect the location of site #37-6-0056 in 2011 and at that time acknowledged the area as being the correct location for the scarred trees ceremonial ground as recorded in AHIMS as site #37-6-0056 and as reported by W.W. Thorpe in 1918. Mr Franks and Mr Lester also noted additional cultural features that were described in a journal or diary of a local resident who had visited the area in the 19th century and that those features were situated further to the north-west on lands owned by Wambo Coal.

(d) On what basis does the proponent refer to the area as being called the Bulga Bora Ground?

In Australian Museum ethnologist W.W. Thorpe's note to Museum Director and Curator Robert Etheridge (dated 18 May 1918), Thorpe provides a brief account of his visit to what he refers to as a 'Bora Ground'.

The site is referred to as the 'Bora Ground at Bulga' and identified as site #37-6-0056 in the Wannaruah Local Aboriginal Land Council's application for an interim protection order for the Bulga Bora Ground under section 9 of the Commonwealth *Aboriginal & Torres Strait Islander Heritage Protection Act 1984* application lodged in December 2003.

In the more than ten years of consultation with Aboriginal community representatives, including the consultation process involving 82 Registered Aboriginal Parties for the Warkworth Continuation 2014 proposal, no one has objected to or suggested an alternative name for the site other than the Bulga Bora Ground.

The proponent refers to the site by this name as it has been described as such in these sources and others, including correspondence and documents submitted by Dr Cotter, Mr Franks and Mr Lester.

Dr Cotter submitted an Expert Witness Report (EWR) in support of her presentation to the PAC on 18 December 2014. In this report Dr Cotter revised her observations on the location of the Bulga Bora Ground from the submission she prepared for Tocumwall on behalf of the PCWP dated 6 August 2014 in response to the public exhibition of the Warkworth Continuation EIS.

In her original submission on behalf of the PCWP dated 6 August 2014 Cotter noted that:

‘From my observations it seems that the Bulga Bora ground was likely situated somewhat north of its current supposed location. This is further supported by (a) the concentration of a broader range of site types including grinding grooves and scarred trees in this more northerly area; and (b) a vegetation regime more in keeping with the ‘red gum - apple box’ community described for the site in the original reportage of it.’

In Dr Cotter’s subsequent submission the PAC on 18 December, she noted she was in error and that the bora ground:

‘... was likely situated somewhat south of its current supposed location. This is further supported by (a) the concentration of a broader range of site types including grinding grooves and scarred trees in this more southerly area; and (b) a vegetation regime more in keeping with the ‘red gum - apple box’ community described for the site in the original reportage of it.’ (Cotter, EWR, p.13).

In section 52 of the EWR Cotter further provides her observations on Thorpe’s sketch map plan of the bora ground location in relation to various Parish maps. Here Cotter again changes her interpretation of its location where she asserts that the evidence ‘...provides for the possible alternate interpretation that the BBG was likely situated approximately 2 miles east of the property Meera somewhere to the east of Wallaby Scrub Road.’ (Cotter, EWR, pp-36-37).

In interpreting her evidence, Dr Cotter has separately concluded that the bora ground could have been located somewhat to the north of AHIMS #37-6-0056 site, or somewhere to the south of the site or finally somewhere to the east of Wallaby Scrub Road and within the Warkworth Continuation development area.

The proponent contends that Dr Cotter’s interpretations are in fact unreliable and do not align in any way with the available evidence as provided by Dr Cotter. The following evidence and observations are provided to demonstrate how Dr Cotter’s interpretations are incorrect.

1. *Copy of Minute Paper signed by WW Thorpe and written dated 13 April 1918 in which he describes a visit by Mr A.N. Eather to the Australian Museum. This Minute Paper is attached to Cotter’s report as Appendix 1.*

Thorpe notes that Mr Eather visited him at the Museum and told him the bora ground was located 17 miles (approx. 26.7kms) from Singleton and 2 miles (approx. 3.2km) from his home at Meera near Bulga on the western side of Wollombi Brook. The distances provided by Mr Eather were either in reference to:

- a) The distance 'as the crow flies', that is in a direct straight line from point A to point B; or
- b) The distance as travelled overland to get to the locality.

With respect to the straight line distance from Singleton (rail station) to the bora ground site, a distance of 17 miles (approx. 26.7kms) would locate the bora ground about 6 miles (10 kms) west of Wollombi Brook, the village of Bulga and the western boundary of the Warkworth Mine.

With respect to the straight line distance of 2 miles (3.2 kms) from Mr Eather's home at Meera, this distance does not intersect with any location within a radius of 17 miles from Singleton as the old Meera homestead site is located no more than 10 miles (16 kms) in a direct line from Singleton.

The overland route from Meera to the #37-6-0056 bora ground site via road and stock route is about 2.2 miles (3.6 kms) or 1.8 miles (2.8 kms) in a direct line. The overland route from Meera to Cotter's alternative site east of Wallaby Scrub Road via road is about 3.6 miles (5.8 kms) or 2 miles (3.2 kms) in a direct line.

Noting all of the above it is obvious that the distances described by Mr Eather were for the distances to be travelled overland via the roads and stock routes of the time (1918) to reach the bora ground location from Singleton and from his home at Meera. It is important to note that Thorpe advised Eather he and his party would be travelling to Singleton by train and then on to Eather's property by motor vehicle.

A comparison of the overland distances to both the AHIMS location #37-6-0056 and Cotter's alternative locality demonstrates that Cotter's location is not the bora ground site locality described by Eather and visited by Thorpe.

- AHIMS location #37-6-0056: overland distance approx. 16.7 miles (26.7kms) from Singleton railway station and 2 miles (3.2km) north from Meera homestead – this locality aligns very closely with Eather's description of 17 miles and 2 miles respectively.
- Cotter's east of Wallaby Scrub Road location: overland distance approx. 10.9 miles (17.5kms) from Singleton railway and 3.6 miles (5.8kms) east from Meera homestead – this locality clearly does not align with the locality Mr Eather described.

A map is appended to the end of this report showing these locations in relation to each other, Singleton, Bulga village, and Wollombi Brook and the Warkworth Continuation proposal area.

2. *Australian Museum ethnologist W.W. Thorpe's description of the topography, soil and vegetation of the bora ground site*

Thorpe notes a couple of key observations on the topography, soils and vegetation associated with the Bulga Bore Ground locality.

- The carved trees were 'red gum [e.g. *E. tereticornis*] and apple [*Angophora floribunda*]'.
- The site was 'open forest country on a slight eminence or plateau'.
- The 'ground is exceptionally level and sandy'.
- The excavation of the sand mound 'bottomed on sandstone at a depth of about 4 feet'.

Cotter claims the AHIMS #37-6-0056 site location does not 'fit' Thorpe's first hand description and argues that rather than being located on the Warkworth Sand Woodland landform WSW landform it was located in association with Hunter Lowland Red Gum Forest and Wollombi Alluvial Red Gum Apple Forest. A review of Cotter's alternative locality east of Wallaby Scrub Road against the topographic contours, soils and vegetation mapping demonstrates and Thorpe's description demonstrates the following.

- Neither the Hunter Lowland Red Gum Forest or Wollombi Alluvial Red Gum Apple Forest (or WSW) are present at (or anywhere near) the east side of Wallaby Scrub Road location as indicated by Cotter. The vegetation community at Cotter's posited locality is predominantly Central Hunter Grey Box – Ironbark Woodland (and derived grassland), where neither *E. tereticornis* or *Angophora floribunda* are present.
- The topography of the east of Wallaby Scrub Road locality shows that is not situated on 'a slight eminence or plateau'.
- The locality is not 'exceptionally level and sandy' as it is dominated by brown duplex loam and red duplex loam and has no sand present (and certainly not to a depth of 4 feet).

Conversely, the AHIMS #37-6-0056 site corresponds very closely with Thorpe's description as follows:

- The site is located within a section of WSW where 'red gum [e.g. *E. tereticornis*] and apple [*Angophora floribunda*]' are co-dominant.
- The site was 'open forest country' in 1918 (as is evidenced in the 1918 photographs) and is topographically situated 'on a slight eminence or plateau' just above Wollombi Brook.
- The 'ground' at the site is 'exceptionally level and sandy'.
- The sands in this are relatively shallow by comparison with sand dunes in the local area (located north and north-east of the site) and consistent with Thorpe's description of the sand running to a 'depth of about 4 feet' to the sandstone bedrock as recorded during their excavation of the sand mound feature.

In carefully assessing and considering the combined locational, topographical, vegetation, soils and other descriptors provided by Mr Eather and Mr Thorpe it is clear that Cotter's alternative locality in the east of Wallaby Scrub Road is not plausible and is incorrect as it does not:

- a) correspond at all with Thorpe's description and sketch plan;
- b) include the vegetation communities and soils Cotter cites in her own interpretation;
- c) have WSW associated with the site as is clearly described by Thorpe and shown in the 1918 photographs; and
- d) come close to aligning with the geographic locality as described by Mr Eather as being 17 miles from Singleton and 2 miles from his home at Meera.

Based on these factors alone it is clearly demonstrable that Cotter's interpretation is fundamentally flawed and incorrect and that the locality of site #37-6-0056 is indeed the location of the Bulga Bora Ground as investigated and described by Thorpe in 1918. As is detailed in the EIS this locality is not located within the Warkworth Continuation development footprint but rather within the Wollombi Brook Aboriginal Cultural Heritage Conservation Area where it will be protected from development in perpetuity.

