MOUNT PLEASANT PROJECT MODIFICATION

Response to Submissions

Prepared for Coal & Allied Operations Pty Limited | December 2010

COAL & ALLIED

Managed by Rio Tinto Coal Australia

Mount Pleasant Project Modification

Final

Report RP1 | Prepared for Coal & Allied Operations Pty Limited | 17 December 2010

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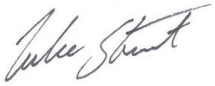
Signature		Signature	
Date	17 December 2010	Date	17 December 2010

Document Control

Version	Date	Prepared by	Reviewed by
1	1 December 2010	Duncan Peake Luke Stewart	Paul Mitchell
2	9 December 2010	Duncan Peake	Luke Stewart
3	17 December 2010	Duncan Peake	Luke Stewart

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1 Introduction

1.1 Background

Coal & Allied Operations Pty Limited's (the Proponent) Mount Pleasant Project is located approximately four kilometres north-west of Muswellbrook in the Upper Hunter Valley of New South Wales (NSW). A development consent for the Mount Pleasant Project was granted on 22 December 1999 which provided for the extraction of approximately 197 million tonnes of run of mine (ROM) coal over a 21 year period.

Since the grant of the consent, the Proponent has progressively assessed the pre-feasibility and feasibility of the project. These reviews have identified a small number of modifications to the project. For these changes to be considered in the project development, they require approval under the NSW *Environmental Planning and Assessment Act 1979* (EP&A Act). Such approval is being sought by way of modification to the development consent, in accordance with section 75W of the EP&A Act. An Environmental Assessment (EA) was prepared and lodged in support of the application to modify the development consent.

1.2 The proposed modifications

The proposed modifications comprise:

- provision of an "envelope" for siting the mine infrastructure, in place of the specific locations detailed in the Environmental Impact Statement (EIS) that supported the original development application. This will enable the detailed designs for the facilities to be more responsive to site-specific topographic and other environmental conditions during the detailed design and construction of the facilities;

- provision of an optional conveyor/service corridor between the Mount Pleasant Project area and the adjoining Bengalla Mine to the south as an alternative to the approved rail facilities. Only one of the options, i.e. conveyor/service corridor or the rail facilities, would be constructed and this choice is yet to be made but it would provide greater flexibility in the detailed design phase. The conveyor/service corridor is located within an envelope to provide flexibility during detailed design;

- extension of the remaining consent life by approximately two years until 31 December 2022; and

- amendment to development consent Condition 6.4 to include Department of Environment, Climate Change and Water (DECCW) industrial Noise Policy (INP) derived criteria, and Condition 7.1(3), to include the optional conveyor/service corridor.

In addition, the currently approved development consent boundary would require modification to include the additional areas for the above changes.

1.3 Overview of the submissions

The EA for the proposed modification was exhibited from 8 October to 29 October 2010. As of 9 December 2010, a total of 22 submissions have been received, including 14 from the community, four from special interest groups and four from government agencies.

The submissions have been categorised into respondent type, being community, special interest groups and government. The matters raised in each submission were categorised into technical disciplines then summarised and tabulated.

The majority of the submissions from the community and special interest groups raised opposition to the mine and the proposed modifications and raised matters that are outlined and considered in this report. One special interest group, the Construction, Forestry, Mining and Energy Union (CFMEU) supported the project and the proposed mitigation measures to minimise predicted environmental impacts resulting from the proposed modifications. One of the government agencies, Muswellbrook Shire Council (MSC) advised that they did not support the application unless proposed conditions could be met. Another government agency, the Department of Environment, Climate Change and Water (DECCW) advised that they were unable to recommend conditions of approval under the matters raised in its submission until these were addressed.

1.4 Purpose of the report

This report has been prepared in accordance with section 75H(6) of the EP&A Act and responds to matters raised in the submissions. The submissions and responses will both be considered by the Minister for Planning in determining the application to modify the approved project.

2 Summary of submissions and responses

2.1 Submissions received

Following public exhibition of the EA, a total of 22 submissions were received as follows:

- fourteen members of the community;
- the CFMEU (Mining and Energy Division) Northern District Branch;
- Anglo American Metallurgical Coal Pty Ltd;
- Balmoral Park Racing;
- Scone Equine Hospital;
- the DECCW;
- Industry and Investment NSW (DII);
- the DECCW – NSW Office of Water (NOW); and
- the MSC.

2.2 Matters raised

The submissions from the DECCW, NOW, MSC and members of the general public raised specific matters relating to the proposed modification. Matters that were raised in more than one submission were considered to be key matters. On this basis, the key matters identified comprise:

- approach to the assessment; and
- cumulative impacts.

Responses to the key matters are provided in Section 2.3. A summary of the matters raised and associated responses are provided in Table 2.1.

2.3 Response to key matters

2.3.1 Approach to assessment

i Proposed modification approach

The application to modify the development consent under section 75W is for a number of minor changes to the currently approved Mount Pleasant Project. As outlined in Section 1.1, these modifications would enable greater responsiveness to actual site conditions in the detailed design phase and accordingly the modifications to the development consent are being sought to enable this flexibility.

The approach to the assessment for the proposed changes to the development consent was to compare their potential impacts with those from the approved development assuming plausible “worst case” conditions in both cases. Because the works would be minor and areas affected small, the environmental

risks are generally low with the exception of noise, which is rated as moderate. A low rating was determined for ecology, air quality, Aboriginal cultural heritage, visual amenity, surface water, soils and land capability, socio-economic matters, traffic and rail transport, groundwater and European heritage.

ii Progress in assessments since 1999

As stated in the EA, since the development consent was granted in 1999, the Proponent has been regularly monitoring a range of environmental aspects on and around the Mount Pleasant Project area, including noise, air quality, surface water and groundwater. Upon recommencement of construction activities, the existing monitoring programmes will be supplemented with real-time monitoring (as required by the development consent).

Several submissions have raised the matter that since the development consent was granted, advances in technology and scientific methods have enabled a better understanding of the interactions between proposed developments and the environment. The Proponent acknowledges that there have been some advances in EA techniques. The existing development consent provides for a suite of thirteen comprehensive environmental management plans that are required to be prepared in consultation with regulators prior to substantive construction. The environmental management plans will incorporate monitoring, corrective action and management review to ensure environmental management of the Mount Pleasant Project remains at its highest. Additionally, the current regulatory framework, in which the Mount Pleasant Project operates, also allows for such advances in technology and scientific methods to be implemented into the development consents of operations, such as the Mount Pleasant Project, to monitor and manage these interactions through the update of consent conditions and environment protection licences.

An example of how such advances can be incorporated into the management of the Mount Pleasant Project is with air quality. The consent requires dispersion modelling and monitoring of PM_{10} and $PM_{2.5}$ sized dust particles to be undertaken in a manner which is consistent with the requirements of regional air quality management initiatives coordinated by the regulatory agencies. In relation to $PM_{2.5}$, the Proponent is an active participant in the Upper Hunter Regional Air Quality Monitoring Network and has made financial contributions to the monitoring network that includes $PM_{2.5}$ monitors in Muswellbrook and Singleton. The Air Quality Management Plan required by Condition 6.1 of the consent mandates that the Proponent provides for reactive controls including operational measures, that is real-time monitoring. The Upper Hunter Regional Air Quality Monitoring Network will provide $PM_{2.5}$ monitoring regime sufficient data to enable analysis of the ongoing environmental contributions from the Mount Pleasant Project and impacts to surrounding areas. The inclusion of real-time monitoring and consideration of $PM_{2.5}$ is consistent with current expectations of both government agencies and members of the community.

Similarly, in the time since the Mount Pleasant Project was approved, noise is now assessed under the DECCW's Industrial Noise Policy (INP), whereas the Mount Pleasant Project was originally assessed under the Environmental Noise Control Manual (ENCM). A key difference in the assessment under the INP policy is the adoption of the L_{eq} noise metric over the L_{10} level, and a more thorough and clear assessment approach for adverse weather conditions.

The noise assessment of the proposed modification adopts the now current INP to establish project specific noise criteria in order to assess potential impacts as a consequence of the proposed modifications, particularly the option of replacement of the rail facilities with the conveyor/service corridor. Using the INP the assessment found that the potential impacts during 'calm' weather conditions would be similar to those predicted in the EIS. However, one important difference when assessing noise to contemporary standards is the DoP's requirement for upfront acquisition of properties affected under 'adverse' weather conditions.

The updated assessment of the proposed modifications has enabled identification of those properties that would be affected under adverse conditions and these properties will now be extended the opportunity for upfront acquisition upon request

iii Use of previous assessment

The EIS for the Mount Pleasant Project was submitted in support of a development application in 1997. In 1999, the Minister for Urban Affairs and Planning granted development consent to Mount Pleasant Project following a Commission of Inquiry (CoI) held over a number of sessions. As required at the time of preparation, the EIS determined the potential environmental impacts from the Mount Pleasant Project within the context of the then existing environment including other proposed developments. The results helped inform regulatory authorities and the Minister about the content of the consent that was granted.

It should be noted that as Mount Pleasant is an approved project, it is considered part of the existing environment of Muswellbrook district and new development applications submitted since its approval are required to consider the Mount Pleasant Project when assessing the cumulative impact of their projects.

This aspect of the environmental planning system enables progressive or "cumulative" assessments incorporating all known development projects to be made. While it means that the original circumstances of a particular project may change as knowledge about the impacts of new projects emerges, the most recent project is determined in the light of all prior approvals and their consequential predicted impacts. This will be the case for the proposed amendments. The assessment of predicted impacts will be determined in the context of current cumulative conditions and regulatory policies, and updated conditions may be applied.

For all of the above reasons the environmental assessment conducted for the Mount Pleasant Project in 1999 remains appropriate. It enabled a properly informed decision about the positive and negative impacts of the project at the time.

2.3.2 Cumulative impacts

Many of the submissions received from the community raised matters that related to cumulative impacts of the Mount Pleasant Project in its entirety, as well as other mining operations around Muswellbrook. The submissions raise the need to understand the cumulative impact of all development (not only mining) in the Upper Hunter Valley.

The application to modify the development consent is seeking to make minor changes to the existing development consent. These proposed modifications are discussed in Section 1.2. In accordance with section 75H of the EP&A Act, an EA was prepared to assess the change in potential impact of the proposed modifications as compared to the approved operations. Similarly, as the remainder of the Mount Pleasant Project will remain unchanged, it is not subject to this modification application and assessment.

Notwithstanding this, where noticeable change has been predicted to occur due to the proposed modification, the scope of the cumulative assessment not only considered the potential environmental impact, but also considered the potential impact cumulatively of these modifications taking into account other surrounding development as well as known future development.

The study concluded that while the proposed modifications have the potential to cause impacts, including cumulative impacts, management and mitigation measures have been developed to address each of these and the residual impacts are considered to be minor. These will be incorporated into the environmental management plans for the Mount Pleasant Project.

For instance, the EA contains a detailed assessment of potential noise impacts resulting from the proposed modifications. Due to the fact that the proposed conveyor/service corridor had the potential to be a dominant contributor to noise at receivers in its vicinity, a cumulative assessment was undertaken in order to determine the effect of the proposed modification. This assessment incorporated the two closest existing mining operations in the area that could contribute to noise at the locations shown in Figure 6.2 of the EA. The assessment concluded that prevailing winds will be a major factor in which of the three nearby mining operations (Mount Pleasant, Bengalla and Mount Arthur) will dominate or contribute to the total received noise at any given sensitive location.

The analysis concluded that the addition of the proposed conveyor/service corridor for the Mount Pleasant Project would dominate the noise environment at one assessment location (Location 43, to the west of the proposed conveyor) during calm weather and four assessment locations (Locations 43, 44, 45 and 289) during prevailing weather conditions.

A detailed cumulative assessment was not undertaken for air quality due to the predicted small incremental contribution resulting from the proposed modifications. As stated in Section 6.3.2 of the EA, the predicted incremental contribution to the air shed from the proposed modifications is approximately 0.01 per cent of the expected emissions from the approved Mount Pleasant Project. The incremental difference in the emissions generated would be the result of the replacement of the rail facilities with the optional conveyor/ service corridor. The assessment concluded that the proposed modifications would not cause any discernible change to dust levels in the area, relative to the approved operation's contribution to the air shed. For this reason, it was considered that a cumulative assessment of the air quality effects of the proposed modifications was not warranted.

i General

Several submissions stated that the cumulative impacts of health were not undertaken. It is recognised and well documented that the community has concerns regarding potential health impacts from dust emissions from mining activities.

As outlined in the section above, the proposed modification would not cause any discernible change to dust levels in the area, relative to the contribution to the air shed from the approved operation.

ii Planning Assessment Commission Review

Several submissions requested a Planning Assessment Commission (PAC) hearing to review the cumulative impacts of the mines, including Mount Pleasant Project, in the vicinity of Muswellbrook. As stated within the EA and in Section 2.3.1 above, the scope of this EA is an assessment of the change in the potential impact of the proposed modification as compared to the approved development.

The potential impacts of the Mount Pleasant Project were assessed within the EIS prepared in 1997 and conditions of consent were granted by the Minister in 1999 following a CoI that was held over a number of sessions.

2.4 Detailed response to submissions

A summary of matters raised in the submissions is provided in Table 2.1, along with responses to the submissions, or where applicable, reference to where the issue has been addressed elsewhere in this report.

Table 2.1 Summary of submissions and responses

Submission by		ID	Category	Comment summary	Response
Community					
C1	Mark and Maria Peel	C.1.1	Noise and Vibration	Cumulative noise assessment did not include Mangoola Mine, noise from conveyor belt and rollers did not include mobile plant noise.	The cumulative noise assessment did not include noise contributions from Mangoola Mine due to the distance from the Mount Pleasant Project and meteorological conditions. The Mangoola Mine is located approximately 8km to the west and, given the other noise sources identified in the area, is not expected to be a dominant noise source for receivers in the area in the vicinity of the Mount Pleasant Project. For receivers located west of the Mount Pleasant Project (i.e. Wybong Road and Roxburgh Road), noise emissions from Mangoola Mine may be minor influencing source whilst there are westerly winds occurring. However, during such meteorological conditions, noise from the Mount Pleasant Project will be abated by these westerlies. Similarly, for easterly winds, noise emissions from Mangoola Mine will be abated whilst enhanced from the Mount Pleasant Project. The effect of these meteorological conditions is such that the cumulative noise under either condition does not include noise from both Mangoola Mine and noise from the Mount Pleasant Project. As such, it was considered not necessary to include Mangoola Mine in the cumulative noise assessment. Noise from the proposed optional Mount Pleasant Project conveyor belt and rollers is included together with mobile plant noise within the model utilised for the assessment (refer to Appendix B of the EA).
		C.1.2	Noise and Vibration	Train loading would have to run continuously to load coal from both Bengalla Mine and Mount Pleasant Project - affecting respondent's property.	The proposed use of the Bengalla Rail Spur by the Mount Pleasant Project would result in additional train movements and loading activities at this location rather than the original location specified in the EIS. The potential noise from the loading of coal onto both Bengalla trains and Mount Pleasant Project trains has been addressed in the cumulative noise

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Submission by	ID	Category	Comment summary	Response
				section (refer to Section 6.1.2). The results from the cumulative noise assessment demonstrate that the DECCW criteria can be achieved at most identified receivers, with some exceptions as described in Section 6.1.2 and Appendix B of the EA.
	C.1.3	Proposal Component	Extension of development consent when project commencement significantly delayed.	The extension of development consent time has no significant consequence on the environmental aspects assessed under the original EIS. The EIS provides for mining over the 21 year life of the development consent, whereas the extension of time would effectively enable only nine years of mining, assuming first coal in 2014
	C.1.4	Visual	Visual impact on respondent's property from conveyor.	The respondent's property corresponds closely with Viewscape Location 3 (Roxburgh Road) in the visual impact assessment conducted as part of the EA (refer to Section 6.5 Visual amenity). The proposed conveyor/service corridor envelope is located approximately 2km to the east of this property. The specifications of the proposed conveyor alone have not been stipulated, however, the proposed conveyor/service corridor, which includes the proposed conveyor, service roads and associated drainage infrastructure is expected to be 6.7km in length and 30m in width. As stated in Table 6.7 of the EA, current views from Roxburgh Road facing east towards the proposed conveyor/service corridor location comprise agricultural ground sloping downwards to the east in the lower horizontal third of the viewscape, dense vegetation in the middle horizontal third of the viewscape, and the upper horizontal third of the viewscape is dominated by a densely vegetated ridgeline, interspersed with views of the infrastructure area of the Bengalla Mine pit.

Table 2.1 Summary of submissions and responses

Submission by	ID	Category	Comment summary	Response
				From Roxburgh Road and the respondent's property, the proposed conveyor may only be potentially visible in a limited number of areas and restricted to the upper horizontal third of the viewscape due to the distance of approximately 2km. The limited areas of potential viewing would be between existing vegetation on the ridgeline and would appear as a relatively small line at the base of the currently visible infrastructure area of the Bengalla Mine pit in these areas. Where the proposed conveyor may potentially be visible in the upper horizontal third of the viewscape, it would not constitute a significant addition to the existing mining operations visible from this location. Furthermore, as mining operations are currently visible, the capacity of the existing viewscape to absorb the potential addition of small sections of the proposed conveyor into the viewscape is considered high, and the limited potential viewing opportunities of the proposed conveyor would not significantly contrast with the existing viewscape from this location. In summary, the visual impacts of the proposed conveyor/service corridor on the respondent's property are considered to be minor and would not significantly change the local or regional viewscapes from the property.
	C.1.5	Air Quality	Dust generation where conveyor belt changes direction and at the surge bin.	The potential for dust emissions from these sources were considered in the air quality study presented in the EA. Transfer points for the conveyor (i.e. where the conveyor changes direction) are not expected to release dust emissions into the air as the proposed design of the conveyor system has all transfer points enclosed. The potential dust emissions from the unloading of coal from the conveyor to the surge bin have been accounted for as per the emissions inventory in Table 6.6 of the EA. It can be seen that the estimated

Table 2.1 Summary of submissions and responses

Submission by	ID	Category	Comment summary	Response
				emissions from unloading coal to the surge bin and loading coal to trains would total 2,926 kg of total suspended particulates (TSP) per year. This equates to approximately 0.01 per cent of the total estimated emissions for that year and, therefore, would not likely result in any detectable change in dust emissions. Additionally, the conveyor will be used to transfer washed coal with high moisture content (ie. low dust generating potential) at speeds of between approximately 10 and 20km/hr. As such, the potential for dust lift-off is negligible. Partial enclosure on the roof and one-side has been included to limit the potential for dust lift-off due to head-winds and cross-winds. Full enclosure at ground level would have a negligible influence on potential dust emissions.
	C.1.6	Noise and Vibration	Vibration from conveyor belt and rollers.	The noise assessment has included potential noise from the conveyor belts, whether it is airborne or vibration induced. Generally, conveyors do not operate with a significant amount of vibration emission. If conveyors did start to vibrate markedly, it would be damaging to the plant, reducing operational efficiencies and would require rectification.
	C.1.7	Noise and Vibration	Property 263 is identified within Mount Pleasant Project's Zone of Affectation. Respondent's property is located 600m from boundary of 263. Sceptical of Mount Pleasant Project's advice that property will not be affected.	It should be noted that the modelling considers the location of the residence rather than the property boundary. As shown in Figure 6.2 of the EA, Location 263 is situated closer than Location 259 (Peel) to a number of sources such as the proposed mining operations, coal handling and preparation plant (CHPP) and the conveyor. The potential noise from the Mount Pleasant Project at Location 259 is expected to be lower than that at Location 263 for these reasons. The modelling predictions demonstrate this to be the case and indicate that predicted noise levels experienced at Location 259 would be below possible minimum acquisition criteria.

Table 2.1 Summary of submissions and responses

Submission by		ID	Category	Comment summary	Response
C2	Name withheld	C.2.1	Cumulative Impacts	Concerned that an assessment of the cumulative health and environmental impacts associated with the Mount Pleasant Project and the surrounding mines has not been undertaken. Specific reference is made to impacts on air quality and water security.	Refer to Section 2.3.2.
		C.2.2	Social	Impact/ risk to social and health support services and employment.	Concerns have been raised about impacts on social infrastructure and community well-being. The Proponent, as a long standing member of the Hunter Valley, shares the respondent's aspirations to ensure sufficient facilities are available to meet future needs. Impacts on the community and social infrastructure generally, including from the Mount Pleasant Project, depend on future population growth and change over the remaining consent life until 2022. It is important to note that there have been no material changes to the project since the original approval. Recent population growth in Muswellbrook has been modest. Between 1996 and 2001 the population actually fell by five per cent (from 15,562 to 14,796 people) but by 2006 it had grown again to be slightly less than the 1996 level (15,236). Forecasts by the Hunter Valley Research Foundation (HVRF 2006), suggest that there will be a marginal increase in population over the life of the project, that is 1,322 or eight per cent above the existing population. Based on the EIS estimates, the Mount Pleasant Project would generate about 11 per cent of this increase. The EIS noted that the new mine would create demands for additional social infrastructure and quantified the demands for different types of facilities. Current forecasts of population growth and its structure show a slightly lower future population than predicted in the EIS (i.e. now 17,215

Table 2.1 Summary of submissions and responses

Submission by	ID	Category	Comment summary	Response
				versus previously 17,500) and little change in structure. Thus, it is probable that the original forecasts of demand for social infrastructure remain valid and are being addressed by the existing related conditions of approval. In this regard it is important to note that the MSC is not proposing any amendments to conditions relating to social infrastructure (refer to G.3.18 in Table 2.1). Whilst the submission raised general social implications of the proposed modifications as a key matter to be addressed, the capacity of health services was specifically raised. Over the ten year period from 1996 to 2006, people employed in health care and social assistance have increased by almost 10,000 across the Hunter region (HVRF 2008). This figure contrasts with a decline in the numbers employed in mining of about 1,800 over the same period and suggests that adequate health services capacity can be assured. In terms of community well-being, the size of population growth over the life of the project, 1,322 people (HVRF 2006), is about the same as that which has occurred over the previous 11 year period (1,097 people). The structure of the population is also unlikely to change materially over this period. Thus, in summary, the population growth and change associated directly with modified Mount Pleasant Project and that for the LGA generally are unlikely to have material effects on community well-being.
	C.2.3	Road and Rail	Impacts on road and rail infrastructure.	The proposed modifications are not expected to result in additional impacts on the road and rail infrastructure compared to those impacts assessed in the EIS. As stated in Section 6.7 of the EA, the construction of the optional conveyor/service corridor may create minor traffic generation with the delivery of the required plant and equipment. However, potential impacts are expected to be similar or less than the construction of the approved rail facilities and manageable within the

Table 2.1 Summary of submissions and responses

Submission by		ID	Category	Comment summary	Response
					existing road network. The proposed modification to utilise the Bengalla Rail Spur would not result in any additional rail movements on the Muswellbrook – Ulan Rail Line as anticipated by the EIS.
		C.2.4	Cumulative Impacts	Request a PAC to undertake a review of cumulative impacts of the cluster of mines, including the Mount Pleasant Project, Dartbrook and West Muswellbrook.	Refer to Section 2.3.2.
C3	Catherine Chicken	C.3.1	Social	Change in community attitudes since approval was granted in 1999 associated with increased mining development in the locality.	It is suggested that community attitudes towards mining have changed since the Mount Pleasant Project was approved and that this provides reason to question the proposed modification. Studies of community attitudes in Muswellbrook (Coakes 2009 and CSRM 2008) indeed show that attitudes have changed but not necessarily to be anti-mining. Coakes notes that in 1999 when her first survey was conducted, that there was "a significant level of community angst" about mine development including perceptions that mining companies were not making a sufficient contribution to local infrastructure and that there was apprehension about various land use and environmental conflicts. By 2005 Coakes noted increased appreciation of mining's economic contribution but with emerging concerns about cumulative impacts of multiple mine and other developments. By 2009 CSRM noted a "broad agreement" that mining had contributed significantly to economic development and had improved safety in the work environment generally. At the same time community perceptions of the potential cumulative impacts from mining were more likely to be negative than positive, a finding that the authors regarded as being typical of community impact studies.

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Submission by		ID	Category	Comment summary	Response
					Thus, it is acknowledged that community attitudes have changed since Mount Pleasant Project was approved, however, the evidence suggests that there are both positive and negative attitudes towards the industry (CSRM 2008).
		C.3.2	Assessment approach	The Environmental Impact Statement prepared in 1997 is out of date, not to contemporary standards, and doesn't account for recent mining developments.	Refer to Section 2.3.1.
		C.3.3	Cumulative Impacts	No assessment of cumulative health and environmental impacts of Mount Pleasant Project and surrounding mines.	Refer to Section 2.3.2.
		C.3.4	Social	Impact/ risk to social and health support services and employment.	Refer to Response C.2.2.
		C.3.5	Road and Rail	Impact on road and rail infrastructure.	Refer to Response C.2.3.
		C.3.6	Cumulative Impacts	Request a PAC to undertake a review of cumulative impacts of the cluster of mines, including the Mount Pleasant Project, Dartbrook and West Muswellbrook.	Refer to Section 2.3.2.
C4	James C.H. Horn	C.4.1	Health	Air pollution in Muswellbrook area is already far worse than any acceptable standard. If Mount Pleasant Project proceeds, this will result in health problems for the local population.	Refer to Section 2.3.2

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Submission by		ID	Category	Comment summary	Response
		C.4.2	Refer to C.2.1 and C3 for matters raised	-	-
C5	Alan Stafford	C.5.1	Refer to C.2.1 and C3 for matters raised	-	-
C6	Arthur W. Bragg	C.6.1	Refer to C.2.1 and C3 for matters raised	-	-
C7	Allison Sedgwick	C.7.1	Refer to C.2.1 and C3 for matters raised	-	-
C8	J. and E. Moore	C.8.1	Visual	The infrastructure area will now cover a larger area and the specific location is not determined. The proposed modification area has expanded to join the respondent's property. Concerned about the height of some buildings, visual impacts and night lighting.	The approved Mount Pleasant Project comprises rail facilities, including a reclaim conveyor, which would pass underneath Wybong Road but would otherwise be constructed above the surface until it approaches the rail loading bin where it would be elevated to deliver coal to the bin top. This is shown in Figure 3.1 of the EA. The proposed infrastructure area envelope is located directly adjacent to the north-east extent of the respondent's property (identified as Location 43 and 44 on EA Figure 6.1). Topography decreases in this direction extending away from the respondent's property. The infrastructure area envelope has been developed to provide flexibility during the detailed design and construction of the facilities in place of the specific locations detailed in the EIS. Elements of the design that may change include the orientation, area and heights infrastructure. These changes are not considered a significant change from that currently approved and the potential impact on visual amenity, including night lighting impacts, of the proposed infrastructure area envelope on the

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				respondent's property are not expected to significantly change as a result of the proposed modifications.
	C.8.2	Noise and Vibration	Concerned about conveyor (and motor drive) being placed in western most section of envelope placing it 400m from residence. Concerned about noise impacts, i.e. exceed acceptable limits (within acquisition zone) and 'sleep disturbance'.	The conveyor will be mitigated using shielding to reduce emissions to the west and north. Noise levels at this residence are shown to be significantly above criteria recommended by DECCW and, as identified in the EA, Coal & Allied have extended the opportunity of acquisition rights to this property
	C.8.3	Noise and Vibration	Respondent concerned that they will be affected by construction noise particularly during 4-6pm.	As discussed in Section 6.1 of the EA, the DECCW construction noise guidelines provide time restrictions as the first tool in managing impacts from construction activities. The proposal will generally be restricted to these construction times, being 7am to 6pm Monday to Friday and 8am to 1pm Saturdays, with the exception being during emergency work or similar or where noise is inaudible or less than 5dB above background. A secondary tool is DECCW's noise level targets. The predictions for this particular residence location do indicate that construction noise levels may be above the "Noise Affected" target (of 40dB(A)), but are below the "Highly Noise Affected" level (of 75dB(A)).
	C.8.4	Air Quality	Respondent concerned dust generated during construction will also degrade air quality at residence.	The predicted dust generation from the construction activities associated with the proposed modifications is expected to be less than the currently approved project which includes construction of a rail loop. Therefore, it considered that dust emissions associated with construction of the modified project components would not degrade air quality at the residence.
	C.8.5	Air Quality	Cumulative air quality already affecting lives. With the Mount Pleasant Project commencing,	Refer to Response C.1.5.

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Submission by		ID	Category	Comment summary	Response
				concerned of further degradation. Conveyor and service corridor near property boundary will add to the disappointing air quality results.	
C9	Suzie Worth	C.9.1	Aboriginal Heritage	Concerned about continual destruction of tangible Aboriginal cultural heritage.	Section 6.4 of the EA provides an assessment of the potential impacts associated with the proposal. Mechanisms for offsetting potential impacts to Aboriginal heritage are discussed in Sections G.2.15 and G.2.16 of this table.
		C.9.2	Refer to C.2.1 and C3 (for matters raised)	-	-
C10	Katherine Brooks	C.10.1	Refer to C.2.1 and C3 (for matters raised)	-	-
C11	Douglas and Nicola Robertson	C.11.1	Refer to C.2.1 and C3 (for matters raised)	-	-
C12	Wendy G. Wales	C.12.1	Assessment approach	Approval granted in 1999 but has not commenced. Better understanding of 'impacts' from mining now than in 1999.	Refer to Section 2.3.1.
		C.12.2	Climate Change and Intergenerational Equity	The understanding of global impacts of climate change from burning fossil fuels is now more clearly understood.	The EP&A Act includes a requirement for development applications to consider the effects upon ecologically sustainable development (ESD). The term ESD is defined by the Commonwealth government as 'using, conserving and enhancing the community's resources so that ecological processes, on which life depends, are maintained, and the total quality of life, now and in the future, can be increased'.

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				As stated in Section 8.2 of the EA, the proposed modifications satisfy the intent of ESD in that it would provide options, subject to engineering and commercial agreements, that may minimise the footprint of disturbance at lower capital and operational costs.
	C.12.3	Cumulative Impacts	Air pollution and groundwater disruption and contamination impacting on health and productivity.	Refer to Section 2.3.2.
	C.12.4	Social	Accommodation shortages.	As referenced in response to C.2.2, the same drivers will apply to demand for housing as those for social infrastructure generally. Population growth associated with the Mount Pleasant Project has been taken into account in overall forecasts and there is now expected to be a slightly lower future population than was the case when the project was approved, that is an earlier forecast of 17,500 (ERM 1997) versus 17,215 now (HVRF 2008). These forecasts form the basis of residential planning and development programs for the LGA. A similar trend can be seen when analysing the changes in rents and housing loan repayments in Muswellbrook compared to now generally. Over the period 1996 to 2006 Muswellbrook experienced the same increase in rental costs as applied across the state (both 50 per cent) but a much (25 per cent) lower increase in the size of loan repayments (HVRF 2008). Sales prices for dwellings across the Upper Hunter have been in decline for much of 2008 - 09 only recently showing positive trends (HVRF 2010). This too illustrates the capacity of the market to accommodate demand levels being experienced and likely in the near future. There is no reason to expect that the proposed modification to the Mount Pleasant Project will cause any change in housing demands beyond what

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					is currently envisaged and provided for in the approval conditions. Muswellbrook has accommodated its housing demands since the project was approved and the modified project would impact its ability to continue doing this over the life of the project.
C13	Bruce and Mary Bates	C.13.1	Noise and Vibration	Conveyor/service corridor will greatly increase noise and vibration, start up sirens.	As stated in Section 6.1.3, the conveyor will be shielded to reduce emissions to the west and north and will also be mitigated using best available technology plant. Noise levels at this residence (identified as Location 47 on EA Figure 6.1) are shown to be above criteria recommended by DECCW. Therefore, due to the predictions outlined in the EA, Coal & Allied extends the opportunity for upfront acquisition upon request to the landowner of this property.
		C.13.2	Air Quality	Conveyor/service corridor will greatly increase coal dust from south easterly winds and impact air quality.	As stated in Section 6.3 of the EA, use of the conveyor/service corridor in place of the approved rail facilities would mean that dust emissions would not change in any material way. The conveyor will be used to transfer washed coal with high moisture content (ie. low dust generating potential) at speeds of between approximately 10 and 20km/hr. Additionally, the service corridor, adjacent to the conveyor, is expected to be utilised infrequently. As such, the potential for dust lift-off is negligible.
		C.13.3	Visual	Impacts from night lighting from conveyor/service corridor.	The approximate elevation of the location of the area where the respondent's property (identified as Location 47 on EA Figure 6.1) is located is approximately 225m RL. Elevation increases substantially to the south-east towards Roxburgh Road (near to the intersection with Wybong Road), which has an approximate elevation of 256m RL. From Roxburgh Road, topography decreases substantially in a south-east direction, over the area where the worst case alignment of the proposed optional conveyor/service corridor is located.

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				As stated in Section 6.5 of the EA, the topography of the area of the proposed conveyor/service corridor is undulating in nature with scattered tracts of vegetation and areas of agricultural land. Preliminary design specifications indicate that the conveyor will be constructed at ground level for the vast majority of its length, with limited sections elevated a short distance above ground level. As a result, night lighting of the proposed conveyor is not predicted to be visible from this property. In summary, night lighting impacts on this property from the proposed conveyor/service corridor are expected to be negligible.
	C.13.4	Greenhouse Gases	No comparison of best and worst case alignment of conveyor in terms of GHG emissions and energy consumption. Consideration should be given to RLs and relative emissions.	Conveyors are an inherently efficient means of transporting bulk materials in terms of energy consumption, and the belts also run coal down slopes. The intention of the modification is for the alignment of the conveyor/service corridor to occur anywhere within the envelope. Within the envelope there is flexibility for siting to consider RL's and relative GHG emissions during detailed design, giving consideration to the potential footprint for a future extension of mining at Bengalla Mine as well as environmental, terrain and engineering parameters.
	C.13.5	Surface Water	Surface water management in relation to limits that are placed on the positioning of the conveyor. Bengalla mine has the potential to extend mining operations into areas in which the conveyor/service corridor may be constructed. When Bengalla mine through the only drainage to the Hunter River for the proposed Mount Pleasant Project, the surplus water discharge would flow into the Bengalla mine void. This scenario should be fully investigated.	The EIS outlines that the discharge point for Mount Pleasant Project is via Raw Water Dam 1, located in the Dry Creek catchment immediately east of the CHPP. The modified configuration of infrastructure within the infrastructure envelope and optional conveyor/service corridor does not change the discharge point as outlined in the EIS. Should Bengalla Mine extend further to the west, potential interactions and/or impacts to the discharge point for the Mount Pleasant Project

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					would require investigation as part of any proposal by Bengalla Mine.
		C.13.6	EA Cover Image	Strongly opposed to the use of photograph of the landscape view of respondent's property which is perceived to be unrelated to the modification. Request a public written apology and reason for utilising image. Image should be removed from future material and website.	The photograph used on the cover was not meant to project the resident's property as being representative of the modification. The Proponent commits to not use the photograph in the development of any future material.
		C.13.7	Noise and Vibration	If a shutdown area for contractor overhaul of large mobile equipment is placed as far west as possible (in envelope) this will have major impact on nearby properties.	The noise and vibration study has assumed a worst case scenario with the siting of infrastructure within the defined envelope. These assumptions include the siting within the envelope of the highest noise emitters nearest residential receivers. The noise emission factors and results within this worst case scenario would accommodate the scenario should the maintenance shed (shutdown area) be situated on the western edge of the envelope.
		C.13.8	Air Quality	Cumulative impacts of Mount Pleasant Project and surrounding mines. Should consider HVAS $PM_{2.5}$ monitoring results from the town of Muswellbrook (when commenced in 2011).	As stated in Section 6.3 of the EA, the proposed modification will not significantly increase dust levels from that which is currently approved. Refer also to Section 2.3.2.
C14	Confidential	C.14.1	Zone of Affectation	The proposed modifications effect on nearby development, eg: existing and future applications	The proposed modification has no bearing on any landowner's rights to make a development application.
Special interest groups					
N1	Balmoral Park Racing	N.1.1	Refer to C.2.1 and C3 (for matters raised)	-	-

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N2	Scone Equine Hospital	N.2.1	Refer to C.2.1 and C3 (for matters raised)	-	-
N3	Anglo Coal	N.3.1	Future development	Dartbrook mine is currently under care and maintenance. Future plans include the development of an open cut mine immediately adjacent to the Mount Pleasant Project which is planned to be operating during the two year ext period sought by modification. Believes consideration should be given to the potential for any future cumulative impacts and the interactions of a potential Dartbrook mining operation.	The original EIS for the Mount Pleasant Project included consideration of the potential impacts of the Dartbrook Mine (then known as Kayuga Mine). It is understood that Dartbrook Mine ceased mining operations on 1 January 2007 and is currently under care and maintenance with the existing development consent due to lapse in 2020. At the time of preparation of the EA and this response to submissions report, an application for the future plans for Dartbrook has not been lodged with the DoP.
N4	Construction, Forestry, Mining and Energy Union	N.4.1	In support of proposal	On balance, the Union supports the modification.	Noted.
Government					
G1	NSW Office of Water	G1.1	Consent Conditions	Remove condition 4.3(1) and replace with standard condition.	Noted.
		G.1.2	Consent Conditions	Carry-over of condition 4.3(2) and commencement provisional upon the Ministers determination.	Noted.
G2	Department of Environment, Climate Change and Water NSW	G.2.1	Biodiversity	Unable to undertake detailed assessment of the proposal until a final design and the associated vegetation clearing is determined.	The intention of the modification is for the alignment of the conveyor/service corridor to occur anywhere within the envelope to provide flexibility for siting during detailed design, giving consideration to the potential footprint for a future extension of mining at Bengalla Mine

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				as well as environmental, terrain and engineering parameters. The ecological assessment has adopted a conservative approach in which it is assumed that the alignment of the conveyor/service corridor is located on the area with the highest quality vegetation. This has allowed the potential worst case ecological impacts to be assessed. The worst case alignment is presented in Figure 2.2 of the EA. Under the proposed worst case scenario, the disturbance would require approximately 47.5ha of vegetation clearing compared to approximately 54.8ha of clearing that would be required for the rail loop, part of the approved project, resulting in a reduction in the clearing requirements by approximately 7.3ha. The proposed worst case scenario (refer to Figure 6.2 of the EA) results in total disturbance of approximately 34ha of vegetation communities currently listed under the *Threatened Species Conservation Act 1995* (TSC Act), compared with approximately 41.8ha of vegetation communities currently listed under the TSC Act under the approved disturbance footprint. The conveyor/service corridor envelope comprises less area of Derived Native Grassland but more area of EEC woodland. Avoidance of listed EECs and important fauna/flora habitats, where possible, will be considered high in the hierarchy of parameters in locating this infrastructure. These avoidance measures may enable a reduction in the worst case potential impacts on these EECs and fauna habitat. Nonetheless, the proposed modification would result in a net reduction in vegetation clearance as compared to the approved rail facilities and configuration of the infrastructure area. Dependent upon the timing for detailed design activities for the Mount Pleasant Project, the final location may be shown in the Flora and Fauna Management Plan that is required to be developed and approved prior to

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				construction under condition 3.4.2 of the development consent.
	G.2.2	Biodiversity	No fauna surveys and only limited flora surveys have been undertaken within the Modification Area.	Extensive fauna surveys have been undertaken over the past 12 years in the immediately adjacent Mount Pleasant Project area. These surveys provide a good indication of the likelihood of occurrence of fauna species based on the vegetation communities/fauna habitat. The level of survey within the Mount Pleasant Project area is indicated in Table 2.3 and Figure 2.2 of EA Volume 2 Appendix C. No separate fauna survey was undertaken in the modification area and is not considered necessary given the knowledge of the likelihood of occurrence of fauna species based on the vegetation communities. Table 2.3 of EA Volume 2 Appendix C presents the fauna survey effort undertaken across the Mount Pleasant Project area. Table C.1 appended to the ecological assessment report consolidates the survey effort for all techniques across the various survey periods and compares their adequacy against DECCW survey guidelines (DEC, 2004). Similarly, extensive flora surveys have been undertaken over the past 12 years across the Mount Pleasant Project area, including the envelopes for both the infrastructure facilities and the conveyor/service corridor (refer to Table 2.2 and Figure 2.1 of EA Volume 2 Appendix C). This work provides a substantial database relevant to, and providing a solid context for, the assessment of potential flora impacts associated with the proposed modification. In summary, it is considered that adequate survey has been completed and that the data collected for the Mount Pleasant Project area is relevant for the respective proposed envelopes for the infrastructure facilities and the conveyor/service corridor.

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	G.2.3	Biodiversity	Locations of Tiger Orchid species and targeted surveys for this species within the Modification Area required.	A small number of individual Tiger Orchids (*Cymbidium canaliculatum*) have been identified across the Mount Pleasant Project area, outside of the proposed conveyor/service corridor envelope. None of these individuals occur within this envelope. It is considered that the flora survey and fauna habitat study completed within the proposed conveyor/service corridor envelope was adequate to identify any additional individuals, and accordingly, targeted surveys for the species are not considered warranted. It is not expected that this species would be impacted by the proposed modification.
	G.2.4	Biodiversity	Disagrees with conclusion that *Eucalyptus camaldulensis* is unlikely to occur within the Modification Area due to specific habitat requirements. Targeted surveys for the species within the Modification Area required.	Additional targeted surveys for this species have been conducted within the conveyor/service corridor envelope subsequent to the lodgement of the EA for adequacy review as part of the work conducted for Bengalla Mine 11 - 13 October 2010. Any specimen considered to have the potential to be *Eucalyptus camaldulensis* was sampled and material sent to Sydney's Royal Botanic Gardens for analysis. All trees sampled were found to be *Eucalyptus tereticornis*.
	G.2.5	Biodiversity	Suggests the occurrence of Pine Donkey Orchid should be 'Likely-suitable habitat; found within locality'.	As above, additional targeted surveys for this species have been conducted within the conveyor/service corridor envelope subsequent to the lodgement of the EA for adequacy review from 11 - 13 October 2010. No individuals of this species were found during these searches despite the favourable weather conditions and productive flowering season. However, based on the erratic flowering nature of the species and its cryptic form, it is considered that the conveyor/service corridor envelope provides 'potential habitat' for this species as opposed to 'likely-suitable habitat' as outlined in Table 3.2 of the Ecology Study in Appendix C of the EA.

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	G.2.6	Biodiversity	Strongly recommends that the locations of the targeted threatened flora searches and detail of the species targeted during targeted surveys undertaken by Cumberland Ecology in 2010 be provided to DECCW.	The conveyor/service corridor envelope has been surveyed on two separate occasions. The first as outlined in the EA and the second from 11 - 13 October 2010 as described above. All species in Table 3.2 of the flora and fauna study were targeted with particular attention paid to habitats suitable for *Eucalyptus camaldulensis*, *Diuris tricolour* and *Cymbidium canaliculatum* which were considered the most likely to occur. No threatened species were recorded within the conveyor/service corridor envelope during either survey.
	G.2.7	Biodiversity	The Powerful Owl, Little Eagle, Barking Owl, Masked Owl and Spotted Harrier have not been included in the species listed in section 3.5.2 despite being previously recorded within the Modification Area or within 10km of the site.	The EA only discusses in detail the threatened species considered likely to be found or present within the envelopes for the infrastructure facilities and the proposed conveyor/service corridor. The other threatened species were not considered necessary to discuss in detail based upon the highly disturbed nature of the habitats within these envelopes and the scarcity of recent records within the locality. Based upon these two factors, it was considered that the envelopes for the infrastructure facilities and proposed conveyor/service corridor did not provide habitat of importance for these species and that no significant impact would occur upon these species as a result of the proposed modifications. The Powerful Owl, Little Eagle, Barking Owl, Masked Owl and Spotted Harrier were all considered to have a possibility of occurring within the envelopes for the infrastructure facilities and the proposed conveyor/service corridor as listed in Table 3.3 of flora and fauna study. The owl species' are considered to have a small likelihood of occasionally foraging across these envelopes. There is little likelihood of the envelopes forming breeding habitat and with the extensive area of better quality foraging and breeding habitat to the west of the Mount Pleasant Project area within and around Manobalai Nature Reserve it is considered unlikely that these species will be significantly impacted as a result of the

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				proposed modifications. The two raptor species were considered as being 'Possible' occurrences within the envelopes for the infrastructure facilities and proposed conveyor/service corridor based on the low numbers of records within a 10km radius of the site. Based on a subsequent review of the proximity of these species to the project area it is considered that a rating of 'Likely' may have been more appropriate. However, as with the owl species referenced above it is considered that the envelopes for the infrastructure facilities and proposed conveyor/service corridor provide marginal foraging habitat as well as limited breeding habitat and that extensive areas of more suitable habitat exist within the surrounding locality. Therefore, there is not likely to be any significant impact upon either of these raptor species as a result of the proposed modifications.
	G.2.8	Biodiversity	Proposal will result in clearing and fragmentation of Endangered Ecology Communities (EECs) not previously considered in the assessment for DA 92/97.	Elements of the proposal that have the potential to impact EEC comprise the modified configuration of the infrastructure area envelope and the conveyor/service corridor. The study addresses potential impacts to EEC resulting from the proposal (refer to Section 6.2.2 and Appendix C of the EA).
	G.2.9	Biodiversity	The decrease in area of Derived Native Grassland to be removed does not compensate for the proposed increase in the removal of higher quality EECs. Adequate survey of the Modification Area and appropriate offsetting required.	The assessment of the potential worst case ecological impacts of the proposed modification concluded that, if pursued, the conveyor/service corridor would result in a net reduction in vegetation clearing as compared to the approved rail facilities and configuration of the infrastructure area. The assessment adopted a conservative approach in which it is assumed that the alignment of the conveyor/service corridor and infrastructure within the infrastructure envelope is located on the area with the highest quality vegetation.

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				Table 6.5 within the EA identifies the areas of EECs which may be cleared as a result of the worst case alignment of the conveyor/service corridor if it is pursued and worst case siting of the infrastructure within the infrastructure area. The conveyor/service corridor envelope comprises less area of Derived Native Grassland but more area of EEC woodland. Avoidance of listed EECs and important fauna/flora habitats, where possible, will be considered high in the hierarchy of parameters in locating this infrastructure. These avoidance measures may enable a reduction in the worst case potential impacts on these EECs and fauna habitat. Nonetheless, the proposed modification would result in a net reduction in vegetation clearance as compared to the approved rail facilities and configuration of the infrastructure area. Given the proposed modification would result in the reduction in clearing areas to that under the existing development consent, no offsets are proposed for the modification.
	G.2.10	Biodiversity	Modification Area is included within consent requirement Conditions 3.3(3) and 3.4(3) of DA 92/97. Requires offsets lands to be conserved in perpetuity.	The proposed modification (i.e. conveyor/service corridor) would result in an approximately 7.3ha reduction in clearing requirements as compared to the approved rail facilities. The existing development consent requires the preparation and approval of several management plans, incorporating a Flora and Fauna Management Plan and Archaeology and Cultural Management Plan, including the identification of offsite conservation options.
	G.2.11	Biodiversity	Adequate fire protection works required on site under Condition 3.8 of DA 92/97. Requires	The relevant requirements of Condition 3.8 of the development consent which relates to Bushfire and other Fire Controls will be prepared prior to

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			clarification whether adequate hazard reduction is included within the 30m disturbance corridor and, if not, whether it has been considered and assessed in the clearing estimates.	commencement of construction. The proposed modifications do not substantially change any aspects of this requirement.
	G.2.12	Biodiversity	Requires clarification as to whether Condition 3.9 of DA 92/97 has been considered and if it will result in vegetation clearing and/or disturbance of threatened species habitat.	The requirements for relocation of transmission lines as outlined in Condition 3.9 of the development consent is not subject of the proposed modifications.
	G.2.13	Aboriginal Heritage	The proposed development will likely impact all Aboriginal site within the infrastructure envelope. Prior to impacting any sites the applicant will be required to manage the site in accordance with Part 6 of the NPW Act and continually consult with local Aboriginal communities. High density of sites suggests that areas where sites have not been located are likely to be due to low visibility. Without a final location for the conveyor it is not possible to assess the nature, scale or significance of impact.	The findings of the independent archaeological assessment report (Scarp 2010) are based upon a full coverage 100 per cent survey of the study area, and therefore a failure to detect objects due to low ground surface visibility is highly unlikely. The Aboriginal cultural heritage (ACH) management recommendations tabled in Appendix E state that the final alignment of the conveyor/service corridor will be designed to 'avoid' disturbing the recorded ACH sites and extents. Furthermore, although the archaeological report found there was adequate ground surface visibility to determine that the probability of encountering sub-surface cultural materials was generally low across the study area, the Cultural Heritage Working Group (CHWG - 31 registered Aboriginal stakeholders) and the Proponent agreed that as a precautionary measure an inspection of the final conveyor alignment will be conducted after the initial clearing of vegetation and top soil to ascertain if any sub-surface artefacts are in fact present and then manage accordingly. The management measures noted in Sections 10.1 and 11 (Table 4 – point 7 and 8) of Appendix E, as well as those detailed in the Aboriginal Cultural Heritage Management Plan (ACHMP), include measures to ensure sites are 'appropriately buffered and barricaded' for their protection during and after development activities.

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	G.2.14	Aboriginal Heritage	Requires written evidence documenting opinions of the Aboriginal registered stakeholders.	The Proponent conducts its consultation process through the auspices of the CHWG. The Proponent has complied with DECCW's ACH Requirements for Proponents (2010) – and previous 2005 ICCRs - by advertising its meetings, writing to each stakeholder/Aboriginal party and providing all relevant project information and documents, implementing a heritage assessment as endorsed and conducted by representatives of the CHWG (through the CHWG work roster), holding CHWG consultation meetings (12 February and 22 April 2010) and an inspection of the conveyor corridor study area (and the proposed ACH conservation area) by 27 Aboriginal Party stakeholders in July. Discussions included detailed reviews of the nature, outcomes and status of all works that had been undertaken within the modification areas and identification of areas that had not previously been investigated (i.e. unsurveyed sections of the conveyor/service corridor envelope area). With regard to these remaining portions, the methodology for the conduct of the initial investigations, personnel to be involved, the outcomes of the investigations, and then subsequently the management strategy to be put in place were also discussed and agreed within these CHWG meetings. The stakeholders' preference is for face to face consultation in open CHWG meetings which are both inclusive and transparent. The CHWG stakeholders who cannot attend CHWG meetings, or who may wish to provide further or confidential feedback are invited to do so at any time in writing via email, fax or letter (this is specified in the public notices and letters sent to stakeholders). The Proponent received no such correspondence with respect to the EA so there was no correspondence from the stakeholders to submit with the EA documentation.

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				Also, the CHWG is provided with the opportunity to attend a private consultation meeting with the technical advisor archaeologist without the Proponent present to discuss the assessment and development management recommendations independently prior to the CHWG meeting. In summary, the Proponent's community consultation process is both inclusive and comprehensive and achieves DECCW's consultation requirements within DECCW's ACH Requirements for Proponents (2010) – and previous 2005 Interim Community Consultation Requirements.
	G.2.15	Aboriginal Heritage	Site classification definition is inconsistent with that used in NSW. Unclear as to the extent to which the assessment of significance and potential impact has been reliably documented and whether the local Aboriginal community has been provided with accurate information. DECCW therefore has insufficient information to determine related conditions.	The DECCW explicitly states there is no official definition of what constitutes an isolated artefact or artefact scatter in both the DECCW Code of Practice for Archaeological Investigation of Aboriginal Objects in NSW (2010 - Requirement 6 Advisory Notes, p.14.) and the superseded NPWS Guidelines for Archaeological Survey Reporting (1997). The determination of what constitutes an isolated find or scatter is the prerogative of the archaeologist conducting the assessment. Therefore, the independent archaeological report constitutes reliable documentation of the significance of the sites, and is consistent with the existing approach to site classification definition used in NSW. This document is the basis of information provided to the local Aboriginal community about assessment of site significance and potential impacts to the sites. The archaeological report assessed the ACH sites (both isolates and scatters) as being of low significance, while the CHWG stakeholders asserted that all ACH sites, be they single artefacts or scatters, are culturally significant. The Proponent's default management measure is to avoid disturbing ACH sites where ever it is possible and reasonable to do so. Within the context of the Proponent's guiding management principle of

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				'acceptable limits of change', the CHWG acknowledge such disturbance may occur in the context of the provision by the Proponent of appropriate cultural offsets. These offsets principally comprise ACH conservation areas that secure protection of ACH sites in perpetuity (in this case the 500ha Mount Pleasant Project Broomfield ACH Conservation Area located adjacent to the western side the Mount Pleasant Project area). The protection of site also presents the CHWG with the opportunity to salvage cultural materials and participate fully in all heritage management activities, and in consideration of the broader suite of community benefits delivered through the Proponent's Aboriginal Relations program in the Hunter Valley (e.g. community development fund, training and employment programs, etc). In summary, the detailed information provided in both the EA and the archaeologists report constitute appropriate information to determine conditions that address conservation, avoidance, mitigation or other management strategies for the sites associated with the proposed modification. With respect to reporting ACH sites in the DECCW AHIMS database site cards to DECCW standards, these have been completed by the archaeologist and submitted. The AHIMS site cards include all pertinent information including the number of artefacts recorded and the extent (area dimensions) within which they occurred.
	G.2.16	Aboriginal Heritage	Insufficient details on voluntary conservation area.	The requirement for a VCA (that is an Aboriginal Cultural Heritage (ACH) Conservation Area) is an existing condition of development consent and that consultation with the CHWG to identify and endorse the VCA is ongoing. The Proponent and the CHWG have identified a proposed ACH conservation area being the Mount Pleasant Project Broomfield ACH Conservation Area which has now been subject to a full coverage 100 per

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					cent survey and assessment report. The Proponent is in the final stages of consultation with the CHWG to formally endorse the proposed Conservation Area for consultation with DECCW.
		G.2.17	Aboriginal Heritage	Recommends that custodial arrangements for any Aboriginal material salvaged should be determined with the local Aboriginal community prior to the commencement of the project.	The Proponent agrees with this requirement as per its standard practice. The Proponent and the CHWG are currently reviewing options to establish long-term custodial arrangements for any cultural materials salvaged at the Mount Pleasant Project. The CHWG has indicated that they wish these cultural materials to stay 'on country' at the Mount Pleasant Project and the Proponent has proposed that the 'Broomfield Homestead Complex', located adjacent to the Conservation Area, be utilised as the cultural heritage storage and management facility for the Mount Pleasant Project. The CHWG has endorsed that this proposal be taken forward for consultation with DECCW.
G3	Muswellbrook Shire Council	G.3.1	Consent conditions	Not clear which conditions the Proponent applies to have revoked or varied or whether it seeks a further condition.	The Proponent is seeking modification of Conditions 6.4 and 7.1(3) as outlined in Section 3.2.4 of the EA. Modification of other conditions of consent is at the discretion of the DoP.
		G.3.2	Road and Rail	The MSC is unable to adequately maintain the road network impacted by the project.	The proposed modifications are not expected to impact upon the road and rail network, as stated in Section 6.7 of the EA. The optional conveyor/ service corridor may create minor traffic generation with the delivery of the required plant and equipment. However, potential impacts are expected to be similar or less than those from construction of the approved rail facilities. To enable the some aspects of the operation of the Mount Pleasant Project, the existing development consent requires the Proponent to undertake a number of road network alterations at its own expense at designated times during the operating life of the operation. These road

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				network alterations include the closure of Castlerock Road, the construction of the Mount Pleasant Northern Link Road to Dorset Road, the construction of the Western Link Road and improvements to the junction of Thomas Mitchell Drive and Denman Road. The consent also allows for the construction of additional intersections and an overpass/underpass of Wybong Road should they be required. In addition to these considerable road network alterations undertaken at the Proponent's expense, the existing development consent (Conditions 7.2(2), 7.2(3) and 7.2(4)) require the Proponent to contribute towards maintenance and upgrade costs.
	G.3.3	Landuse	Sterilisation of land development due to cumulative rail movements, continued use of rail corridors and operation of clause 89 of State Environment Planning Policy (SEPP) (Infrastructure) 2007.	The proposed modification includes the use of the Bengalla Mine Rail Spur. Rail movements on the Muswellbrook - Ulan rail line are anticipated in to be generally in accordance with the EIS. Therefore, the cumulative effect of rail movements on the line would not change from that previously assessed in the EIS. Clause 89 of SEPP Infrastructure relates to the review of land within interim rail corridors. The clause refers to the Minister for Planning, in consultation with the Minister for Transport to review, every two years, these corridors to determine whether any of the land included in a corridor be excluded from the operation of Policy (i.e. become available for purposes other than rail). The Muswellbrook – Ulan rail line is a key element in the Hunter Valley coal chain which supports an industry that is a vital part of the NSW economy, providing about 21 per cent of NSW export revenues. Future use of land within rail corridors such as the Muswellbrook - Ulan rail line is a matter of strategic value to the NSW and, in accordance with the SEPP, will be subject to review by the relevant Ministers at regular intervals.

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				The proposed modifications including the proposed extension of consent life by two years would not unreasonably restrict either the review process or alternative land development within rail corridors.
	G.3.4	Air Quality	The extension of the project without conditions requiring the monitoring and regulation of $PM_{2.5}$ is unreasonable particularly as the project is up-wind of the prevailing wind corridor affecting the township of Muswellbrook.	Refer to Response C.1.5. The potential dust emissions from the proposed modifications, such as unloading of coal from the conveyor to the surge bin have been accounted for as per the emissions inventory in Table 6.6 of the EA. It can be seen that the estimated emissions from unloading coal to the surge bin and loading coal to trains equates to approximately 0.01 per cent of the total estimated emissions for that year and, therefore, would not likely result in any detectable change in dust emissions previously assessed and approved. The management of air quality impacts from the operation of Mount Pleasant Project are currently defined within the existing development consent and will also be subject to further requirements should an Environment Protection Licence be issued by DECCW. The existing development consent requires the Proponent to participate, to the satisfaction of the Director-General, in regional air quality management initiatives, both by way of financial and infrastructure resources and obligations, in agreement with the Director-General, and to comply with the outcome of regional air quality management initiatives. Commitments and obligations shall include PM_{10} and $PM_{2.5}$ monitoring and modelling. The Air Quality Management Plan, as required by Condition 6.1, requires the Proponent to provide for reactive controls including operational measures, i.e. real-time monitoring. The Proponent is an active participant in the Upper Hunter Regional Air Quality Monitoring Network and has made financial contributions to the

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Submission by	ID	Category	Comment summary	Response
				monitoring network that includes $PM_{2.5}$ monitoring in Muswellbrook.
	G.3.5	Social	The project would result in a further deterioration of the underlying sustainability and diversity of the community and 'overheat' local markets to the substantial detriment of the community.	The principal driver for stimulating local markets will be growth in population combined with the capacity of markets to respond. Whilst the proposed modifications comprise no material changes to the Mount Pleasant Project that would affect outcomes previously assessed in the EIS, it is important to note that forecast population growth (HVRF 2008) over the life of the modified proposal is similar to that which has occurred over the prior equivalent period (refer to Response C.2.2). An understanding of the labour market's capacity can be gained by examining unemployment levels. If the market became "overheated" it would be characterised by lower unemployment than occurs more generally. Five years ago Muswellbrook had much higher unemployment than was typical for NSW as a whole (9.5 per cent versus 5.1 per cent) but in the intervening years it has been tracking the state averages (both 5.1 per cent in 2007-2009) suggesting the local and state labour markets were much the same. Future labour market conditions will depend on overall population growth and the availability of people with particular skills. The former will be unaffected by the proposed modifications as they will not increase current estimates of the future workforce; while the latter will depend mainly on national immigration trends which are unlikely to vary markedly from the time when the project was approved. Thus, there is no reason to expect that the proposed modifications will adversely affect prevailing labour market conditions. In fact, it is likely that recent reduced unemployment is at least partially due to greater participation rates which will have positive impacts both on consumption (i.e. business conditions) and social cohesion. Changes in the cost of living in Muswellbrook will be determined by local market factors and national economic policies (e.g. electricity pricing) unrelated to the Mount Pleasant Project. Provided local markets for

Table 2.1 Summary of submissions and responses

Submission by	ID	Category	Comment summary	Response
				goods and services continue to be able to respond to the growing population, there should be no greater inflation than occurs nationally. Population growth will be the principal factor affecting local market capacity and, as discussed previously, growth rates are forecast to remain similar to the recent past and be below state averages.
	G.3.6	Legislative pathway	Any extension of the project should be applied for under section 75J and not section 75W of the EP&A Act.	As stated in the EA, the proposed modification seeks to extend the expiry date of the development consent by a further two years until 2022. The proposed extension to expiry date would not result in any changes to the approved disturbance footprint, as it would only result in a further two years of the already approved mining schedule being carried out (refer to Section 3.2.3 of the EA). Mining will progress generally in accordance with approved operations for the remaining consent life until 2022. The proposed extension in consent life is considered to have limited environmental consequences beyond the original environmental impact assessment for the Mount Pleasant Project. It is considered appropriate that the proposal be considered under section 75W of the EP&A Act.
	G.3.7	EA document	There is no evidence by way of environmental impact concerning the approximate further two year period sought.	As discussed above, the proposed extension of the consent life by another two years would involve the operation of an already approved mining schedule.
	G.3.8	Assessment Approach	The assumptions and findings in the original EIS are now manifestly invalid. It would be fictitious to find the matters set out in the EIS provided a sufficient and appropriate basis for the variation assessment.	Refer to Section 2.3.1.
	G.3.9	Road and Rail	Increasing coal related traffic on local roads with	Refer to Response G.3.2

Table 2.1 Summary of submissions and responses

Submission by	ID	Category	Comment summary	Response
			insufficient contributions by proponents of mining development to cover the costs of necessary upgrades.	
	G.3.10	Noise and Vibration	Increasing amounts of coal transported by rail. None of the rail corridors are attenuated for noise which results in the sterilisation of residential development near rail corridors.	Rail movements associated with the proposed modification are considered to be generally in accordance with the EIS. The attenuation of noise for rail corridors is a matter for the appropriate rail authority.
	G.3.11	Social	Anecdotal evidence that the labour pool is insufficient to meet the needs of intensive mining in the sub region. Limited labour supply and high demand for labour has increased the price of labour and appears to have flowed into prices more generally and resulted in the depletion of trade qualified persons providing domestic trade services.	Refer to Response G.3.5.
	G.3.12	Social	Less quantifiable impacts of mining such as loss of visual amenity/character and social impacts.	Visual amenity and character are subjective and complex issues because they depend on the responses of individuals to changes in the landscape. One change that has occurred in the landscape around Muswellbrook over the past decade has been an increase in the areas of the town that are exposed to views of mines (CSRM 2008). It is unlikely that the proposed modifications to the Mount Pleasant Project will have any material visual impacts on Muswellbrook residents. The proposed facilities will be largely concealed and will not change the principal causes of impact- the areas used for mining and emplacement of overburden. Section 6.5 of the EA presents the visual assessment of the proposed modifications.

Table 2.1 Summary of submissions and responses

Submission by	ID	Category	Comment summary	Response
	G.3.13	Social	Council services are required to be open for longer periods to equitably service the shift worker community at a significant impost to the community.	Refer to Response C.2.2.
	G.3.14	Social	Short term resource (coal) creating demand spikes and supply constraints for various local markets such as water, land and labour. Resulting in increases in the cost of living and impacting upon other competing/incompatible industries such as thoroughbred breeding and viticulture.	Refer to Response G.3.5 and Response G.3.13.
	G.3.15	Social	Limited capacity of public services such as health to accommodate increases in population resulting from mining projects.	Whilst the submission raised general social implications of the proposed modifications as a key matter to be addressed, the capacity of health services was specifically raised. Over the ten year period from 1996 to 2006, people employed in health care and social assistance have increased by almost 10,000 across the Hunter region (HVRF 2008). This figure contrasts with a decline in the numbers employed in mining of about 1,800 over the same period and suggests that adequate health services capacity can be assured.
	G.3.16	Social	Limited MSC resources to make submissions on major developments.	The MSC has raised its limited capacity to assess major development proposals, specifically citing the fact that it receives no development application fee as this goes to the State Government which has primary regulatory responsibility. This is a matter for the State Government. It is noted that one of the MSC's proposed conditions would provide for it to receive a significant annual payment (above $20,000) for enlarged environmental services.

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	G.3.17	Road and Rail	Applications to close local roads have not been made and it is not yet known if the closure of those roads will be conditional on the longer term creation of new roads to serve the lots subject to the proposed modifications.	The proposed modification is not seeking any changes to road closures. Road closure associated with the project would be generally in accordance with the EIS. The Proponent will consult with MSC and make relevant application at the appropriate time.
	G.3.18	Consent conditions	Consent conditions proposed by MSC.	The Proponent is seeking modification of Conditions 6.4 and 7.1(3) as outlined in Section 3.2.4 of the EA. Modification of other conditions of consent is at the discretion of the DoP. The Proponent will hold further discussions with the MSC in relation to the requirements of the development consent, such as Section 94 contributions.
G4 Industry & Investment NSW (DII)	G.4.1	Mining Lease	Should the proponent apply for a mining lease for the conveyor/service corridor envelope, consent must be granted by the Minister for Mineral Resources to apply for a mining lease prior to the modification being approved by the DoP.	Noted.

3 Conclusions

Following public exhibition of the EA for the proposed modifications to the Mount Pleasant Project, a total of 22 submissions were received, including 14 from members of the community, four from special interest groups and four from government agencies.

Whilst the majority of the submissions discussed matters related to the Mount Pleasant Project in its entirety rather than the specific modifications that are the subject of the proposal, the key matters raised in these submissions related to the approach to the assessment and the cumulative impacts of the Mount Pleasant Project.

The existing development consent provides for a suite of thirteen comprehensive environmental management plans that are required to be prepared in consultation with regulators prior to substantive construction. The preparation of the environmental management plans will incorporate monitoring, corrective action and management review to ensure environmental management of the Mount Pleasant Project remains at its highest.

Responses are provided to matters raised by the submissions in this report. The responses indicate that no changes are required or further assessments to those provided in the EA.

The conclusions and statement of commitments made in the EA remain valid, in that the proposed modifications provide options, subject to engineering and commercial arrangements, that would comprise manageable environmental impacts that are consistent with the approved Mount Pleasant Project.

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