

12 December 2016

**NSW Planning Assessment Commission Determination Report  
Wambo Coal Project – MOD 12 Southern Longwall Modifications – D435/16**

## **1. INTRODUCTION**

On 18 October 2016, the Planning Assessment Commission (the Commission) received from the Department of Planning and Environment (the Department) a modification request from Wambo Coal Pty Ltd (WCPL), a subsidiary of Peabody Energy (the Proponent) to modify the existing approval for components of both the aboveground and underground mining operations.

The modification request has been referred to the Commission for determination because the Department received more than 25 submissions in the nature of objections.

The Commission to determine the modification request consisted of Ms Lynelle Briggs AO, Chair of the Commission, Mr Roger Fisher and Mr Brian Gilligan. Mr Brian Gilligan subsequently stood aside from the Commission prior to the public meeting due to the potential for a perceived conflict of interest to occur (**Appendix 1**).

### **1.1 Summary of Development Application**

The modification request proposes to modify the existing development consent to:

- Realign and extend the approved Woodlands Hill seam longwall panels in Area 1 under the existing open cut mining operations;
- Realign and extend the approved Arrowfield Seam, and mine Woodlands Hill seam rather than the Bowfield Seam with a realigned and extended footprint in Area 2;
- Commence new mining operations in the Arrowfield and Woodlands Hill seam in Area 3;
- Deletion of mining operations from occurring in the Bowfield seam whilst retaining operations in the Arrowfield seam in Area 4;
- Extend the approved surface development area to include a laydown area for underground equipment, water management infrastructure, office and bathhouse complex, extended run-of-mine (ROM) coal facilities, electrical infrastructure, workshop, fuel bay, car parking and new access road;
- Relocation of one approved ventilation shaft and approval of four additional shafts;
- Two centralised gas plants to flare methane gas collected through pre-drainage and goaf drainage activities;
- Extend the approved mine life by seven years until 1 March 2032;
- Increase the underground mine ROM coal production rate from 7.5Mtpa to 9.75Mtpa (total mine ROM coal production of 14.7Mtpa to remain unchanged);
- Extend the approved life of the open cut mining operations by three years until March 2020; and
- Amend and / or delete current conditions of consent which are redundant and to bring the consent up to date.

Following subsequent consultation with an affected landowner, the proponent has included a revised layout for the first workings and it was determined that a portion of the main headings in Area 3 would be removed so as to not encroach underneath the neighbour's property.

## **1.2 Background**

Mining operations originally commenced within the site in 1969. Current operations at the mine are by way of two separate development consents, including:

1. Open cut and underground mining operations granted consent on 04 February 2004 (DA 305-7-2003)
2. Associated rail operations granted consent on 16 December 2004.

The mine operations have been subject to a number of amendments with 13 modifications determined to date. A further two modifications are currently pending finalisation by the Department.

To date three separate seams have been mined within the Wambo mine complex. This includes the Whybrow seam within the Homestead and Wollemi Mines which was completed in 2002. The Arrowfield seam within the United Colliery Mine which was completed in 2010. And the Wambo seam within the North Wambo Underground Mine which was completed in 2016.

## **2. SECRETARY'S ASSESSMENT REPORT**

The Secretary's assessment report identified subsidence, surface water, groundwater and biodiversity as the key impacts associated with the proposal. The Secretary's assessment report concluded that, with the implementation of minor amendments to the existing conditions, coupled with WCPL's proposed mitigation measures and subsequent amendments to existing management plans, the proposed modification could be carried out with minimal environmental impact.

### **2.1 Legislative context - Section 75W**

Development Application 305-7-2003 was approved on 04 February 2004, pursuant to Part 4 of the *Environmental Planning and Assessment Act 1979* (EP&A Act). The Department has provided advice that in accordance with Clause 8J(8) of the *Environmental Planning and Assessment Regulation 2000* and the transitional arrangements of Schedule 6A of the EP&A Act, Section 75W of the EP&A Act provides the power to modify the approval.

The Commission considers the proposed modification of the Wambo Coal Project does not fundamentally change the essential nature of the existing development in its current form. The development, if modified, would continue the operation of the existing open cut and underground mining operations within the general area of operations already approved, in the same, or generally the same manner and scale. In the Commission's view, the proposed changes are within the broad scope of Section 75W as it applies to the development, and therefore the request to modify may be considered under Section 75W.

In determining the proposed modification, the Commission has the legal power under Section 75W(4) to modify the approval, with or without conditions, or refuse the modification.

## **3. COMMISSION'S MEETINGS AND SITE VISIT**

As part of its assessment of the proposal, the Commission met with the Department, the Proponent (including a site visit), and an adjoining property owner. The Commission also conducted a public meeting.

### **3.1 Briefing from the Department**

On 7 November 2016, the Department briefed the Commission on the project and the content of its assessment report. Specifically, the Department discussed the proposed amendments to the existing approved development and how those amendments to the mine layout would influence biodiversity, groundwater, surface water, surface infrastructure and the type of subsidence impacts that may arise as a result. Notes from this meeting are provided in **Appendix 2**.

### **3.2 Briefing from the Proponent and site visit**

On 7 November 2016, the Commission met with the Proponent at the Wambo Mine Complex. The Proponent briefed the Commission with regard to existing site operations, the proposed modification and amendments to the project since lodgement. The Proponent addressed the issues surrounding rehabilitation of the mine site, subsidence and ponding impacts. The briefing session was followed by an inspection of both the open cut and underground mining operations. Notes from this meeting are provided in **Appendix 2**.

### **3.3 Meeting with Mr. and Mrs. Fenwick**

On 8 November 2016, the Commission met with Mr and Mrs Fenwick (at their request) on their property adjoining the south eastern section of the Wambo mine complex. The property has been previously subject to underground mining operations, and the purpose of the visit was to undertake an inspection of the site to develop a further understanding of the way subsidence impacts may present themselves at surface level. Notes from this meeting are provided in **Appendix 2**.

### **3.4 Public Meeting**

The Commission notes that there is no statutory requirement for a public meeting to be held prior to determination. However, due the significant public interest in the project, the Commission held a public meeting at the Singleton Youth Venue, Singleton on 8 November 2016. A list of the speakers that presented to the Commission is provided in **Appendix 3**. A summary of the issues raised by the speakers is provided in **Appendix 4**.

### **3.5 Meeting with Singleton Shire Council**

The Commission offered to meet with Singleton Shire Council as part of the determination process and this was declined by the Council.

## **4. ADDITIONAL INFORMATION**

During the Commission's review of the Secretary's assessment report (including associated expert reports) and following the conclusion of the public meeting, the Commission sought some additional clarification from the Department. The nature of the information sought generally pertained to the impacts and management of subsidence on surface formations, groundwater and surface water, rehabilitation and biodiversity.

## **5. COMMISSION'S CONSIDERATION**

In this determination, the Commission has carefully considered:

- all information provided by the Proponent;
- the Secretary's assessment report;
- advice and recommendations from government agencies;
- all written and verbal submissions from the public; and
- additional information provided by the Department to the Commission as described above in Section 4.

The Commission considers that the key issues for this proposal were subsidence, surface water, groundwater, hydraulic connectivity and biodiversity. These issues are discussed in detail below.

### **5.1 Subsidence**

Concerns have been raised with the Commission by the public regarding the short and long term impacts of subsidence. These concerns include the impacts on the surface structure, groundwater, surface water, biodiversity and the steep slopes adjacent to, and the cliffs of the Wollemi Escarpment and Wollemi National Park.

During the determination process the Commission was able to conduct a site inspection of two properties that have been the subject of historical longwall mining operations. The first of these properties is within the Wambo mining complex and the second is on a privately owned landholding adjacent to the mine complex. During the inspections three noticeable impacts were observed:

Firstly, surface impacts can present themselves in a number of different ways on the landscape including troughs over the longwall panels, surface cracking and collapses.

Secondly, while most of the impacts of subsidence will occur within the first few months, significant impacts can continue to occur for many years after mining operations have concluded.

Thirdly, ground impacts that may be regarded as negligible or insignificant in terms of an overall landscape may have a significant deleterious impact at the level of a local property.

In this section of the report the impacts of subsidence will focus on surface impacts only and other subsidence related issues such as groundwater, surface water, hydraulic connectivity and biodiversity shall be discussed separately in the report.

#### 5.1.1 Surface Subsidence

The Environmental Assessment submitted by the Proponent was accompanied by a specialist Subsidence Assessment prepared by Mine Subsidence Engineering Consultants. Both the Report and Department's assessment acknowledged that the proposed modification would increase total surface level subsidence impacts from 860 ha, as currently approved, to 1,700 ha as now proposed. This represents an increase of 840 ha.

Due to the complexity of both mining operations within the Wambo complex, which includes historic and future underground operations and an existing open cut operation, the Commission requested clarification of the predicted impacts from the Department.

The Department has provided the below table (**Table 1**) which describes the change in overall impact between the currently approved mine layout and the proposed modified layout for each of the extraction areas to clearly illustrate the impacts across the mining complex.

Mining Area	Layout	Coal Seams Mined	Maximum Predicted Total Subsidence (mm)
1 and 2	Approved	Wambo, Arrowfield and Bowfield	9,000
	Modified	Wambo, Arrowfield and Woodlands Hill	6,250
3	Approved	-	-
	Modified	Arrowfield and Woodlands Hill	3,700
4	Approved	Arrowfield and Bowfield	6,950
	Modified	Arrowfield	2,750

**TABLE 1**

It is apparent by the information provided in Table 1 that the changes proposed to the mine plan under the modification represent a reduction in the total subsidence impacts of the development within Areas 1, 2 and 4. It is noted that these changes will also reduce other subsidence related impacts identified separately in the report.

Area 3 has not been the subject of any previous extraction approvals and this represents a new impact. The predicted subsidence to occur within this area is consistent with impacts predicted to occur within the remainder of the mine complex. The Commission sought clarification from the Department regarding the subsidence prediction for Area 3 within Table 1 differing from the stated 4.05m within the Secretary's assessment report. The reason for this is the 4.05m represents total subsidence of both the Arrowfield and Woodlands Hills seams within the entire mining complex, and not just within Area 3.

The consideration of subsidence impacts as part of the proposed modification involves a difficult trade-off between reduced impacts within Area 4 and the new impacts within Area 3. The Commission recognizes that, while the magnitude of expected subsidence is expected to be reduced relative to current approvals, the overall presentation of those impacts on the surface is expected to be expressed over a wider area, including some land not affected by previous approvals.

Based on a physical inspection of the site, and photographic evidence of the continuing long-term effects of subsidence, the Commission also took into account the fact that subsidence that may be considered insignificant or negligible at a landscape level may still represent significant impairment of an individual property.

The Commission sought some additional advice from the Department regarding the cumulative impacts of the modification when considered in light of the previous mining that had occurred within the shallower Whybrow and Wambo seams. Predicted maximum cumulative subsidence under the current approval is up to 9.7m. As a result of the proposed modification the maximum cumulative subsidence is predicted not to exceed 8.2m in the same zone.

On balance, the Commission, on review of the Secretary's report and additional information provided by the Department, is satisfied that the overall subsidence impacts are acceptable relative to current approvals, and can be appropriately monitored and mitigated through the recommended conditions of consent.

## **5.2 Groundwater, surface water and hydraulic connectivity**

Concerns have been raised with the Commission by the public regarding the short and long term impacts that subsidence can have on both groundwater and surface water resources and that the modification will create some additional surface and sub-surface subsidence which could impact on a range of groundwater and surface water features. These two issues are addressed separately below.

Due to the significance of the concerns raised by the public in submissions and the public meeting the Commission engaged in further discussion with the Department to further improve existing monitoring and data collection. Public submissions noted that there was considerable uncertainty about the base-line conditions against which subsequent modifications have taken place, citing changes over time in the classification of local surface watercourses in Environment Impact Statements and related documentation. These uncertainties have arisen in part as a result of the apparent failure of the regulatory system to ensure compliance with previous conditions that would have required the production of a reliable base-line.

The Commission acknowledges the critical underlying importance of reliable baseline data for any new mining or extraction area to ensure effective compliance against conditions and in maintaining community confidence in the industry and the regulatory system.

Whilst the Commission acknowledges it does not have authority to revisit previous consents, it does see a requirement for contemporary base-line information to be established prior to the commencement of operations for which approval is sought in this modification, and more generally for the establishment of baseline data in any future assessment and determination of extraction industries.

### **5.2.1 Groundwater**

The Environmental Assessment submitted by the Proponent was accompanied by a specialist Groundwater Assessment prepared by Hydrosimulations and expert peer review by Dr Frans Kalf. The assessment indicates that the site contains both productive shallow alluvial aquifers and less productive deeper hard rock aquifers.

#### *Alluvial Aquifers*

The Groundwater Assessment concluded that in regard to the impacts on the alluvial aquifers:

- There are no alluvial aquifers above Areas 1 and 4;
- Fracturing to the surface is not expected above Area 3; and
- Extraction of the shallower seams has already occurred in Area 2.

The Groundwater Assessment states that the highly productive alluvium would be subject to predicted drawdowns of up to 2.2m, which represents an increase of 0.1m over the existing approval, however there is no predicted additional drawdown for the Wollombi Brook alluvium. Within the less productive alluvium, the modification would not increase previously approved impacts, and there would be minimal additional drawdown of around 0.2m in the areas of alluvium adjacent to North Wambo and Wambo Creeks.

The Groundwater Assessment acknowledges the potential of increased fracturing within Area 2, between the now proposed Woodlands Hill seam through to the shallower Wambo and Whybrow seams. Historic mining activities within the Wambo and Whybrow seams have caused fracturing into the Wambo Creek alluvial and surface water systems.

As a consequence, the increase in fracturing has the ability to transmit saline water upwards into the alluvium over the long term as salinity build up is usually arrested as a result of groundwater drawdown in the short term.

The modelling provided indicates that the modification is likely to result in a minor long term incremental increase in salinity within the alluvium, over the current approval. Despite this, the modelling indicates no increased risk in the beneficial use of the highly productive alluvium for a period of at least 100 years and only minor zones of up flow into the alluvium after 200 years into the areas around North Wambo Creek and the confluence of Stoney Creek and Wambo Creek.

#### *Hard Rock Aquifers*

Hard rock aquifers are less productive than the shallower alluvial aquifers. The Groundwater Assessment acknowledges a lack of information on three privately owned bores within the aquifer and it is therefore difficult to determine the potential impact on these bores.

The Secretary's assessment states that predicted groundwater levels across the South Wambo Underground Mine total potential drawdown could exceed 2.0m and that modelling suggests it could reach an eventual equilibrium of 15.0m below initial conditions, due to permanent changes to in hydraulic connectivity and subsidence. The Commission sought further clarification from the

Department regarding the extent of predicted impact attributed by the modification. In response the Department stated that the long-term recovered groundwater level is highly dependent on the change in storage within the aquifer, and that the modification would not materially change the overall storage in the aquifer from a regional perspective, and therefore only a small portion of residual long-term drawdown would be attributable to the modification.

The Department notes that this impact is the result of existing approvals and that the proposed modification is not expected to increase the impact on private groundwater users. The Department further noted that the Groundwater Assessment conducted for the South Bates Underground Mine Modification (MOD 15) was based on a previous version of the numerical model using different software. Although not directly comparable, the Groundwater Assessment for MOD 15 concluded that the residual drawdown following recovery would be in the order of 10 m. The Department has stated that it is not in a position to compare the 10 m and 15 m results, given that they were the products of different modelling software, but that they are also unaware of any input data changed between the two models.

Due to the historical mining activities within the Wambo complex there is now a regional zone of depressurisation within the coal measures. Additional depressurisation is predicted to occur during mining operations within the South Wambo Underground mine. The proposed modification is likely to increase drawdown within the Woodlands Hills seam, but there would be less drawdown within the Bowfield seam, extending depressurisation slightly to the northwest and south.

In addition to these impacts there is the potential for increased groundwater penetration within the operational mining area. The modification is predicted to increase inflows by approximately 0.3ML / day. This additional water take is covered by existing entitlements held by the mine.

The Proponent's Environmental Assessment and the Secretary's assessment report both acknowledge the likelihood of increased risk to the existing groundwater network as a result of the proposed modification. The Department states that it is satisfied that potential impacts are acceptable, and that appropriate monitoring and management could be addressed through the existing conditions of consent.

The Department of Primary Industries – Water (DPI Water) recommend during their review of the project the construction of additional paired monitoring bores to be located adjacent to longwall 10A. The Department has not sought to apply this request as a condition of consent and would revisit the request as part of the annual review of the operations Groundwater Monitoring Program. The Commission sought additional clarification from the Department regarding why this request was being deferred from the current modification.

The Commission notes that while the expected impacts associated with this modification are small relative to the impact of existing approvals, there is some increased risk to the groundwater network. After further discussions with the Department, the Commission considers that existing groundwater monitoring and management could be improved through additional monitoring measures requested by DPI Water. To ensure this occurs, the Commission shall apply additional conditions of consent to require the implementation of additional groundwater monitoring and for the collection of baseline groundwater levels. These requirements shall be required to be completed prior to the commencement of operations within Areas 1 – 4 inclusive, as subject to this modification.

In addition to the increased monitoring the Commission sought further clarification from the Department on the merits of seeking an independent assessment of the groundwater modelling and impacts. In response to this the Department provided further advice confirming that an independent peer view was commissioned by the Department as part of the assessment of MOD 14 .

The review was completed by Mr Hugh Middlemis of Hyrdogeologic who was satisfied that the modelling completed was conservative, consistent with site specific testing and literature values and a good example of best practice in design and execution.

In addition to the independent peer review under MOD 14, the peer review of the current Groundwater Assessment by Dr Frans Kalf concluded:

- agreement with the assessment of the key issues as presented in the EA;
- the hydrogeological description, conceptualisation, model design, simulations and reporting have been conducted in a professional manner and described in detail; and
- all drawdown predictions, and in particular water table drawdown within alluvial sediments are considered plausible.

On consideration of the additional information provided by the Department, the Commission is satisfied that the groundwater impacts, including salinity have been appropriately modelled and that further impacts will be monitored with appropriate management to ensure that impacts remain within anticipated levels.

### **5.2.2 Surface water**

The Environmental Assessment submitted by the Proponent was accompanied by a specialist Surface Water Assessment prepared by Advisian. The Surface Water Assessment indicates that there are a number of natural surface water courses that are present within the site, and that subsidence may have a number of impacts on these surface water systems. These are discussed below.

#### *Wollombi Brook*

Wollombi Brook is considered to be the most significant surface water resource within the immediate locality, and traverses the Wambo mine complex. The longwall panels adjacent to the Brook are proposed to be located 180m away at its closest point and are located outside of the area of draw. The predicted subsidence impact in this area is to be less than 20mm and with no impact regarding tilts, curvatures and strains. It is important to note that the first workings which are located under the Brook are designed to not create any subsidence impacts, unlike longwalls.

The Surface Water Assessment considered the cumulative impact of existing and proposed mining activities, and modelling concluded that increased leakage from the Brook would occur to the extent of 125ML/year which is less than 0.1% of the mean annual flow within the Brook.

The Commission has, in consultation with the Department, amended the performance criteria for the Wollombi Brook under Condition 22 to give greater clarity to its protection. The Commission is satisfied with the Department's conclusion that the proposed modification will maintain a negligible impact on the Wollombi Brook as per the current approval.

#### *Other Local Watercourses*

Within the immediate locality there are three additional named watercourses, North Wambo Creek (including the diversion channel), Wambo Creek and Stoney Creek. These watercourses are classified as a combination of 4<sup>th</sup> and 5<sup>th</sup> order streams and are ephemeral in nature, though the Commission notes that the description of the status of watercourses in the region has changed since the commencement of mining operations.



Based on the modelled subsidence impacts, North Wambo Creek is expected to suffer less predicted movement as a result of the proposed modification, whereas the North Wambo Creek Diversion, Wambo and Stoney Creeks are predicted to experience higher than currently approved levels of movement, and this is represented in **Table 2** below.

<i>Watercourse</i>	<i>Layout</i>	<i>Maximum predicted total subsidence (mm)</i>	<i>Maximum predicted total tilt (mm/m)</i>	<i>Maximum predicted total hogging curvatures(km<sup>-1</sup>)</i>	<i>Maximum predicted total sagging curvature (km<sup>-1</sup>)</i>
Wollombi Brook	Approved	<20	<0.5	<0.01	<0.01
	Modified	<20	<0.5	<0.01	<0.01
North Wambo Creek	Approved	8,150	100	>3.0	>3.0
	Modified	4,050	65	>3.0	2.4
Wambo Creek	Approved	1,650	16	0.20	0.15
	Modified	3,100	20	0.50	0.40
Stony Creek	Approved	4,900	30	0.55	0.75
	Modified	5,600	30	0.65	0.70

TABLE 2

North Wambo Creek, Wambo and Stoney Creeks have previously been undermined by historic operations and the assessment has predicted additional impacts may occur which include cracking and fracturing, loss of surface water flows, ponding, erosion and scouring. It is noted that flooding impacts have also been considered and no significant change to flood behaviour is expected.

In regard to surface cracking, bedrock fracturing and surface water flow loss the Department has concluded that cracking and fracturing will occur, and lead to a loss of surface water flow during periods of low flow. During periods of high rainfall the majority of runoff would flow naturally and not be diverted into the dilated strata. To manage this, the Department states that a number of control options exist to fill the cracks to reduce impacts which include:

- washing a slurry containing well-graded silt into the cracks, using water from the mine workings; and
- infilling larger surface cracks with typical alluvial material with added bentonite or other clays as necessary.

In regard to ponding it is considered that the overall impacts are generally consistent with the current approval and will occur to various levels across all three creek systems. The ponding does have the potential to cause further erosion and sediment issues within these systems. The Department is satisfied that if adverse impacts do develop as a result of ponding, then existing management and remediation controls are in place within the consent to alleviate such issues.

The Commission has, in consultation with the Department, amended Condition 35 to give greater emphasis to protecting the stability and ecological quality of these surface water systems. The Commission, on review of the information provided by the Department, is satisfied that the overall subsidence impacts are acceptable, and can be appropriately monitored and mitigated through the recommended conditions of consent.

### 5.2.3 Hydraulic Connectivity

Hydraulic connectivity has the potential to occur between the surface and extracted longwall panels if fracturing is created between the two zones. Given the width of the proposed longwall panels it has been accepted by the Department that cracking could, theoretically extend from the panels through to the surface.

The submitted Subsidence Assessment states that surface cracking does not imply the potential for hydraulic connectivity as the vertical fractures may not be continuous from the point of mining to the surface due to the presence of strata layers with low permeability. In addition to this, it is predicted that over time many surface cracks, particularly those within watercourses will naturally fill with surface soils and to a degree self-repair. In instances where this does not occur, remediation actions would be required to fill and repair surface cracking.

Additional evidence cited in the Subsidence Assessment to support the absence of connectivity has been provided from the analysis of previous mining operations within the Wambo mine complex, and similar mining experiences in the Hunter and Newcastle coalfields.

Based on the proposed management regime, the Commission is satisfied with the Department's conclusion that the proposed modification does not pose a greater risk to hydraulic connectivity within the area of mining operations beyond the existing approval, and can be appropriately monitored and mitigated through the recommended conditions of consent.

### **5.3 Biodiversity**

Concerns have been raised with the Commission regarding the direct and indirect impacts to biodiversity as a result of the project modification. The Environmental Assessment submitted by the Proponent was accompanied by specialist Flora and Fauna Assessments prepared by FloraSearch and Ecological.

It is acknowledged that the additional 185 ha of new surface disturbance (300 ha within the angle of draw) and sub-surface subsidence is likely to impact on biodiversity values, including protected flora and fauna and threatened ecological communities.

Vegetation clearing is expected to be an additional 7.9 hectares (ha), of which 3.4 ha is woody vegetation and 4.5 ha is previously cleared derived native grassland, which has not been assessed as a component of a threatened ecological community. The impacted woody vegetation is likely to provide habitat for a number of threatened species, including the Regent Honeyeater, and includes 1.5 ha of protected threatened ecological communities. The Department's assessment report has identified 112 ha of threatened ecological communities directly above the longwalls and 215 ha of threatened ecological communities within the angle of draw which may be impacted by subsidence.

The Proponent has committed to managing and conserving a biodiversity offset to compensate for unavoidable impacts to biodiversity as a result of the modification. The offset proposal involves expanding their current Remnant Woodland Enhancement Program by 41.6 ha, including 27.1 ha of vegetation consistent with, or similar to, the threatened ecological communities directly and indirectly impacted by the modification. The offset area has been identified as providing habitat for threatened species likely to be impacted by the modification, including 27.7 ha of potential habitat for the Regent Honeyeater.

The Department has assessed the likely direct and indirect impacts to biodiversity values from the proposed modification and has concluded that the likely direct impacts are small in extent and dispersed in nature. Additionally, the Department has found that the residual direct impacts and subsidence impacts to biodiversity can be managed effectively through the amended conditions of consent, in particular through the extraction management plan and the flora and fauna management plan and monitoring program.

The Department has confirmed that the proposed biodiversity offsets are adequate to compensate for the impacts to biodiversity associated with vegetation clearance and are suitable to improve or at least maintain the biodiversity values over the medium to long term.

As the predicted subsidence in Areas 1, 2 and 4 is expected to decrease, the modification would not be expected to have an overall negative biodiversity impact in these areas, relative to existing approvals.

Area 3 is not currently impacted by any existing mining approvals and any subsidence is a new impact. Given the near equivalent subsidence trade-off between Areas 3 and 4, and the greater portion of threatened ecological communities which exist within Area 4 over Area 3, the overall impact is considered to be reduced under the project modification. In reaching this conclusion, the Commission notes that the Environmental Assessment has stated that the condition of vegetation within undermined areas is not noticeably different from the vegetation found in unmined areas in other sections of the Wambo mining complex.

The Commission considers that the biodiversity impacts associated with the modification are unevenly and intermittently spread across the development site. The Commission also considers that the likely impacts to vegetation associated with subsidence are small and able to be adequately monitored and managed. The Commission, on review of the information provided by the Department, is satisfied that the overall impacts to biodiversity are acceptable, and can generally be appropriately monitored and mitigated through the proposed conditions of consent.

The Commission does acknowledge that there is a significant degree of discomfort within the wider community regarding the Proponent's willingness and ability to meet the rehabilitation objectives of the project. In light of community feedback and the Commission's own physical inspection of the site, the Commission held further discussions with the Department concerning the North Wambo Creek diversion to develop a better understanding of the state of the Proponent's contemporary rehabilitation performance at the mine. The Commission was advised that while the physical works of the diversion had been completed, both the Department and Proponent consider the diversion to be in a state of active rehabilitation and that substantial funding had been allocated for further rehabilitation in 2017, and that the completion criteria for the diversion had not yet been considered compliant.

Given the views expressed in public submissions and at the public meeting, the Commission suggests that the Proponent may wish to consider further measures to build confidence in its rehabilitation efforts and, as an act of good faith with the community, the company may wish to publish on its website its rehabilitation story including time lapse photographs of various localities over time as rehabilitation is undertaken to illustrate their compliance for the public's information and benefit.

The Commission considers that steps are being taken within the Department to ensure that an appropriate management regime is in place, and that rehabilitation conditions are effectively addressed by Conditions 40 – 50 inclusive throughout the consent.

#### **5.4 Escarpments and steep slopes**

Concerns have been raised regarding the potential impact of subsidence on the steep slopes adjacent to the site and to the escarpment and cliff zone which forms the boundary of the Wollemi National Park.

### *Steep Slopes*

Steep slopes are an area of land with a gradient of between 18.3° and 63.4°, and are located directly below the escarpment area and directly above four longwalls within the Woodlands Hill seam and four longwalls within the Arrowfield seam.

The Subsidence Assessment predicts that the modified layout would have an additional vertical subsidence impact of 1.65m, however predicated tilts and curvatures were only expected to have a marginal increase. The steep slopes are expected to be impacted by tension cracks along the top of the steep slopes and compression ridges are expected to form at the base of the slopes in response to subsidence, but it is not expected that these impacts would result in slope instability.

### *Wollemi Escarpment and cliffs of the Wollemi National Park*

Adjacent to the area categorised as steep slopes are the cliffs of the Wollemi Escarpment which form the commencement of the Wollemi National Park. A cliff is generally described as a continuous rock face with a minimum length of 20m, a minimum height of 5m, and a minimum slope of 63.4°. The closest longwall panel is to be a minimum distance of 310m from the nearest cliff area.

The Subsidence Assessment predicts that the cliff area will be subject to less than 20mm of vertical subsidence, with no significant tilts, curvatures or strains and that far field movements will not exceed 60mm without significant associated strains.

The Subsidence Assessment makes a number of recommendations for the management of subsidence impacts in the steep slope and cliff areas. The Department is satisfied that appropriate management, as part of the Extraction Plan process is in place to adequately address any impacts.

Based on the proposed management regime, the Commission is satisfied with the Department's conclusion that the proposed modification does not pose a significant increase in risk to steep slopes or cliffs beyond the existing approval.

## **5.5 Other relevant issues**

All other issues raised previously in submissions have been adequately addressed in the Department's assessment report and conditions of consent. However, the Commission would like to comment further on the following matters:

### *Aboriginal Heritage*

A Cultural Heritage Impact Assessment, prepared by RPS Australia has been submitted with the Environmental Assessment which identified 87 sites within the modification area. 78 will potentially be impacted by subsidence or vegetation clearing. Consultation with Office of Environment and Heritage and Registered Aboriginal Parties did not require the salvaging of artefacts unless required due to subsidence and any rehabilitation requirements. Any such salvage will be in accordance with an appropriate Aboriginal Heritage Impacts Permit.

The Commission is satisfied that Aboriginal heritage will be appropriately managed as described in the Department's report.

### *Air Quality*

An Air Quality and Greenhouse Gas Review was prepared by Todoroski Air Sciences to determine the potential air quality impacts created by the modification, in particular the ventilation shafts, additional access roads, mine operations and transport of product coal. The assessment concluded that total dust emissions would be 56% - 87% less than currently approved and greenhouse gas emissions would also be reduced by 0.32Mt CO<sub>2</sub>-e per year.

The Commission agrees with the Department's conclusion that the proposed modification is unlikely to generate significant impacts relative to the existing approval, and that appropriate impact management will continue to occur via the existing conditions of consent and Air Quality and Greenhouse Gas Management Plan.

### *Noise*

A Noise Review was prepared by SLR Consulting to determine the potential noise impacts generated by the modification, in particular the hauling of run of mine coal to the coal handling and processing plant and the operation of the additional four ventilation shafts. The modelling indicates that overall noise impacts on sensitive receivers would be less than currently approved.

The Commission agrees with the Department's conclusion that the proposed modification is unlikely to generate significant impacts relative to the existing approval, and that appropriate impact management will continue to occur via the existing conditions of consent and Noise Monitoring Program.

### *Private and Public Infrastructure*

Concerns have been raised regarding the potential damage and loss to existing infrastructure that exists with and adjacent to the study area as a result of subsidence impacts. The existing consent requirement for the development of an Extraction Plan which requires a Built Features Management Plan is considered adequate in protecting local infrastructure from mining related damage.

### *Main headings into private land*

As part of the original modification proposal, part of the main headings to service Area 3 extended into a section of privately owned land, without consultation with the property owner. In response to the owner's concerns, the Proponent has amended the heading design to remain fully within mine owned land. As headings are designed to not subside there are no expectations of subsidence impacts on privately owned land.

### *Impacts on Agricultural Lands*

The proposal will potentially sterilise 15 ha of agricultural land during mining operations. The soil has been classified as Classes 4 and 5 (low productivity), and does not contain any Biophysical Strategic Agricultural Land. The long term rehabilitation of the site is to consist of a mix of woodland and grasslands suitable for grazing and there will not be a significant loss of agricultural lands within a regional context.

### *Compliance and Monitoring*

Concerns have been raised regarding the compliance performance of the Proponent under its existing mine approval and the lack of enforcement action.

The Commission has reviewed the most current Extraction Plan, Mine Operations Plan and associated management plans and is satisfied that these adequately address the requirements for the monitoring and mitigation / rehabilitation of mining related impacts, including subsidence (and subsidence related) impacts.

It is also noted that Condition 6 Schedule 6 of the consent requires that any subsequent modification to consent conditions will require the review and amendment of any plans, strategies and programs required under the project approval.

An effective and credible regulatory regime is critical to public confidence in the planning system and the mining industry. The Commission acknowledges community concerns about the effectiveness of the regulatory regime in ensuring compliance with conditions attached to previous approvals at this site and the impact that these concerns have had on community opposition to the modification. The Department has advised that a more effective compliance and enforcement regime has been developed over the past year or two and that additional processes and resources have subsequently been put in place to ensure a more effective system of compliance and enforcement of consent conditions in the Hunter region.

#### *Use of Post approval management plans*

Concerns were raised by both the public and the Commission regarding the suitability of utilising post approval management plans to establish the compliance and outcomes framework for a project. The Commission sought further clarification from the Department regarding this, and was advised that it is a common approach taken for mining projects.

The Commission reviewed the content of the current MOP for the Wambo mine complex and is satisfied with the Department's response regarding the suitability of these arrangements given the nature of contemporary mining operations and regulatory objectives.

#### *PM2.5 not considered*

The existing development consent (Condition 5B) requires the Proponent to manage PM2.5 levels in accordance with the requirements of any Environmental Protection Licence.

#### *Visual amenity and lighting*

The additional 7.3 Mt of coarse rejects and 3.0 Mt of tailings will be stored within existing open cut mine voids and managed in accordance with existing approved arrangements. The existing consent (Conditions 85 and 86) requires the mine to take all reasonable steps to mitigate off-site lighting impacts and comply with *AS 4282–1995 Control of Obtrusive Effects of Outdoor Lighting*. This Australian Standard has been superseded with AS 4282-1997 and the Commission has required this condition to be updated to reflect the latest version.

#### *Open cut operations*

The modification seeks to extend open cut mining operations by three years until 2020. There are no extensions to the existing approved extraction area or changes to the annual extraction rate. The existing and amended conditions are considered satisfactory in managing the three-year extension to open cut pit operations.

#### *Community consultation*

The Department is responsible for ensuring adequate public consultation occurs in accordance with the legislative requirements of the EP&A Act and Regulations. Modifications are notified at the Department's discretion. It is noted that the Commission also provided the public sufficient opportunity to comment on the proposal, including the holding of a public meeting, which is not a statutory requirement.

#### *Salinity Trading Scheme*

Condition 24 of the existing consent requires the consent to give consideration to the *Protection of the Environment Operations (Hunter River Salinity Trading Scheme) Regulation 2002*.

### *Amendment of Conditions*

There are a number of amendments to existing conditions proposed by the Department, both in response to the modification proposal, but to also update the existing consent and remove redundant conditions. The Commission has reviewed the proposed amendments and is satisfied with the reasons provided.

In addition the Commission has provided further review and recommended a number of minor changes to conditions of consent.

## **6. COMMISSION'S RESPONSE TO COMMUNITY ISSUES**

Speakers at the public meeting, and through written submissions raised a number of significant concerns. Separate to the Commission's consideration of the modification request in Section 5 of this report, the Commission responds to the issue(s) raised by the community as follows.

### **6.1 Feral animal control**

Concerns raised over the lack of controls to stop animals (both native and feral) from leaving the mine site and entering into private lands. Existing condition 48 makes reference to feral animal control.

### **6.2 Singleton Council Consent – DA 108/91**

DA 108/91 was a previous consent for mining operations at the Wambo complex and was to be surrendered to enable the existing consent to commence – Condition 5. As the current consent is known to be active, the Commission is satisfied that DA 108/91 would have been surrendered and is no longer a relevant consideration.

### **6.3 Mine ownership**

Questions regarding the financial status of Wambo Coal and its parent body Peabody Energy, including the fit and proper person test (*Mining Act 1992*) are not relevant considerations for an assessment under the EP&A Act.

### **6.4 Paris Agreement**

The Australian Government has recently become a signatory to the Paris Agreement to address global climate change. However, at this stage the Paris Agreement is not reflected in statements of government policy that the Commission is able to reference as part of the project assessment.

## **7. COMMISSION'S FINDINGS AND DETERMINATION**

The Commission has carefully considered Proponent's proposal, the Department's Assessment Report and the relevant matters for consideration under the EP&A Act. The Commission has noted the advice and recommendations from government agencies including:

- Department of Primary Industries – Water;
- Office of Environment and Heritage;
- Heritage Council of NSW;
- Division of Resources and Energy; and
- Environmental Protection Authority.

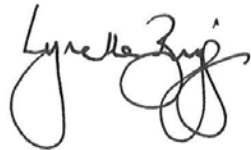
Finally, the Commission has heard from members of the community about their concerns for the proposal during the public meeting in Singleton.

Consistent with the Department's view, the Commission also considers that the proposed modification is within the scope of Section 75W of the EP&A Act, as the proposed changes do not make the modified development substantially different to what is currently approved.

The Commission has responded to concerns expressed by speakers at the public meeting, while noting that a number of those issues relate substantively to aspects of the proposal that have already been approved and were not subject of this modification request. In addition to these considerations, the Commission believes that Government currently has an important role to play in assessing and determining the cumulative impacts that mining industries within the Hunter Valley are having on the region's groundwater and surface water systems.

The Commission has formed the opinion that the modification proposal will deliver a number of economic benefits to the local community and NSW and an overall improved environmental outcome to the locality when compared to the existing approval for the project. The Commission is therefore satisfied that the modification will provide a net overall benefit.

For the reasons set out above, the Commission accepts the Department's recommendation that this proposal be approved. Consequently, the Commission has determined to grant consent to the modification request subject to the conditions set out in the instrument of approval.



**Lynelle Briggs (Chair)**  
**Member of the Commission**



**Roger Fisher**  
**Member of the Commission**



## **APPENDIX 1**

### **IDENTIFICATION OF POTENTIAL CONFLICT OF INTEREST**

A few days before the Wambo public meeting, the Planning Assessment Commission's Secretariat advised me that one of the local landowners wanted the Commission to visit their property to see first-hand the impact of underground mining on their land.

Subject to there being time available, I thought this was a good idea and entirely consistent with our intention to engage more with community members affected by projects. The Secretariat advised me on Monday 31 October 2016 that there was some free time for a visit to the property. I did not advise the other Commission panel members of this as, at the time, I considered it to be a minor change to our programme.

When we met with the Department on Monday 7 November, Commissioner Brian Gilligan (who joined the meeting by telephone), was surprised to hear mention of the names of Ron and Janet Fenwick, as he had not seen their names mentioned in any documentation on the Wambo Mod 12 matter to that point; not had he seen their submission to the PAC; nor seen the list of speakers for the public meeting in Singleton on 8 November. This was a product of the tight timeframe associated with the planning for the mine visit and meeting.

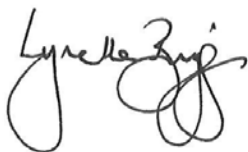
As soon as the panel met face to face, Mr Gilligan flagged the issue of the possible conflict of interest with me and, because our time was limited, we agreed to discuss it further as our itinerary permitted, later in the day.

That evening, I advised Mr Gilligan that I had agreed to meet with the Fenwicks on their property the next day. Mr Gilligan informed me that Mrs Janet Fenwick is his cousin, but that he had never visited their property, nor was he aware that she and her husband were engaged in an ongoing dispute with the mine.

In the circumstances, Mr Gilligan advised me that there was the potential for a perception of conflict of interest arising from his family connection. We agreed that the most appropriate course of action was for Mr Gilligan to stand aside from the Commission for this determination and take no further part in the PAC deliberations on it.

The proponent and the Fenwicks were advised of this decision before the public meeting.

I mentioned at the public meeting that Mr Gilligan had stepped down from the Commission panel in the interests of probity. Mr Gilligan was not present for the public meeting and has taken no further role in this determination.



Lynelle Briggs AO  
Chairperson

## APPENDIX 2 RECORDS OF COMMISSION MEETINGS

### Notes of Briefing from the Department

<b>This meeting is part of the determination process</b>		
<b>Meeting note taken by</b> Alana Jelfs	<b>Date:</b> 7 November 2016	<b>Time:</b> 09:00am
<b>Project:</b> Wambo Coal Mine – Southern Longwalls Modification (DA 305-7-2003 MOD 12)		
<b>Meeting place:</b> PAC Office		
<b>Attendees:</b> PAC Members: Lynelle Briggs, Roger Fisher, Brian Gilligan (by phone) (subsequently withdrew from panel) PAC Secretariat: David Koppers, David Way, Alana Jelfs Department of Planning and Environment: Matthew Sprout, Jessie Evans		
<b>The purpose of the meeting:</b> Department briefing to discuss the proposed modification application		
<b>Meeting Notes:</b> <b>Overview and proposal:</b> <ul style="list-style-type: none"> <li>• Introduction by Chair</li> <li>• DPE provided an overview of the proposed modification;</li> <li>• Wambo Coal Pty Ltd (WCPL) propose modifications to extend Areas 1 and 3, including additional longwall panels in the Woodlands Hill Seam (Area 1) and extension of mining in the Arrowfield Seam and Woodlands Hill Seam into Area 3. Area 1 comprises previous underground mining;</li> <li>• Areas 2 and 4 comprise modifications to approved workings, Area 2 includes a reorientation and minor extension of the approved Arrowfield Seam. Woodlands Hill Seam is proposed to replace Bowfield Seam in this location;</li> <li>• Potential for cumulative effects on disturbed land due to cracking surface of creek bed which is to be filled with grout to a depth of 110m in line with North Wambo Creek;</li> <li>• Figure 5 of DPE report shows the existing United Collieries bord and pillar workings (darker green area) and the existing mine area in the Arrowfield Seam (lightest green area). The area coloured light orange indicates the existing Homestead/Wollemi Workings in the shallower Whybrow Seam where work has been undertaken most recently. The grey shaded area indicates finished workings. Wollombi Creek runs between Areas 1 and 2;</li> <li>• Area 4 has existing approval to mine five longwall panels, however WCPL no longer propose mining of the Bowfield Seam in this location, therefore less drawdown, subsidence and other expected cumulative impacts;</li> <li>• WCPL has indicated a preference to mine deeper and sequence in accordance with the Seam: Whybrow, Wambo, Woodlands, Arrowfield and Bowfield;</li> <li>• WCPL propose to reorientate longwall panels slightly north-west (from south-west) which is more feasible as shallower seams dip to south-west and the reorientation allows WCPL to get a longer wall;</li> <li>• The last set of longwalls are in Area 1, beneath the current open cut.</li> </ul> <b>Open cut / under-ground operations:</b> <ul style="list-style-type: none"> <li>• One consent covers all open cut operations;</li> <li>• Under Area 1 (Figure 5 of DPE report) comprises a large area of disturbed land, an area of land for rehabilitation, tailings, dams, with approved operations stretching to the north-west. The Department indicated that any subsidence impacts can be managed;</li> <li>• There are some surface works proposed to vent shafts in the area;</li> <li>• There is an exclusion zone around the Homestead, which is surrounded by some pasture land, which WPCL are to retain. The Homestead, which contains a stable and other associated buildings, is in poor condition</li> <li>• DPE described the 4 stacked layers in the stratigraphic sequence. There is a separation of approximately 80m between the top two layers and a 150m block between the other two layers</li> <li>• PAC requested a stratigraphic section figure to show how longwalls stack, how cumulative impacts may interact and the nature of interburden thickness to demonstrate likelihood of subsidence and fracturing;</li> <li>• DPE commented on the Independent Expert Scientific Committee on Coal Seam Gas and Large Mining Development (IESC) report which identifies some issues particularly in relation to subsidence.</li> <li>• The IESC report considered the whole project and all potential impacts and not just the modification works and the difference from what is currently approved</li> </ul>		

- DPE indicated that predicted subsidence decreases under the proposed modification layout. Early workings at the mine used bord and pillar and longwall mining methods to extract coal, which leaves behind a lot more coal and therefore less subsidence. The proposed longwalls in the Woodlands Hill and Arrowfield Seams are staggered to offset subsidence issues rather than stacked (directly above and below), as previously approved; However, by taking multiple seams, the mining will reactivate material above, leading to increased subsidence over time;
- On the other hand, the proposed mining is deeper than previously approved, which is expected to have less impact – the deeper the mining the less subsidence movement - the largest impacts at the mine have already occurred;
- Currently 4 seams are approved;
- DPE consider there are 3 key issues with regard to subsidence:
- Main headings under Wollombi Brook, which have been designed not to subside the brook;
- Cliff line, modelling in assessment shows negligible impacts on the cliff line, ongoing monitoring required to ensure negligible impact;
- Area 3 subsidence, new subsidence, area contains deep seams up to and over 200m;
- Fenwicks' property – no new subsidence impacts are expected as a result of the proposed modification, existing impacts remain;
- Water issues covered off in DPE's assessment report, DPE indicated there would be minimal impacts on biodiversity. DPE required additional measures to be incorporated in the Rehabilitation Management Plan, which was not included as part of the application;
- WCPL focus on progressive rehabilitation. The website contains information on environmental management and criteria;
- Areas 1 and 3 were referred under the EPBC Act

**Outcomes/Agreed Actions:** DPE to provide section plans showing stratigraphic sequence of mine

**Meeting closed:** 10:00am

### Notes of Briefing from the Proponent meeting and site visit

**This meeting is part of the determination process**

**Meeting note taken by David Koppers**

**Date: 07 November 2016**

**Time: 1330**

**Project:** Wambo Coal Mine – MOD 12

**Meeting place:** Wambo Coal Mine Administration Centre

**Attendees:**

PAC: Lynelle Briggs, Roger Fisher, Brian Gilligan (subsequently withdrew from panel), David Koppers

Peabody Energy: Michael Alexander, Albert Scheepers, Steve Peart, Murray Wood

Resources Strategies: Josh Hunt, Joanna Hinks

**The purpose of the meeting:** To permit the proponent to provide a detailed briefing to the Commission regarding the project and to inspect the mining operations.

**Meeting Notes:**

- Introduction by Chair
- Briefing by proponent as follows:
  - Open cut MOP approved until 2020;
  - Open cut at strip ratio limit which prevents deeper extraction within the pit. Underground operations required for seams below the pit limit;
  - Extraction around 6.0mtpa – approved for 14.0mtpa;
  - Clean coal yield of 65% - 750,000tn storage capacity onsite;
  - MOD seeks 3 year open cut extension to permit operational buffer to proposed joint venture approval. No extension of extraction area and no additional extraction involved;
  - Open cut extraction has been slower than originally planned;
  - Joint venture does not impact on underground operations;
  - MOD does not prevent future access to Bowfield Seam – would be subject to future MOD;
  - Peak increase in annual production from 7.5mtpa to 9.75mtpa whilst two seams extracted concurrently. Will revert to 7.5mtpa over time, still capped to 14mtpa for site;

<ul style="list-style-type: none"> <li>Peabody stated that there will be minimal changes to the final operations plans post approval given the amount of information required at DA stage. Changes would usually be contained to any updated information provided due to continued monitoring and modelling;</li> <li>End of panel reports prepared for independent review. Outcomes then feed into future amendments;</li> <li>Rehab plans are provided with the MOP. Regulated by DRE, not DPE;</li> <li>2016 rehab = 100ac worth about \$700,000;</li> <li>Total projected rehab cost \$75M, held as bank guarantee;</li> <li>Offset area adjacent to National Park within Peabody land;</li> <li>Subsidence in Area 4, 60% less than approved;</li> <li>Ponding areas do not run together during rainfall events like a watercourse;</li> <li>Longwall subsidence is usually consistent with existing surface topography so that overland flow can still continue;</li> <li>Peabody indicated that the faults are very clean faults and monitoring suggests they act as barriers to water movement, rather than increasing connectivity;</li> <li>Mine workings under the Fenwick property are approximately 150 – 200m deep;</li> <li>PE indicated no outstanding compliance action other than sediment dam failure, which is with the regulatory authorities for determination.</li> </ul> <ul style="list-style-type: none"> <li><b>Safety briefing, PPE fitment and tour of the mining complex including, open and underground operations, homestead, rehabilitation areas, North Wambo Creek diversion and surface inspection of mined longwall panels.</b></li> </ul>
<b>Outcomes/Agreed Actions:</b> <ul style="list-style-type: none"> <li>Peabody will provide copies of stratigraphy used in presentation.</li> </ul>
<b>Meeting closed: 1830</b>

### Notes from Inspection of the Fenwick Property

This meeting is part of the determination process		
Meeting note taken by David Koppers	Date: 08 November 2016	Time: 0900
<b>Project:</b> Wambo Coal Mine – MOD 12		
<b>Meeting place:</b> Fenwick Property		
<b>Attendees:</b> PAC: Lynelle Briggs, Roger Fisher, Brian Gilligan (subsequently withdrew from panel), David Koppers Property Owners: Ron and Janette Fenwick		
<b>The purpose of the meeting:</b> To permit the property owner to show the Commission the impact that underground mining operations have had on their property.		
<b>Meeting Notes:</b> <ul style="list-style-type: none"> <li>Introduction by Chair;</li> <li>Visual inspection of the property – shown the various visible surface effects of underground mining including cracking, holes, trenches and longwall subsidence;</li> <li>Owners provided a brief explanation of the history of the property, the history of mining operations, efforts by the Fenwicks to pursue remediation, and unremediated impacts.</li> <li>Subsequent to the visit, the Fenwicks advised that they have needed to leave their house for several months when subsidence made it unsafe.</li> </ul>		
<b>Outcomes/Agreed Actions:</b> <ul style="list-style-type: none"> <li>Owners to provide some further documentation to the Commission during the public meeting in the form of historical site and impact photos.</li> </ul>		
<b>Meeting closed: 1015</b>		

**APPENDIX 3  
LIST OF SPEAKERS**

**Planning Assessment Commission  
Wambo Coal Project – D435/16**

Date and Time: Tuesday 08 November 2016 – 11:00am

Place: Singleton Youth Venue - Singleton

**List of Speakers**

Registered Speakers:	1. Steve Phillips (Lock The Gate Alliance)
	2. Jan Davis (Hunter Environment Lobby)
	3. Tony Lonergan (Hunter Community Network)
	4. Ron Fenwick
	5. Trish Sellars
	6. Janet Fenwick
	7. Judith Leslie – Spoke as 8.
	8. George Tlaskal (Rivers SOS) – Spoke as 7.

## APPENDIX 4

### SUMMARY OF ISSUES PRESENTED AT THE PUBLIC MEETING

<b>This meeting is part of the determination process</b>		
<b>Meeting note taken by David Koppers</b>	<b>Date: 08/11/2016</b>	<b>Time: 1135</b>
<b>Project: Wambo Coal Mine – MOD 12</b>		
<b>Meeting place: Singleton Youth Venue</b>		
<b>Attendees:</b> Planning Assessment Commission – Lynelle Briggs (chair), Roger Fisher, David Koppers (Secretariat)		
<b>The purpose of the meeting:</b> Public meeting to hear the views of the community on the project		
<b>Meeting Notes:</b> <ul style="list-style-type: none"> <li>Opening statement by Chair, including that Mr Brian Gilligan had stood down for the Planning Assessment Commission's (the Commission) determination panel owing to a conflict of interest which became evident overnight (see <b>Appendix 1</b> for additional information).</li> <li>Comments made during the public meeting and in written submissions provided at the public meeting are synthesised and summarised below:</li> </ul> <p><u>Extent of proposed modification</u></p> <ul style="list-style-type: none"> <li>The MOD 12 is a significant change to the original approval and should not be a Section 75W;</li> <li>The location of supporting infrastructure is not shown or addressed in MOD 12;</li> <li>The extension of the open cut operations are not supported;</li> <li>Impacts of open cut mining are known, however impacts from underground are not as clear.</li> </ul> <p><u>Water quality / salinity</u></p> <ul style="list-style-type: none"> <li>Wollomi Brook and tributaries have been sacrificed to mining. Wambo Creek has endured decades of damage due to cracking and the removal of ponds and pools;</li> <li>Dispute the assessment finding that water impact is insignificant. Further analysis is required;</li> <li>OEH (2013) study on salt loads in Wollomi Brook showed excessive salinity levels below mining areas not correlated with river flows;</li> <li>Hydrological connectivity requires further assessment for Wambo, North Wambo and Stoney Creek;</li> <li>South Wambo Dam requires further assessment as it may result in increased salinity to groundwater;</li> <li>Groundwater to reach equilibrium 15m below original level. There are no measures to correct damage;</li> <li>Peabody Energy (PE) has destroyed Wambo Creek. Peabody Energy (PE) repairs have made impacts worse.</li> <li>Independent review of hydrological information is required, including determination of baseline;</li> <li>Independent Expert Scientific Committee (IESC) raised water quality issues that have not been addressed.</li> </ul> <p><u>Subsidence and cracking</u></p> <ul style="list-style-type: none"> <li>Drawdown has exceeded predictions. Additional monitoring requested by DPI Water has not been done and has been ignored;</li> <li>Subsidence assessment is not sufficient. Cracks and holes can be repaired but often reoccur;</li> <li>Long term impacts of subsidence on private properties not given appropriate consideration;</li> <li>Subsidence impacts have doubled in surface area, impacting steep escarpment slopes and creeks;</li> <li>Many holes have been fenced off. Potential to impact people and livestock;</li> <li>Impacts of cracking in moving up from the Bowfield Seam has the potential to increase salinity.</li> </ul> <p><u>Rehabilitation commitments</u></p> <ul style="list-style-type: none"> <li>PE does not have a long term future, and is unlikely to meet long term rehabilitation commitments;</li> <li>Wambo must provide offsets where rehabilitation is ineffective. PE informed of damage but slow to action on repairs.</li> </ul> <p><u>Compliance with conditions of consent and mine management</u></p> <ul style="list-style-type: none"> <li>PE has history of non-compliance with past conditions and undertakings;</li> <li>PE neglected to install appropriate monitoring equipment at the mine site. There are gaps in monitoring;</li> </ul>		

- Poor regulation and management for private land impacts – impacts on mine owned land are unknown;
- PE has a culture of non-enforcement. Regulation and enforcement of existing operation is inadequate;
- Page 10 of DPE's report refers to compliance action but there is no evidence of action taken;
- Up to the mine's Environmental Compliance Officer to ensure compliance.

#### Economic issues

- PE's parent company has filed for Chapter 11 bankruptcy;
- Institute for Energy Economics and Financial Analysis claims that PE business model is sustainable;
- Australia Institute has debunked the PE financial assessment;
- Non-compliance with Treasury guidelines is not given sufficient attention in DPE's report;
- Potentially misleading information under the Chapter 11 process may impact on PE's ability to operate the mine as required.

#### Climate change

- The Paris Agreement is to reduce global temperatures and coal is the biggest contributor;
- The Agreement implies the "coal industry needs to be retired within 30 years". Ninety percent of Australia's known coal reserves need to remain in the ground to meet temperature targets;
- Government needs to accept that coal is dead and move to renewables. Coal does not have a future.

#### Biodiversity and heritage

- Impacts on Hunter Eucalypt Endangered Ecological Community, Regent Honey Eater and those associated long-term ponding are not adequately addressed. Independent assessments are required;
- Significance of impact on the National Park cannot be established or how impacts are offset;
- Provision of new infrastructure within offset areas is of concern. Offset areas must be protected;
- Impacts on heritage are not fully considered.

#### Cumulative impacts

- Cumulative assessment of impacts is required. The Commission has not been presented with adequate information;
- Cumulative impact of regional depressurisation. Impacts from previous mods/extensions not addressed.

#### Assessment process / accuracy of information

- Independence of the Commission is questioned as notice of the public meeting was given the day the report was received. Community lacks confidence in the planning system and environmental agencies;
- DPE report based on insufficient information and PE's response to submissions was inadequate;
- Letter sent to the Minister, stating PE is not considered a 'fit and proper person' under the Mining Act;
- The mine extension was proposed under property without consultation with the community;
- Consultants have not done their jobs. Reports are inaccurate and validation is absent;
- DPE pushes many issues to post approval management plans;
- The Commission has not been provided with sufficient information on likely impacts;
- No independent review on subsidence report, required for ground truthing subsidence and water impacts.

#### Property and land use

- Company is seeking to avoid rectifying any property damage caused by mining;
- Fenwick property is subject to ongoing subsidence, comprising troughs, cracking and holes throughout. The property contains 6 longwalls, which has changed the drainage profile;
- Company is seeking to avoid rectifying any property damage caused by mining;
- Former land use as productive agricultural land now lost to scrub.

#### Employment

- 180 employees depend on Wambo and other mines in the area. Loss of the mine would detrimentally impact employment in the area.

**Outcomes/Agreed Actions: Minutes to be documented**

**Meeting closed: 1255**