

26 September 2014

DETERMINATION OF MT ARTHUR COAL OPEN CUT CONSOLIDATION PROJECT MODIFICATION (MP 09_0062 MOD 1)

EXECUTIVE SUMMARY

The Planning Assessment Commission (the Commission) has prepared this report under the delegation of the former Minister for Planning and Infrastructure.

Hunter Valley Entergy Coal Pty Ltd (HVEC) is seeking to modify its existing project approval for the Mt Arthur coal mine near Muswellbrook in the Upper Hunter Valley. The proposal seeks to extend the existing open cut mine to the southwest, to extract an additional 128 million tonnes of coal. Other modifications are also proposed, including extending the life of the mine by four years, additional overburden emplacement, duplication of the existing rail loop and various other changes to the mining operations and final landforms.

Following careful consideration of the views expressed at the public meeting on 15 July 2014, the Environmental Assessment Report prepared by the Department of Planning and Environment (the Department) as well as agency and public submissions, the Commission has determined the above project modification should be approved, subject to recommended conditions as amended by the Commission.

As part of its assessment of the proposed modification, the Commission notes that the relevant guidance document for blasting in NSW is dated and was developed prior to the current large scale mining operations. Given this, it would be beneficial for the Department to review and update blasting guidelines, to provide better clarity of current expectations for proponents and the community, and to improve confidence in the planning assessment process. It is also noted that the NSW Industrial Noise Policy and Acquisition Policy are currently under review. Finalisation of these policies will provide more clarity for proponents and landholders regarding noise impacts and amelioration measures.

This determination report provides further detail on the Commission's process and findings, and outlines amendments made to the Secretary's recommended conditions of consent.

1. BACKGROUND

The Mt Arthur coal mine near Muswellbrook is one of the oldest open cut mining operations in the Hunter Valley, with operations commencing at the site in the early 1960s. Since then, the mine has undergone several modifications and is currently operated by HVEC, a subsidiary of BHP Billiton.

In 2010 approval was granted for the HVEC to consolidate its open cut operations and associated rail transport activities into a single project approval. As a result, the current operations at the Mt Arthur complex are regulated under two Ministerial approvals:

- MP 09_0062: The open cut mining operations and associated coal haulage known as the "Mt Arthur Consolidation Project" (approved on 24 September 2010); and
- MP 06_0091: The underground mining operations (approved on 2 December 2008). Works associated with this approval have not yet commenced.

The existing approval is until 2022 and allows for extraction of up to 32 million tonnes per annum (Mtpa) of run-of-mine (ROM) coal from an open cut disturbance area of approximately 6,400 hectares.

Under the existing approval, HVEC is required to secure over 3,000 hectares of biodiversity offsets, comprising offset areas and rehabilitated woodland. HVEC is also required to establish biodiversity offsets as part of the underground project and for its open cut operations under separate Commonwealth legislation.

Road access to the Mt Arthur mine is primarily via a dedicated access road off Thomas Mitchell Drive, a local road managed by Muswellbrook Council

2. PROJECT MODIFICATION

The proposed modification by HVEC seeks approval to modify approval MP 09_0062. It is proposed to extend the existing open cut mine to the southwest to extract an additional 128 million tonnes of coal, though overall there will be no increase in the annual extraction limit because the modification would be a continuation of the existing mining operations, by extending the life of the mine by four years until 2026.

A comparison of the proposed modification with the approved project is provided below:

	Current approval	Proposed modification
Life of mine	2022	2026
ROM extraction limit	32 Mtpa	No change
Disturbance area	Total open cut mine disturbance area is approx. 6400ha	Increase total disturbance area by approx. 260ha
Site access	Via Thomas Mitchell Drive (occasional access off Edderton Road)	Construct additional site access off Edderton Road to service relocated explosives facility. No change to main entrance.
Equipment fleet	Up to 193 vehicles	Up to 291 vehicles
Frequency of blasting	2 blasts per day with a maximum of 12 per week.	<ul style="list-style-type: none"> 3 blasts per day, with a maximum of 12 blasts per week averaged over 12 months 4 blasts per day up to 12 days per year
Blasting start time	9.00am	8.00am
Blasting charge	Maximum instantaneous charge greater than 1,500kg (4 per week, averaged over a 12 month period)	Removal of restriction on maximum instantaneous charge. (Note: There will be no change to the existing limits for overpressure and ground vibration).
External transport	Rail transport up to 27 Mtpa, using a maximum of 24 train movements per day	No change to the tonnage, but increased maximum train movements to 30 per day.
Biodiversity offsets and rehabilitation	3,012ha (1,097ha offset areas and 1,915 on-site rehabilitation)	4,365ha (1,723ha offset areas and 2,642ha on-site rehabilitation)

In addition to the above, the modification also proposes duplication of the existing Mt Arthur rail loop and additional overburden emplacement in a conveyor corridor between two existing emplacement areas (to the east of the mine, near Drayton coal mine);

3. DELEGATION TO THE COMMISSION

On 29 May 2014 the modification was referred to the Commission for determination under Ministerial delegation because Muswellbrook Shire Council objected to the proposal and more than 25 objections to the proposal were submitted.

Ms Gabrielle Kibble AO, Chair of the Planning Assessment Commission, nominated Mr Paul Forward (chair) and Mr Joe Woodward PSM to constitute the Commission for the project.

4. SECRETARY'S ENVIRONMENTAL ASSESSMENT REPORT

In considering the justification for the modification, the Secretary's Environmental Assessment Report ("Assessment Report") prepared by the Department of Planning and Environment (the Department) identifies the following key issues:

- Noise, particularly to the south west of the mine.
- Blasting;
- Air quality (including greenhouse gases);
- Traffic and transport (road and rail);
- Rehabilitation and final landform;
- Visual impact;
- Biodiversity;
- Aboriginal heritage;
- Agriculture;
- The significance of the resource to the region and NSW as a whole;
- Economic and social impacts; and
- The extent to which the modification has been designed to avoid, mitigate and/or offset the impacts on the environment and the amenity of the local community.

The Assessment Report concluded that the Department is satisfied that the proposed amendment would not significantly increase the impacts of the approved project and that residual impacts can be adequately mitigated, managed and/or offset through the implementation of conditions of approval. The Department recommended the application for approval, subject to conditions.

5. SITE VISIT AND MEETINGS

5.1 Planning and Infrastructure

The Department briefed the Commission on 17 June 2014. The following matters were discussed:

- Background to the application;
- The strategic context and significance of the mine;
- Issues raised by Council;
- Amenity impacts;
- Traffic related issues, including existing obligations and upgrades;
- Biodiversity offsets (existing obligations and long term protection);
- Aboriginal heritage management zone;
- Water resources.

5.2 Proponent

The Commission met with HVEC on 14 July 2014 for a briefing on the project and to undertake an inspection of the mine site (accompanied by the proponent). The Proponent provided a presentation on the mine and outlined the application currently before the Commission.

On 23 July 2014, HVEC sent the Commission additional information to be considered as part of the assessment of the modification. This included legal advice regarding the realignment

of Edderton Road, a Blast Management Plan (dated June 2014), an Independent Environmental Audit Report (November 2012), a visual simulation from a viewpoint to the south west of the mine, and details of progressive rehabilitation undertaken by HVEC.

5.3 Muswellbrook Shire Council

The Commission met with representatives of Muswellbrook Shire Council on 14 July 2014. The Mayor and Council officers outlined their response to the Department's recommendation as follows:

- The need for the proponent to contribute financially to the upgrade of Thomas Mitchell Drive through the payment of Section 94 contributions.
- The proposed closure/realignment of Edderton Road;
- Proposed plans by Council to relocate its sewerage and water treatment plant to part of the mine's proposed offset area;
- The future offset area and its conflicting location with Council's future Muswellbrook urban growth area;
- The wording of the rehabilitation condition;
- The contributions received through the Voluntary Planning Agreement (VPA);
- Blasting and public information about blasting events.

5.4 Public Meeting

On 15 July 2014 the Commission held a public meeting to gain an understanding of the community's views on the recommendation. Approximately 40 people attended the meeting, including the registered speakers. Speakers included representatives of special interest groups, environmental groups and local landholders. Each of the speakers was against the modification.

The issues raised at the meeting and in the associated submissions received by the Commission are summarised below:

- Impacts arising from current operation of the mine including noise, dust, blasting, lighting water quality, visual impacts, social impacts, the effect on property values and health impacts. Many of the submissions (verbal and written) express concern that the modification will intensify these impacts;
- Cumulative impacts from the numerous mines operating concurrently in the area;
- Increased road traffic, coal trains and associated impacts;
- Loss of ecological communities, threatened species, biodiversity and natural habitat, which will not be offset "like for like";
- Claims of non-compliance with consent conditions and claims that commitments are not being fulfilled;
- The modified approval recommended by the Department removes conditions that should be reinstated;
- The condition of and impact on surface water and ground water has not been adequately assessed;
- An independent economic assessment should be undertaken;
- There should be a limit to the number and extent of modifications;
- Impact of mine on the agricultural industry and thoroughbred industry, particularly from dust and reduced air quality;
- Inadequate visual assessment undertaken;
- Increase in greenhouse gas emissions resulting from the project;
- Inadequacy of the Secretary's Assessment Report, in particular in relation to surface water and ground water issues;
- Inadequate contribution to maintenance and upgrade of public roads;
- Objection to permanent mining voids being left after mining ceases;

- Inadequate rehabilitation; and
- Remaining landholders are “locked in” by surroundings mines but not eligible for acquisition.

6. ADDITIONAL INFORMATION FROM THE DEPARTMENT AND PROPONENT

Following the public meeting and a detailed review of the Assessment Report, the Commission sought additional advice from the Department regarding a number of issues that required clarification. A meeting was held between the Commission and officers from Department on 5 August 2014 to outline these issues, with a written response received from the Department on 26 August 2014.

7. COMMISSION’S CONSIDERATION

The Commission has considered the application and reviewed the Assessment Report, associated documents and additional information provided by the Department and HVEC. The Commission has also considered submissions made by Muswellbrook Shire Council, agencies and the public. The key issues considered as part of the assessment of this modification are addressed below:

7.1 Noise Impacts

A number of speakers at the public meeting raised concern regarding noise emissions from the mine, as well as the cumulative noise impacts from neighbouring mines. The Department’s noise assessment was criticised, as it was suggested that the impacts of the mine had been underestimated.

A detailed noise assessment was undertaken by acoustic experts Wilkinson Murray, as part of the Department’s assessed of the proposed modification. The assessment was undertaken in accordance with the NSW Industrial Noise Policy and provides a direct comparison with modelled years for the existing project. It is a cumulative assessment, in that it incorporates other noise sources into the background noise levels (including the noise generated by Mangoola and Bengalla mines). The report found 24 properties will be impacted by the noise, and intrusive noise levels will increase by 1-3dBA south west of the mine. Noise will be reduced in other areas as the mining operation moves south west over time. The cumulative noise levels at all receivers would comply with the acceptable amenity criteria for rural land.

In its review of the amended Instrument of Approval, the Commission requested justification from the Department regarding the deletion of a number of existing conditions relating to noise. This included the proposed deletion of conditions relating to mitigation or acquisition of properties where more than 25 percent of the property is impacted by intrusive noise. The Department explained that noise acquisition and cumulative noise conditions were removed from contemporary mining approvals because the conditions are not legally enforceable by either the Department or the EPA. In addition, some cumulative noise conditions impose obligations on third parties outside the control of the subject mine. Importantly, the Department also advised that no existing properties would be affected by the deletion of these conditions. The Commission notes that the NSW Industrial Noise Policy and Acquisition Policy are currently under review. Finalisation of these policies will provide more clarity for proponents and landholders regarding noise impacts and amelioration measures.

The Commission notes the noise modelling for the project is conservative. For example, assumptions were based on all machinery being operational at full power, which is unlikely to occur in practice. While some residences will receive increased noise levels, they will be eligible for mitigation or acquisition consistent with the existing approval.

The Commission agrees with the Secretary’s findings that the proposed modification would not significantly change or increase the noise associated with the approved project, but

rather there would be a general shift in the distribution of operational noise impacts towards the south west. Blasting noise impacts are discussed below.

The Commission is satisfied with the modified conditions of consent, which would require HVEC to update its Noise Management Plan, implement reasonable and feasible noise mitigation measures, conduct monthly attended monitoring, and ensure compliance with the conditions of consent.

7.2 Blasting

Blasting allowance

The proposed modification involves the following changes to blasting at the Mt Arthur mine:

- Increasing the maximum number of blasts from two per day to three;
- Allowing a maximum of 12 blasts per week averaged over 12 months (currently a maximum of 12 blasts per week is permitted, however this is not averaged);
- Allowing up to four blasts per day for a maximum of 12 days per year;
- Commencing blasting at 8.00am rather than 9.00am; and
- Removing the restriction on the maximum size of each blast.

The Commission is aware that blasting is a key issue of concern for the local community. The Department's Assessment Report notes 153 complaints about blasting between 2007-11 but only three exceedances were recorded. It is not clear to the Commission whether this is because the existing blast criteria do not satisfy the community's expectations, or whether it reflects a lack of appropriate compliance by government agencies. The Commission sought further advice from the Department and the Proponent regarding justification of the proposed changes and compliance issues. The Department advised that it and the EPA are currently investigating improvements to compliance issues and also provided further information regarding the proposed changes.

In summary, while the proposed changes would allow relaxations to the blasting times and frequency, they would provide more flexibility for the Proponent to blast under optimum conditions. This could reduce the impact on residents. For example, when the wind is from the northern sector HVEC would do more blasts in the northern mine pit.

The Commission notes that the relevant guidance document for blasting in NSW is ANZEC's *Technical Basis for Guidelines to Minimise Annoyance due to Blasting Overpressure and Ground Vibration* (1990). This guideline recommends blasting should generally occur no more than once a day and be permitted between 9.00am to 5.00pm Monday to Saturday. The Department argues that this document is dated and was developed prior to the current large scale mining operations that require more frequent and flexible blasting. It referred to other nearby mines (Bengala and Drayton) that have approval conditions inconsistent with the ANZEC guidelines. Given this explanation, it would be beneficial for the Department to review and update the blasting guidelines for NSW to provide better clarity of current expectations for proponents and the community, and to improve confidence in the planning assessment process.

The Commission has carefully considered the proposed modifications and the further advice. On balance, the increased flexibility regarding the number and timing of blasts is supported because it will enable smaller blasts on a more frequent basis, and will provide an opportunity to utilise favourable weather conditions. In turn, this will allow a greater ability to minimise offsite dust, overpressure and vibration impacts.

The Department has also recommended removal of the maximum instantaneous charge limit in the existing approval. The Commission accepts that the more important criteria are the overpressure and ground vibration limits and providing these are specified, there should be

no need to specify a maximum charge limit. Importantly, there is no proposal to amend the limits for overpressure and ground vibration and these are consistent with the ANZEC guidelines.

The Commission accepts the recommended condition 17 that requires HVEC to update the existing Blast Management Plan to include details on a blast monitoring program, and outline how the blast management zones will comply with the relevant impact criteria. In reviewing this condition, the Commission considered the suggested amendments to Condition 17 recommended by Muswellbrook Council. Council requested that the condition be amended to require the Blast Management Plan be prepared in consultation with Council. However, the Council's Mining Blast Management Policy is a local government policy which does not necessarily reflect NSW Government policies in the regulation of blasting in the mining industry. Therefore, this amendment is not supported by the Commission.

Notification of blasting

At the meeting between Muswellbrook Council and the Commission, Council explained that it has created an online portal for blasting in the region. The portal allows all stakeholders to access the blasting schedule for registered mines. Council's policy is that all notifications are received through the portal.

Mt Arthur currently does not participate in this portal, however it provides the public with access to its blasting schedule via the Mt Arthur Coal website. This is consistent with the requirements of the most recent Blast Management Plan for the site (approved by the Department in June 2014). The schedule is also distributed to relevant organisation and individuals, and HVEC has advised the Commission that it intends to add Council to its list of stakeholders.

The Commission considers it would be beneficial if the Blast Management Plan condition (Condition 17 of Schedule 3) is updated to require Mt Arthur to participate in Council's online portal. This will enable stakeholder access to multiple blasting schedules from one source, which is particularly useful for residents who live within close proximity of more than one mine in the region.

7.3 Air Quality

Cumulative impacts

A number of speakers at the public meeting raised concern about air quality impacts and the resulting impacts on health and land value.

The Department's Assessment Report considered the Air Quality and Greenhouse Gas Impact Assessment prepared by PAE Holmes. This assessment considered the cumulative impacts of the proposed modification in the context of neighbouring mines, and concluded that the existing envelope of air quality impacts would be shifted to the south west (in-line with the progressing mine front). There are, however, additional applications for increased mining activity currently under assessment. In light of this, the Department commissioned an independent cumulative assessment of air quality by Todoroski Air Sciences

There are no predicted exceedances of the annual PM₁₀ standard. The Commission notes that short-term, 24hr average PM₁₀ concentrations may exceed the relevant impact criteria at up to 12 privately owned residences to the west of the mine. To assist in mitigating the impacts on these properties, conditions 18 to 24 of Schedule 3 have been updated to reflect the changes associated with the modification. These conditions impose the current requirements for the management and monitoring of air quality impacts. In addition, all properties would retain their existing mitigation or acquisition rights under the modified approval.

The Department has acknowledged that there is currently no criterion applicable for PM2.5 particulate impact assessment in NSW. However the National Environment Protection Measure (NEPM) reporting standard for PM2.5 has been used for the purpose of the Mt Arthur assessment. Whilst acknowledging the NEPM reporting standards are advisory only, the Commission notes the PAE Holmes assessment concludes that the modification would not result in exceedances at any privately owned residence.

Mitigation measures

The Commission is advised that HVEC currently implements a range of dust mitigation measures for the Mt Arthur mine, including the use of water carts and chemical suppressants on unsealed haul roads, restrictions on dust-generating activities during adverse meteorological condition, real-time dust monitoring and curtains/shields for relevant equipment and use of water sprays. The Commission supports these measures.

Conclusion

The Commission accepts that while the project modification extends the life of the mine by four years, it would not result in any significant adverse air quality impacts when compared to the existing operations on the site. This conclusion has been reached on the basis of the existing and proposed mitigation and acquisition measures, in addition to the recommended conditions requiring best practice dust management.

7.4 Property Acquisition

At the public meeting, one of the speakers explained that there are five privately owned properties surrounded by a number of mines, however none of the properties are located in an acquisition zone. Other attendees at the public meeting confirmed this. The Commission was concerned about the cumulative impacts of mining on these properties and considered whether it was possible to require HVEC to acquire properties outside of an acquisition zone.

The Commission sought further advice from the Department and was advised that acquisition is only considered when all reasonable and feasible mitigation measures have been exhausted. In making a decision about affording acquisition rights, the Department assesses the predicted impacts against air quality and noise impact assessment criteria established by the Environmental Protection Authority (EPA). With regard to Mt Arthur, the properties that have been recommended for upfront acquisition would be significantly affected by either dust or noise impacts. This does not mean that other properties would not be impacted by the proposal – just that the nature and extent of these impacts are consistent with the normal criteria used for acquisition.

The Commission agrees with the Department that acquisition limits should be applied consistently throughout NSW, as applying alternative limits on a mine-by-mine basis would introduce significant uncertainty in the planning process. The recommended conditions associated with this modification require the proponent to demonstrate compliance with the applicable noise and air quality limits. If there is ongoing non-compliance with these limits, HVEC would be required to acquire the affected properties in accordance with the Department's acquisition procedures. There is also provision for nearby landowners to request an independent review to be conducted if they believe that the mine is exceeding relevant noise impact criteria. Finalisation of the NSW acquisition policy, which is currently under review, will provide more certainty to proponent and the community.

7.5 Rail

HVEC currently has approval to utilise 24 train movements per day, to transport a maximum of 27 Mtpa of coal from the mine to the Port of Newcastle, via the Antiene Rail Spur. As part of this modification, HVEC has sought to increase the number of movements to 30 per day, with no request to increase the limit on haulage. The proposed change will enable increased efficiency and flexibility with regards to rail movements and at the terminal.

Despite not being raised as a significant issue at the public meeting, the Commission has carefully considered this element of the proposal and the impact it could have on properties within close proximity to the rail line. Given that there will be no increase in the total amount of coal transported on an annual basis, the Commission accepts that increasing the maximum number of daily train movements will not result in unreasonable impacts on these properties. Although there may be increased disturbance on particular days, there will be other days when there are less movements and less disturbance. To ensure affected properties are aware of any increased rail movements, the Commission has added a further requirement to Condition 11 of Schedule 5 ("Access to Information"). The Proponent will be required to ensure they make publically available (on its website) the days on which they intend to make over 24 rail movements.

7.6 Roads

Thomas Mitchell Drive

At its meeting with the Commission on 14 July 2014, Muswellbrook Council discussed the road infrastructure associated with Mt Arthur. With regard to Thomas Mitchell Drive, Council outlined the following:

- The road classified as a local road and therefore Council is the relevant road authority;
- The road services four mines (Bengalla, Mt Arthur, Drayton and Mangoola);
- The road is used almost exclusively by the mining industry, although Council acknowledged that the road also services Council's industrial estate;
- The road carries a large volume of heavy vehicles and is used as a by-pass of Muswellbrook town centre;
- Council has commenced a significant upgrade of the road, having spent \$8.5 million so far (of which \$3 million was provided from HVEC);
- There is concern regarding the shortfall in funding for the upgrade;
- HVEC has not paid the Section 94 contributions required under its 2010 approval as there is currently no Section 94 plan (a draft has been finalised); and
- The Council will receive \$4 million from the NSW Government (Hunter Infrastructure Investment Fund) for the upgrade of Thomas Mitchell Drive

The total cost of the Thomas Mitchell Drive upgrade is estimated at approximately \$18 million. Both the Department and Council consider it appropriate for a significant proportion of the upgrade and ongoing maintenance to be funded by the various mining companies using the road. Under the existing approval and associated Voluntary Planning Agreement (VPA), HVEC has obligations relating to the upgrade and maintenance of the local road network.

The Department has commissioned GHD to conduct an independent study in consultation with Council and the relevant mines. The aim of the study is to establish an equitable approach to apportioning funding liabilities for Thomas Mitchell Drive. The most recent draft of the study (dated June 2014) has been received by Council and indicates that more than \$7 million of additional funding should be provided to Council from mining companies. The Commission notes that all the key mining operations that rely on Thomas Mitchell Drive currently have (or recently had) applications being lodged with the Department, and consequently there is an opportunity for Council to require additional funds in accordance with the GHD Study.

The Commission accepts that the GHD study provides a fair and reasonable approach to the funding of the upgrade and maintenance of Thomas Mitchell Drive. Although Council's Section 94 plan has not been finalised, the Commission considers the conditions recommended by the Department provide sufficient flexibility to ensure that the outcomes of

the study can be implemented. Notwithstanding this, the Commission believes that the notes associated with of Condition 47 should be amended as shown below, as this will reflect the contribution HVEC has already made to the road upgrade works as part of its existing VPA:

“Road Upgrades and Maintenance

...

Note:

- *In making a determination about the applicable **upgrade and** maintenance contributions for Thomas Mitchell Drive, the Secretary shall take into account the contributions already paid and currently required to be paid towards the **upgrade and** maintenance of the local road network surrounding Muswellbrook under this approval and the planning agreement executed on 24 June 2011, and summarised in Appendix 9.”*

As requested by Muswellbrook Council, the Commission has amended Condition 47 to correct the date of the GHD study to June 2014 (rather than December 2014). Council also requested that the condition require contributions be paid by 30 September 2014 (rather than 31 December 2014). However, given the date of this determination and the GHD study, it would not be reasonable to change this timing. This is discussed later in this report.

Edderton Road

The proposed modification seeks to realign and upgrade Edderton Road and its intersection with Denman Road, to provide a formal access road to the proposed relocated explosives facility. Regarding this element of the proposed modification, Council raised the following issues with the Commission:

- The impact of the proposed closure/realignment of the existing Edderton Road on the efficiency of the regional traffic network and condition of the road;
- The realignment is not necessarily supported by Council as it is a critical road for emergency services and its closure would have an impact on the local economy;
- The Commission doesn't have the authority to approve the realignment of a local road - this needs to be done under the Roads Act

The Department has advised the Commission that the construction of the realigned section of Edderton Road has already been approved under the existing Part 3A approval for Mt Arthur. Therefore, Council cannot refuse to grant consent under the Roads Act. However, HVEC still needs to obtain separate consent from Council for the closure of the section of Edderton Road that it proposes to mine through. It is noted that HVECs provided legal advice to the Commission which is consistent with the Department's position.

The Commission concludes that the realignment of Edderton Road is not a matter of relevance to this modification. The Commission accepts the Department's conditions requiring HVEC to upgrade the intersection of Edderton Road and the explosives facility access road to meet relevant standards and to the satisfaction of Council.

7.7 Voluntary Planning Agreement (VPA) and Section 94 Contributions

HVEC and Muswellbrook Council have an existing VPA with Council that provides for both Section 94 contributions (including \$3 million towards the upgrade of Thomas Mitchell Drive) and voluntary public benefit contributions. As part of this modification HVEC has offered to extend the contributions under its existing VPA for an additional four years.

Following its meeting with the Commission, Muswellbrook Council requested the modified approval include the following addition in relation to the VPA:

Schedule 2:

14A. By the end of December 2014, unless otherwise agreed by the Secretary, the Proponent shall use its best endeavours to enter into a revised planning agreement with Council. The contributions proposed to be made under the planning agreement shall generally be

consistent with those made under planning agreements entered into between Council and other mining operations (after taking into account the relative size of the various operations). In the event of a dispute between the parties in negotiating the terms of a planning agreement, the Secretary shall arbitrate a settlement."

The addition of Condition 14A as recommended by Council is not supported by the Commission, as neither the Commission nor the Secretary has the authority to require HVEC to increase its voluntary contributions.

The proposed modification seeks approval to continue mining for four years at the same intensity. Given this, it is unlikely that there would be additional demand on community services and infrastructure; however the duration for the demand would be extended for the extended life of the mine. The commission therefore agrees with the Department's recommendation that additional Section 94 contributions are warranted to address issues with the dilapidation of Thomas Mitchell Drive (as outlined earlier in this report).

7.8 Biodiversity Offsets and Rehabilitation

The Commission has considered the biodiversity impacts of the project in the context of the surrounding landscape. The site sits within an existing mining cluster, in close proximity to other open cut coal mining operations. Under the existing approval conditions HVEC is required to establish a 3,012 ha biodiversity offset package, while the proposed modification will result in a 4,365ha package (including rehabilitated woodland areas).

Condition 37 of Schedule 3 of the existing approval requires HVEC to identify and secure an additional off-site offset area of at least 135ha. HVEC-owned land adjacent to the existing Thomas Mitchell Drive offset area has been identified by HVEC as the preferred location. Council has suggested alternative wording to the recommended biodiversity offsets conditions because it has two concerns regarding the offset areas. The first concern is that Council has plans to locate a sewage treatment plant within an offset area approved under the 2010 approval. To address this, the Commission has amended Condition 37 to require the actual size of the offset *"be adjusted to fully offset the biodiversity values that would be lost if any land within the biodiversity offset strategy is excised for the provision of public utilities or services, such as the Muswellbrook Sewage Treatment Plant"*. This amendment is considered to be consistent with the wording suggested by Council and is acceptable. Council's suggestion that Condition 39 (Long Term Security of Offsets) also be varied to require HVEC to consult with Council regarding the off-site offset area is also acceptable.

Council's second concern with HVEC's offset strategy is that the additional offset area is proposed to the east of Muswellbrook, in an area that is identified by Council in its future urban release strategy. The Department has advised the Commission that the additional offset area has no formal status, and any offset that compromises Muswellbrook's future urban growth corridors would not be accepted.

Taking into consideration the recommended conditions from the Department, the Commission is satisfied that all reasonable attempts have been made to minimise and compensate the biodiversity impacts associated with this modification.

7.9 Compliance matters

Concern was raised at the public meeting regarding non-compliances with the 2010 conditions of consent and commitments, although this was disputed by several of the speakers at the public meeting. The claimed areas of non-compliance related to noise, the amount of blasting, visual impact and the location of overburden emplacement.

The Department has advised the Commission that an independent environmental audit for the mine was conducted in November 2012, with the next audit due to be completed in

September 2014. The 2012 audit concluded that a high degree of compliance with the project approval conditions and commitments. This report is available online at <http://www.bhpbilliton.com/home/society/regulatory/Pages/default.aspx>.

It is noted that Conditions 3 and 4 of Schedule 5 of the modified consent require an annual review of the environmental performance of the project to be completed to the satisfaction of the Secretary, with subsequent revisions made to management strategies/plans if required. The Commission supports this requirement for regular audits of the mine.

The Commission has consulted with the Department and is satisfied that the area of overburden emplacement shown in the aerial photos in the Assessment Report appears consistent with the approved disturbance footprint. In addition, the Department's Singleton compliance team have recently confirmed that the dump heights are significantly below the approved maximum heights.

The Commission notes the significant community concern about alleged non-compliance with approval conditions and/or commitments. The Department advised it had issued two Penalty Infringement Notices in recent months and the Commission was advised that the EPA is considering taking enforcement action following a compliance issues from earlier this year.

While compliance issues need to be pursued directly with the Department, the Commission has sought to ensure conditions of the modified consent are enforceable with appropriate penalties, and that there is relevant information readily available to enable the community to make informed decisions.

7.10 Visual Impact

Visual Impact Assessment

As part of HVEC's Environmental Assessment, a Landscape and Visual Assessment was undertaken by Urbis Pty Ltd. The assessment included a comparison of six representative viewpoints and receiver locations to determine the extent of any visual impacts associated with the proposal. Urbis identified that the proposed modification has the potential to marginally increase the existing visual impacts of the mine as a result of:

- Extending the open cut mine to the south and south west;
- Increasing the size of the overburden emplacement area behind the advancing mine front to a height of 375m;
- Increasing the height of the overburden emplacement within the conveyor corridor to 360m;
- Duplication of the rail loop and increasing the number of peak train movements; and
- Additional equipment operating on the site.

The Landscape and Visual Assessment concluded that the nature and extent of the visual impacts on receivers to the north and north west would be similar to those associated with the existing operations. Receivers to the west and south west are likely to experience a marginal increase in visual impacts as the mine progresses in that direction. However, the Department noted in its Assessment Report, much of the land in this direction is either owned by HVEC or subject to acquisition rights. Other properties to the west would experience some residual impacts, which would be diminished by distance, topography and vegetation.

Mr Ross Cole of Darley Australia (owner of Woodlands Stud, located to the south of the Golden Highway) and Mr Cameron Collins from the Hunter Thoroughbred Association raised concern at the public meeting regarding the visual impacts of the proposed modification on

the Stud. Together they commissioned Mr Michael Wright as a visual and landscape advisor, to undertake an analysis of the Urbis assessment. Mr Wright's opinion is that the angle and position from which the photographs were taken are inappropriate, and the visual simulations should have been conducted from elevated portions of the property.

In response to these concerns, HVEC has provided details to the Commission regarding the methodology used in the visual assessment. HVEC explained that the viewpoint near the entry to Woodlands Stud was selected due to its proximity to the homestead. The viewpoint was positioned to the north to avoid views to the mine being obstructed by intervening topography to the south. The elevated portions of the Stud were not used for the assessment these locations are the highest in the landscape and were not considered to be representative of the property.

The Commission visited the entry to the Woodlands Stud and has previously visited the high point on the Stud. The Commission acknowledges that the proposed mine would be more visible from high point on the Woodlands stud. On balance, the Commission considers the visual impact on the Woodlands stud is acceptable. This conclusion acknowledges that the proposed mine extension would be approximately 10km or more away; other mining operations are also visible in the distance from the high point in the Woodlands property and; the Commission considers that the visual impact on the bulk of the property, including the homestead would be minimal.

Proposed deletion of visual impact Commitments

The Statement of Commitments in the existing approval includes an obligation to minimise visual impacts on the Woodlands Stud. Commitment 20 states that direct views of the mine from the stud will be kept to less than 2.5 percent of the primary view from the property. At the public meeting and in its written submission, Darley Australia raised concern that the relevant Commitments (18, 19 and 20) were proposed to be deleted from the consent as part of the subject modification. The Commission shared this concern and sought clarification from the Department. It was advised that each Commitment has been replaced with Condition 49 of the modified consent, as detailed below:

Commitment	Proposed modification
Commitment 18 Guidelines to be prepared to include treatment methods for primary/ secondary view areas from affected residences, consultation requirements, plans to mitigate visual impacts.	The Department has recommended that this Commitment be replaced with Condition 49. This Condition requires the existing Visual Impact Management Report to be revised to the satisfaction of the Secretary. The report must identify the properties likely to experience visual impacts and describe the additional mitigation measures that could be implemented to reduce the visibility of the mine.
Commitment 19 Draft plans to be prepared in consultation with Woodlands to screen and filter views of the mine from affected sections of Stud. The works will be implemented and effectively maintained throughout the life of the project, at the cost to Mt Arthur Coal.	The Department questioned the need for Commitment 19, as the potentially affected land at the Woodlands Stud is approximately 10km from the mine. However, following discussions with the Commission, the Department has incorporated the intent of Commitment 19 into Condition 49 through the following amendment to the Condition notes: <i>"The additional visual impact mitigation measures should be aimed at reducing the visibility of the mine from significantly affected residences or areas on privately-owned land subject to tourist and/or general public access or areas on the Woodlands thoroughbred horse stud with views of the project, and do not necessarily require measures to reduce visibility of the mine from other locations on affected properties..."</i>

<p>Commitment 20</p> <p>Views from the primary view zone of Woodlands will be minimised to active overburden faces on the out-of-pit emplacement areas to ensure the extent of any primary view is less than 2.5 percent.</p>	<p>The Department has indicated that the extent of the primary view from Woodlands would remain well below 2.5 percent meaning there is limited justification in incorporating this commitment into the conditions of approval. The Department also questions how this Commitment would be monitored and enforced were it to be incorporated in the project approval.</p>
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The Commission is satisfied that the proposed Condition 49 reflects the intent of the visual impact commitments contained in the original approval. To ensure that visual impacts are appropriately mitigated, the Department has recommended that HVEC update its Visual Impacts Management Report to reflect the modification and implement additional mitigation measures for impacted receivers, to the satisfaction of the Secretary. The Visual Assessment indicates that the proposed extensions of the mine would remain within the 2.5 percent threshold required under Commitment 20 and that views from the majority of the operational areas at the stud are shielded by intervening topography.

Darley disputed the Department's prediction that the view would necessarily remain below 2.5 percent, as it depends on the methodology used to measure this. Given the Department's advice that this condition may not be enforceable, it is difficult to understand how the Department can be convinced that it will not be breached. The Commission accepts that this condition should be deleted, as it is not enforceable and considers the other conditions as proposed, and amended by the Commission, adequately protect visual amenity.

Visual Bunds

At the public meeting, Mr Michael Wright presented photographs of a recently constructed visual bund along Denman Road, to show the Commission that HVEC's obligations regarding mitigation of visual impacts using bunding and tree screening are not effective. HVEC has advised that bunds shown in the photographs were less than 12 months old. During its inspection of the site and surrounding area, the Commission was able to inspect areas of established visual bunds (for example along Thomas Mitchell Drive). The Commission acknowledges the lack of established vegetation limits the effectiveness of the bunds but is satisfied that the conditions of approval are appropriate and will provide satisfactory screening provided there is full compliance with the conditions.

7.11 Rehabilitation

The proposed modification includes the following changes to the approved post-mining landform:

- The emplacement of overburden within the existing conveyor corridor;
- backfilling the existing Saddlers Pit void;
- Retaining the existing Belmont and McDonalds Pits as final voids;
- Changes to the distribution of woodland rehabilitation areas; and
- Improvements to the contouring and relief of the final landform.

Under Condition 43 of the modified approval, HVEC would be required to carry out rehabilitation progressively, as soon as reasonably practicable following disturbance. Under Condition 41A (Rehabilitation Objectives), a comprehensive Rehabilitation Management Plan (RMP) would need to be prepared, detailing how specific rehabilitation objectives would be achieved. The RMP would need to be prepared in consultation with key stakeholders and to the satisfaction of the Division of Resources and Energy (DRE). As part of its mining lease, HVEC would also be required to prepare successive mining operations plans every

three to five years, to establish the plans and cross-sections for the mine and proposed final landform.

At its meeting with the Commission, Muswellbrook Council explained that while it supported the addition of Condition 41A, it suggested an amendment to the objective relating to the rehabilitation of the mine site, as follows:

- 41A. *The Proponent shall rehabilitate the site to the satisfaction of NSW Trade & Investment. The rehabilitation must comply with the objectives in Table 14, and be consistent with the rehabilitation plan shown in Appendix 7 and the final landform plan shown in Appendix 8.*

Table 14: Rehabilitation Objectives

Feature	Objective
Mine site (as a whole)	<ul style="list-style-type: none">• Safe, stable and non-polluting• Final landforms designed to incorporate Natural micro-relief and Natural drainage lines micro-relief and integrate with surrounding natural landforms
...	

In this clause Natural means having the characteristic, to the extent possible, of being derived from nature. In the case of drainage lines, this includes, amongst other things, sinuosity. Reference should be made to the typical geomorphology of adjacent areas.

As part of its consideration of the suggested amendment above, the Commission asked the Department whether there is legislative framework and/or guidelines to reflect the requirement for “natural” land form. The Department advised that while it does not have guidelines for the rehabilitation of open-cut coal mines, the DRE and other government agencies have best practice standards which would be used to prepare the RMP.

The Commission accepts that the proposed changes to the existing approval represent an improvement to the rehabilitation strategy for the mine, and would result in a natural and functional final landform. It agrees with Council that amending the rehabilitation objectives to refer to “natural” micro-relief and drainage lines will strengthen HVEC’s obligations in relation to the final landform of the mine site; however the Commission does not consider it necessary to specifically define the term “natural”.

7.12 Additional Amendments

The draft conditions recommended by the Department were discussed with Muswellbrook Council and the Proponent, and Council provided comments on specific conditions. These comments have been considered by the Commission and addressed in this report.

On 3 September 2014 the Department forwarded correspondence received from HVEC to the Commission. In its letter, HVEC requested that the dates specified in a number of conditions be updated to reflect the timeframe associated with assessing this modification. The conditions relate to the delivery of certain strategies and management plans, and are considered in the table below:

Condition No.	Proposed revision	Commission's assessment
37 - Biodiversity offsets Revise offset strategy and identify additional off-site offset area to the satisfaction of the Secretary by end of September 2014	Change from September 2014 to three months from the approval date	Accepts revising the date to the 31 December 2014.
39 – Long Term Security of Offsets Provide appropriate long term security for the biodiversity offset area by 31 December 2014	Change from December 2014 to six months from the approval date	Accepts revising the date to 31 March 2015.
40 – Biodiversity Management Plan (BMP) Submit a BMP to the Secretary by end of September 2014	Change from September 2014 to nine months from the approval date	The BMP can be staged to include the additional offset area. Six months from the approval date is considered reasonable.
42 – Rehabilitation Strategy Submit a Rehabilitation Strategy to the Secretary by the end of June 2015	Change from June 2015 to 12 months from the approval date	Accepts revising the date to the end of September 2015.
44 – Rehabilitation Management Plan (RMP) Submit a RMP to NSW Trade and Investment for approval by 31 March 2015	Change from March 2015 to 12 month from the approval date	Accepts revising date to 30 September 2015.
47 – Roads Upgrades and Maintenance Pay Thomas Mitchell Drive contribution by 31 December 2014.	Change December 2014 to three months after completion of the Contributions Study	Accepts revising date to 3 months after the GHD study is completed and issued by the Department.
49 – Mining Operations Additional Visual Impact Mitigation Revise the Visual Impacts Management Report by the end of September 2014.	Change September 2014 to three months from the approval date	Accepts revising date to the end of December 2014.

All other amended conditions not specifically detailed in this report have been considered by the Commission and are deemed to be acceptable.

7.13 COMMISSION'S DETERMINATION

The Commission has carefully considered the Secretary's Environmental Assessment Report as well as submissions made to Department and the Commission during the public meeting. The Commission notes that some of the concerns raised relate to the existing operation of the mine; and that compliance with regard to these issues is governed by the conditions of consent. The Commission's assessment role is limited to the modifications proposed in the current application and their associated impacts.

The Commission has determined to approve the modification, subject to the conditions recommended by the Department, as amended by the Commission. The Commission's amendments are summarised as follows:

Schedule 3

- Conditions 1 and 7 – Remove names of private landholders.
- Condition 17 – Include the requirement for Mt Arthur to participate in Muswellbrook Council's online blasting portal.
- Condition 22 - Remove names of private landholders.

- Condition 37 – Revise timing and include a note requiring the size of the off-site offset area to be adjusted if any land is excised for the provision of public utilities or services, such as the Muswellbrook Sewage Treatment Plant.
- Condition 39 – Revise timing and include requirement to consult with Council.
- Condition 40 – Revise timing.
- Condition 41A – Amend wording of rehabilitation objective for the mine site.
- Condition 42 – Revise timing.
- Condition 44 – Revise timing.
- Condition 47 – Revise timing and amend wording relating to the upgrade and maintenance of Thomas Mitchell Drive.
- Condition 49 – Revise timing and amend working to include reference to Woodlands Stud.



Paul Forward
Member of the Commission (Chair)



Joe Woodward PSM
Member of the Commission

Appendix 1

List of Speakers at the Public Meeting

Planning Assessment Commission Meeting Mt Arthur Coal Consolidation Project Modification

Date: 9.30 am Tuesday 15 July 2014
Place: Muswellbrook RSL Club,
113 Bridge Street, Muswellbrook

1. Mark Peel
2. Darley (Ross Cole)
3. Hunter Thoroughbred Association (Cameron Collins and Michael Wright)
4. Hunter Communities Network (Bev Smiles)
5. Hunter Environment Lobby Inc – Jan Davis
6. Ernest Markham
7. Lock the Gate Alliance – Steve Philips