



Planning
Assessment
Commission

Wilpinjong Extension Project

SSD 6764

Review Report

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Wilpinjong Extension Project PAC Report ©
State of New South Wales through the NSW Planning Assessment Commission, 2016

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EXECUTIVE SUMMARY

The Wilpinjong Extension Project (SSD 6764) (the project) is a proposed extension of the existing Wilpinjong open cut coal mine. Wilpinjong is located approximately 40 kilometres northwest of Mudgee, near the village of Wollar, within the Mid-Western Regional local government area.

The project would involve:

- the development of a new open cut pit to the east of existing operations;
- extensions to various existing open cut pits;
- a minor increase in coal production from the current 12.6 to 13 Mtpa;
- continued use of existing coal processing and surface infrastructure;
- an extension to the life of the mine by 7 years (i.e. from 2026 to 2033); and
- the development of a range of ancillary infrastructure, including further realignment of Ulan-Wollar Road, relocation of a 330 kV transmission line, and construction of additional surface infrastructure to support mining operations.

On 3 November 2016, the Minister requested that the Planning Assessment Commission (the Commission) conduct a public hearing and review the merits of the project, with consideration of the likely economic, environmental and social impacts. The Commission was constituted of Mr Joe Woodward (chair), with Mr Alan Coutts and Mr David Johnson. The Commission examined the documents referred to in the Terms of Reference set out by the Minister, including the Environmental Impact Statement, submissions and Response to Submissions. The Commission also received written submissions, held a public hearing, visited the site and surrounds, and met with the Applicant, the Department of Planning and Environment (the Department) and Office of Environment and Heritage (OEH).

The Commission notes that the Secretary's Environmental Assessment Report (SEAR) is a preliminary assessment of the merits of the project. The assessment considered the potential impacts of the project with regard to noise, blasting, air quality, social, biodiversity, water resources, heritage, final landform, rehabilitation and economic impacts. Other issues identified in the preliminary SEAR include traffic and transport and visual impacts.

Taking into account the information available, views expressed at the public hearing and submissions received, the Commission has made a number of recommendations to progress assessment of this proposal. The Commission considers the key issues which require further information and consultation with relevant agencies include biodiversity and offsets, final landform and rehabilitation, water quality, Indigenous and non-Indigenous heritage, noise and blasting, social and impacts on Wollar Village.

The Commission makes a number of recommendations for the Department and Applicant to consider prior to finalising the project recommendation.

With regards to the conditions of consent, the Commission considers it is not appropriate to review or provide comments on the proposed conditions of consent during this review, and considers this would be more appropriate during the determination stage of the application.

NSW Planning Assessment Commission Determination Report Wilpinjong Extension Project (SSD 6764)

1. INTRODUCTION

On 3 November 2016, the Minister for Planning issued a request to the Chair of the Planning Assessment Commission (the Commission) to carry out a review of the Wilpinjong Extension Project (the project) and conduct a public hearing.

Ms Lynelle Briggs AO, Chair of the Commission, nominated Mr Joe Woodward PSM (chair), Mr Alan Coutts, and Mr David Johnson to constitute the Commission for the review.

1.1 Existing Mine Operations

Wilpinjong Coal Pty Ltd (the Applicant), a subsidiary of Peabody Energy Australia Pty Limited, owns and operates the Wilpinjong Coal Mine, an existing open cut coal mine located approximately 40 kilometres (km) northwest of Mudgee, near the village of Wollar. The project site is located in the Mid-Western Regional local government area. **Figure 1** shows the regional location of the existing Wilpinjong Coal Mine, and its relationship to nearby mines, nature reserves as well as towns and villages.

The mine was approved by the then Minister for Planning in February 2006, following a review by an Independent Hearing and Assessment Panel. The project approval has been modified on six occasions and currently allows WCPL to:

- carry out mining operations in seven open cut pits;
- extract up to 16 million tonnes per annum (Mtpa) of run-of-mine (ROM) coal;
- process the coal on site at a coal handling and preparation plant (CHPP); and
- transport up to 12.6 Mtpa of product coal by rail for domestic and export markets.

The mine has been operating continuously for 10 years and employs approximately 550 people. The current project approval for mining operations expires in early 2027.

There is approximately 79 Mt of ROM coal remaining within the approved footprint of the mine. However, without an approval to extend the mine, production is expected to significantly decrease from 2017 onwards. This is due primarily to the design of the mine which relies on a number of open cut pits operating simultaneously to maintain production rates and meet customer specifications. The decline is also exacerbated by the geometry of the mine, which limits the number of fleet vehicles and machines that can be deployed as mining progresses into the narrower sections of the approved mine plan.

Over the next 10 years, production at the mine under the current approval is forecast to average approximately 7 Mtpa, a reduction of approximately 6 Mtpa from current levels. The Applicant has a contract with AGL Macquarie to supply the majority of remaining coal to the Bayswater and Liddell power stations in the Hunter Valley until 2026. A total of approximately 6 Mt is expected to be available for sale on the export market. The forecast reduction in coal production would also be reflected in the number of employees at the mine, which would reduce from 550 to 150 by 2026.

While the decline was forecast under the original approval, the Applicant has identified an opportunity to extract an additional 95 Mt ROM coal from land adjacent to its existing operations.



Figure 1: Regional Location of the Wilpinjong Coal Mine
 Source: EIS, Resource Strategies Pty Ltd

2. THE COMMISSION'S REVIEW TASK

2.1 Terms of Reference

The Minister's request was issued on 3 November 2016 under Section 23D of the *Environmental Planning and Assessment Act 1979* (the Act) and Clauses 268R and 268V of the *Environmental Planning and Assessment Regulation 2000*. A copy of the Terms of Reference in the Minister's request is provided in **Appendix 1**.

The Terms of Reference are as follows:

1. *Carry out a review of the Wilpinjong Extension Project, and:*
 - a. *consider the EIS for the project, all issues raised in public and agency submissions, and any information provided on the project during the course of the review;*
 - b. *assess the merits of the project as a whole having regard to all relevant NSW Government policies, paying particular attention to the impacts of the project on Wollar Village; and if necessary;*
 - c. *recommend appropriate measures to avoid, minimise and/or manage significant impacts of the project.*
2. *Conduct public hearings during the review as soon as practicable after the Department of Planning and Environment provides its preliminary assessment report to the Commission.*
3. *Submit its final report on the review to the Department of Planning and Environment within 10 weeks of receiving the Department's preliminary assessment report, unless the Secretary agrees otherwise.*

3. CURRENT PROPOSAL

3.1 Secretary's Environmental Assessment Report

On 3 November 2016, the Commission received the preliminary Secretary's Environmental Assessment Report (preliminary SEAR), prepared by the Department of Planning and Environment (the Department).

The preliminary SEAR considered the merits of the proposal, its strategic and statutory context, public and agency submissions and the Applicant's response to submissions. The report identified noise, air quality, social, biodiversity, water, heritage, final landform, rehabilitation, and economic impacts as key issues.

The Department's conclusions acknowledge that the project would increase the impacts on the local community and environment compared with the existing mining operations. However, these impacts would not be significantly greater than is currently the case, and apart from some minor exceedances, would comply with applicable government guidelines and policies.

To address the residual impacts of the project, the Department has recommended a range of detailed conditions to ensure that these impacts are effectively minimised, mitigated and/or compensated for. With the implementation of these conditions, the Department considers that the project achieves a reasonable balance between maximising the recovery of the coal resource and minimising potential social, amenity and environmental impacts, including impacts on Wollar Village and surrounds.

On balance, the Department considered that the benefits of the project outweigh its costs, and recommended that the project is approvable, subject to stringent conditions.

3.2 Project Proposal

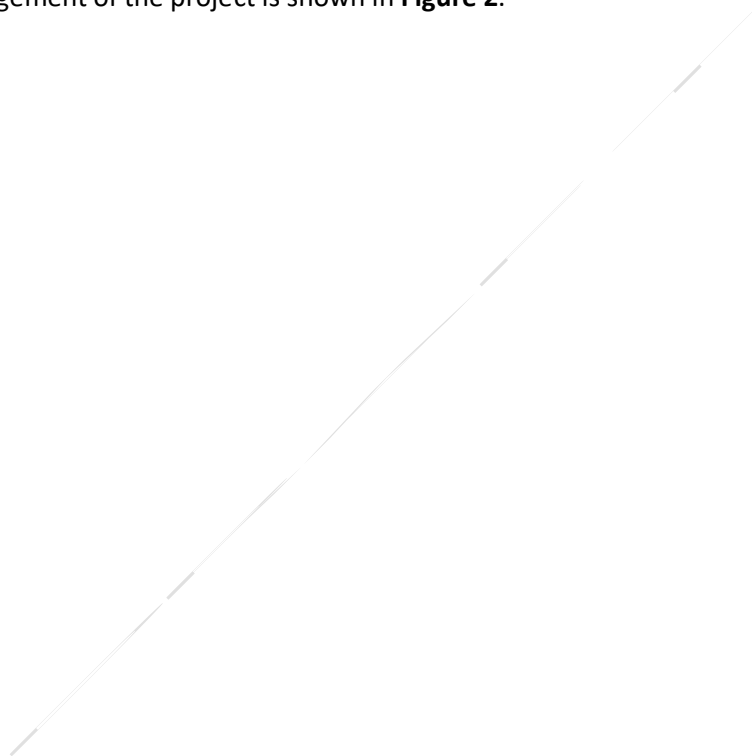
The Applicant is seeking approval to extend its existing operations, which would allow mining to continue to 2033.

The project would involve:

- the development of a new open cut pit to the east of existing operations;
- extensions to various existing open cut pits;
- a minor increase in coal production from the current 12.6 to 13 Mtpa;
- continued use of existing coal processing and surface infrastructure; and
- an extension to the life of the mine by 7 years (i.e. from 2026 to 2033).

The project would also involve the development of a range of ancillary infrastructure, including further realignment of Ulan-Wollar Road, relocation of a 330 kV transmission line, and construction of additional surface infrastructure to support mining operations.

The general arrangement of the project is shown in **Figure 2**.



- LEGEND**
- Mining Lease Boundary
 - Mining Lease Application Boundary
 - Approved/Existing Open Cut and Contained Infrastructure Area
 - Relocated Black Bank and Combo Creek Disturbance Area
 - Proposed Open Cut Extension Area
 - Proposed Public Road Realignment
 - Proposed Pit 3/8 Road
 - Proposed Service Road
 - Proposed Local Electricity Transmission Line (ETL)
 - Realignment/Relocation
 - Proposed Relocated Transbird 330 kV ETL
 - Existing Local ETL
 - Existing Transbird 330 kV ETL

Source: WCEP (2015); NSW Dept of Industry (2015)
 Date: WCEP (Jan 2015; Jun 2014)

Figure ES-3

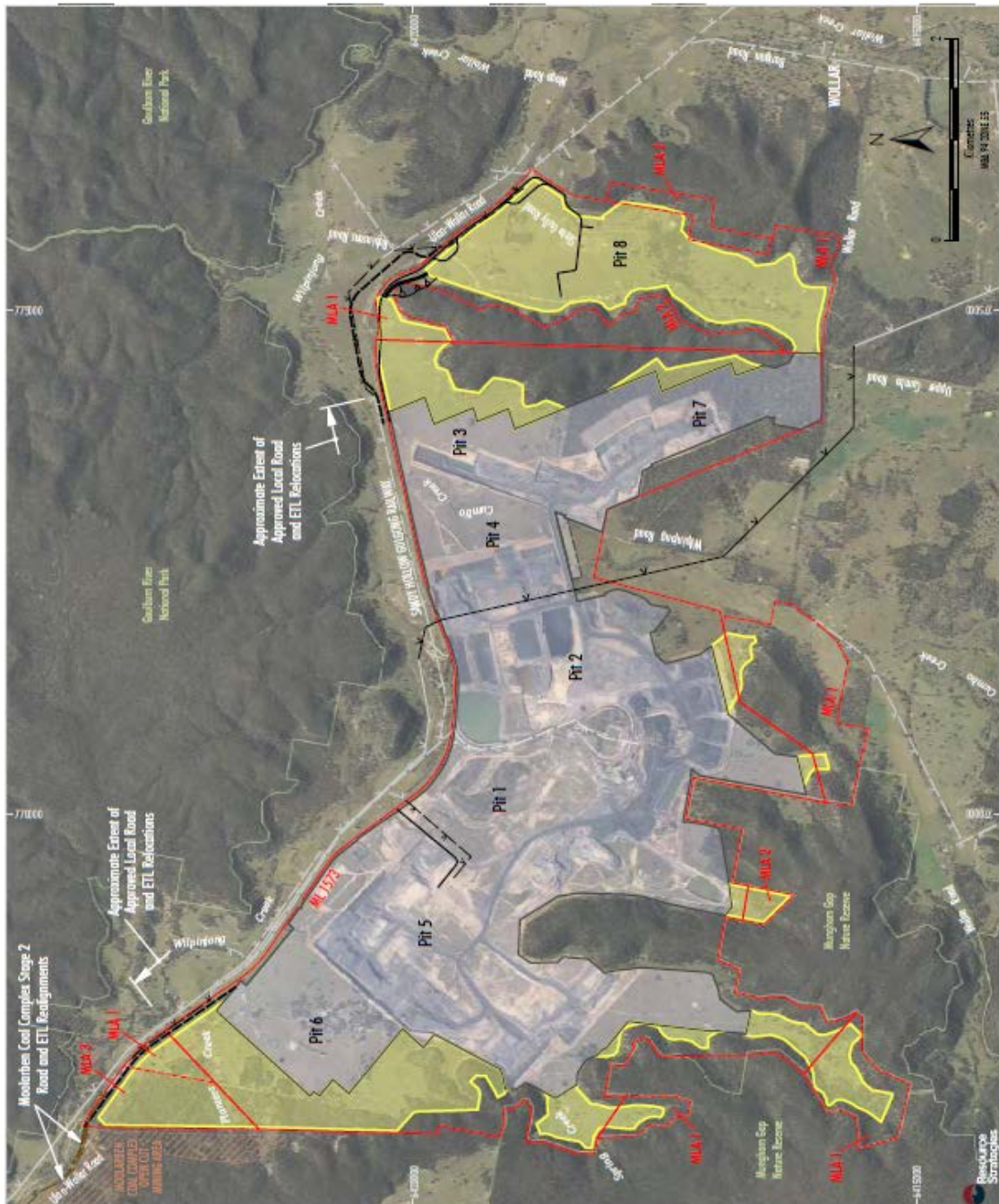


Figure 2: Wilpinjong Extension Project, Source: EIS, Resource Strategies Pty Ltd

4. COMMISSION'S MEETINGS AND SITE INSPECTION

As part of its review, the Commission met with the Department, the Applicant and the Office of Environment and Heritage (OEH) and conducted a site inspection. The notes from each of these meetings are provided in **Appendix 1**.

4.1 Briefing from the Department

On 22 November 2016, the Department briefed the Commission on the project and the content of the preliminary SEAR. Specifically, the briefing included:

- an overview of the existing mine;
- the strategic context;
- key aspects of the proposed project and amendments;
- the assessment process to date, including site verification, independent experts, bilateral agreement, Independent Expert Scientific Committee (IESC) and community consultation;
- the Commission's Terms of Reference for the review; and
- key assessment issues, which include amenity, social, biodiversity, water resources, heritage and rehabilitation.

4.2 Briefing from the Applicant and Site Inspection

On 28 November 2016, the Commission met with the Applicant at the Wilpinjong Mine site. The Applicant briefed the Commission on the existing site operations and the proposed extension of the mine site. The Applicant identified the key issues surrounding rehabilitation of the site, property ownership within Wollar Village and potential for Indigenous cultural heritage impacts on the site. The briefing was followed by an inspection of the open cut mining operations and inspection of Wollar village including the residences currently owned by the proponent.

4.3 Briefing from the Office of Environment and Heritage

On 6 December 2016, the Commission met with the OEH. The purpose of this meeting was to discuss the implications of the project with regard to biodiversity outcomes with a particular focus on the relocation of the 330Kv transmission line and the impacts and offsets surrounding the Regent Honeyeater, an endangered bird species whose habitat is present throughout the area.

4.4 Offer to Meet with Mid-Western Regional Council

The Commission offered to meet with the Mid-Western Regional Council as part of the review process. The offer was declined by the Council.

5. PUBLIC HEARING

As required by the Minister's Terms of Reference, a public hearing was held on 29 November 2016 at the Mudgee Town Hall. A total of 14 individuals and groups had registered to speak at the hearing. However, due to a number of cancellations on the day a total of 10 verbal submissions were made. A list of speakers that presented to the Commission is provided in **Appendix 2**.

A summary of the project specific issues raised at the public hearing are provided in **Appendix 3**.

In the weeks prior to the public hearing a number of community interest groups made public announcements of their intentions to boycott the public hearing, and encouraged others to do the same. During the public hearing there were community meetings both outside of the hearing venue in Mudgee and also in Sydney to protest against the project and government policy in relation to coal mining approvals in general.

6. COMMENTS AND FINDINGS

The Commission was satisfied with the extent of information provided by the Department in preliminary SEAR and associated expert reports. Most issues were subjected to additional peer review reports and no additional information was sought from the proponent or the Department. The Commission also considered all the public submissions and the verbal presentations in the public hearing.

As part of the review process the Commission has considered a range of issues which are discussed in greater detail below.

6.1 Biodiversity and Offsets

6.1.1 Introduction

The preliminary SEAR acknowledged that the proposal will impact on a number of threatened ecological communities, threatened flora and fauna species and the habitats of these species.

The Environmental Impact Statement (EIS) was accompanied by a specialist Biodiversity Assessment Report and Biodiversity Offset Strategy, prepared by Hunter Eco, and an Aquatic Ecology Assessment prepared by Bio-Analysis. The biodiversity and ecology reports and offset strategy seek to identify and assess the impacts of the project, identification of avoidance and mitigation measures, and the identification of biodiversity offsets for unmitigated residual impacts.

The Commission notes that NSW Offset Policy is currently within a period of transitional change and legislative reform. This is due to the NSW Government establishing a new Biodiversity Conservation reform package which will include a proposed Biodiversity Conservation Act and revisions to the Biodiversity Assessment Method. In the meantime the Commission took into account existing legislation and policies.

6.1.2 Vegetation Communities

The project proposes the direct disturbance of 354 ha of native woodland vegetation, and a further 668 ha of primarily cleared grazing land. Of this total disturbance area, 19 ha are classified as consisting of either a vulnerable ecological community (Slaty Box Forest), or an endangered ecological community (Blakelys Red Gum, and Yellow box Woodland) pursuant to the *Threatened Species Conservation Act 1995*.

In addition to the communities above, the Commonwealth Department of Environment and Energy (DoEE) has raised concern regarding the identification and classification of Box Gum Woodland Derived Native Grassland. There are differing definitions regarding the identification and classification of the derived native woodland between State and Commonwealth departments with the Department concluding that the grassland was not of sufficient condition to require offsetting.

The Commission notes the Department's comment about seeking updated mapping and assessment outcomes at the determination stage. The Commission agrees with this approach and supports the adoption of a precautionary approach being taken in the assessment of impacts where there is an inconsistency between Government agencies.

6.1.3 Threatened Flora Species

One threatened species, *Ozothamnus tessellatus*, was recorded within the study area. The ecological assessment recorded three separate communities with a total of 1,090 individual plants. The project is anticipated to directly impact on 589 individuals.

6.1.4 Threatened Fauna Species

Due to the significant amount of surface disturbance associated with the proposal, the project is likely to have potential impacts on threatened fauna species that occur, or have the potential to occur, within the site. The ecological assessment established that 20 species were recorded within or in proximity to the site, with an additional 18 species identified to potentially occur within the site. This impact includes the loss of 190 ha of Regent Honeyeater habitat and 160 ha of Koala habitat.

Table 1 below provides a breakdown of the threatened fauna species that do, or are likely to occur within the site.

Table 1: Threatened Fauna Species

Group	Species	TSC Act	EPBC Act	Recorded
Birds	Black-chinned Honeyeater, Brown Treecreeper, Diamond Firetail, Gang-gang Cockatoo, Glossy Black Cockatoo, Grey Crowned Babbler, Hooded Robin, Little Eagle, Little Lorikeet, Masked Owl, Scarlet Robin, Speckled Warbler, Turquoise Parrot.	V	-	Yes
	Regent Honeyeater	CE	CE ²	No
	Barking Owl, Flame Robin, Painted Honeyeater, Powerful Owl, Square-tailed Kite, Varied Sitella.	V	-	No
	Swift Parrot.	E	E	No
	Bush Stone-curlew.	E	-	No
Mammals	Eastern Bentwing-bat, Eastern Cave Bat, Eastern Freetail-Bat, Little Bent-wing Bat, Yellow-bellied Sheath-tail Bat.	V	-	Yes
	Corben's Long-eared Bat, Large-eared Pied Bat.	V	V	Yes
	Spotted Tail Quoll.	E	E	No
	Brush-tailed Rock Wallaby.	E	V	No
	Eastern False Pipistrelle, Squirrel Glider.	V	-	No
	Koala.	V	V	No

Notes:

1. V = vulnerable; E = endangered; M = migratory; CE - critically endangered
2. Status changed from E to CE occurred after the determination of the action being a controlled action and accordingly assessed as Endangered under the EPBC Act in the EIS and assessment report.

The Department of Environment and Energy concluded that there are likely to be significant impacts on Box Gum Woodland, Regent Honeyeater and *Ozothamnus tessellatus*, and the Department agreed with this outlook in the absence of mitigation and offsetting.

In addition, the project site contains an abandoned mining adit which is located approximately 152m from Pit 8. The adit has been identified as a possible maternity roosting site for the Eastern Bentwing Bat. The Department advised that the adit entry is currently unstable and at risk of rock fall regardless of future mining operations.

The OEH has confirmed that there are few known roosting sites for the bat within the Hunter Valley and that the loss of the site may place regional populations at risk. The Commission viewed this area during the site inspection.

6.1.5 Aquatic Ecology

The Aquatic Ecology Assessment has reviewed the potential onsite and downstream impacts of the project on aquatic ecology. The assessment considered the extent of impact already approved by the existing mining operations and the additional impact on local watercourses as proposed.

The assessment concluded that as the existing ephemeral watercourses provide poor aquatic habitat and that there will be nil to negligible change to the aquatic ecology within Wilpinjong Creek, the project will not result in any significant impact to any listed threatened aquatic species or communities. Some submissions stated that the reason for the existing poor aquatic habitat is from the previous and current mining operations. The Commission is of the view that the current aquatic quality is a result of a range of factors including agricultural, natural and mining operations, but agrees that the project should not have any additional significant impact providing all the conditions of approval are met.

6.1.6 Munghorn Gap Nature Reserve

Adjacent to the south west corner of the project site is the Munghorn Gap Nature Reserve. The OEH has recommended a 50m buffer between the reserve boundary and any mining operations. In response to this recommendation, the Applicant has proposed a 20m buffer from the edge of the open cut to the reserve boundary. Within this buffer will be ancillary infrastructure such as roads and water infrastructure.

The Applicant's justification for the 20m buffer is that about 780,000 tonnes of coal would be sterilised if no mining or infrastructure were to be permitted within the 50m buffer, or 350,000 tonnes of coal would be sterilised with a 50m buffer which permitted infrastructure within this zone. In addition to this, the proposed 20m buffer requires the clearing of 11 ha of native vegetation, however this is not a listed endangered ecological community.

While the Commission was concerned about the potential impact of mining in close proximity to the Munghorn Nature Reserve it was noted that the 50m buffer originally proposed by OEH is currently grassland. Since the Nature Reserve is woodland and it is now proposed to rehabilitate the mining area to woodland, it would not be the best biodiversity outcome to maintain a 50m grassland strip in-between the two woodlands. The Commission is satisfied a 20m buffer is more appropriate and will result in a better longer term outcome.

6.1.7 Relocation of the 330Kv Transmission Line

Area 8 of the project is currently transversed by a 330Kv transmission line, which is proposed to be relocated through part of the existing open cut mine. This component of the proposal will result in the loss of approximately 3 ha of land within Enhancement and Conservation Areas (ECA) – A and B. It is important to understand that ECA A and B form part of the offset and biodiversity outcomes for the existing Wilpinjong mining operation, and as part of these requirements, the Applicant was required to secure these areas into perpetuity. It is acknowledged that the community have raised concerns that despite the requirement for perpetuity, the Applicant is proposing to impact on these areas with the relocation of the transmission line.

During the Commission's meeting with OEH on 6 December 2016, the Commission sought further clarification on the approach to impact on the ECAs, and could the requirement for perpetuity be amended. OEH confirmed that provided the Applicant was able to provide an equivalent area elsewhere to compensate for the loss, then under current government policy it was permitted.

6.1.8 Commission's Considerations and Biodiversity and Offset Recommendations

In its review of the Biodiversity and Offset component of the project, the Commission has given consideration to the EIS and supporting specialist reports, the preliminary SEAR, the briefings provided to the Commission, including the submission by OEH, and to the concerns which have been raised by the community, either verbally during the public hearing, or by way of written submission. Community submissions in particular raise a number of concerns including, but not limited to, the suitability of how the offset strategy has been formulated, the cumulative loss of biodiversity within the locality, and the potential impacts on EECs and threatened species.

The Commission has given significant thought and consideration to both the potential impacts of the project on biodiversity at both a local and regional scale, but also the potential long term biodiversity outcomes that may occur as a result of the project. The Applicant and Department, in consultation with OEH have proposed a number of offset and management strategies to mitigate the project's biodiversity impacts. Additionally, it is noted that further consultation between the Department, Government agencies and the Applicant is likely to occur prior to the final SEAR being completed.

Whilst the Commission is generally satisfied with the information provided by the Applicant, and generally agrees with the position achieved by the Department in its conclusions, the Commission has formed that view that additional consideration of impacts and the management of those impacts is required, and subsequently the Commission makes the following recommendations to the Department and Applicant regarding biodiversity and offset impacts prior to finalising the project:

- should insufficient evidence be provided by the Applicant to satisfy the Department of Environment and Energy as to the identification and classification of derived native grassland, then for the purposes of establishing an appropriate offset liability, the area in question shall be deemed as satisfying the requirement for derived native grassland;
- incorporate as a minimum the Department's recommendations listed on page 50 of the preliminary SEAR within any proposed consent requirements to minimise impacts on the Nature Reserve;
- incorporate as a minimum the Department's recommendations listed on page 51 of the preliminary SEAR within any proposed consent requirements to minimise impacts on the abandoned adit to protect potential roosting sites of the Bentwing Bat. In addition to this, the Applicant and Department should give consideration to the impacts of mine lighting on bat movements to and from the adit;
- given the critical status of the Regent Honeyeater, the Department and the Applicant shall provide additional evidence to confirm that any shortfall in species credits are available for purchase by the Applicant. The Commission would not be supportive of any reduction in Regent Honeyeater credit liabilities;
- the Department should provide sufficient evidence to demonstrate that the proposed Regent Honeyeater breeding program is operational, or if not already operational, provide evidence that appropriate agreements are in place with relevant stakeholders, and that the program would become operational in less than five years;
- the Commission would encourage the development and adoption of a progressive offset strategy that focuses initial efforts on those land holdings that can offer the quickest biodiversity returns for endangered ecological communities and threatened flora and fauna species, for example ECA – B; and

- the Commission would encourage the Department, OEH and the Applicant to give consideration to develop a long term strategy to provide for the maximum potential habitat outcome for the Regent Honeyeater within the site and land offset areas.

Whilst outside of the scope of this project, the Commission notes the Department's reference in its SEAR to future mining proposals in the area and would encourage the Department to expand on the outcomes proposed as part of this project, onto other nearby mining projects if and when the opportunities arise. Of particular importance is the improvement in linking the Goulburn River National Park with the Munghorn Gap Nature Reserve, the acquiring of offset areas which adjoin these areas, the establishment and improvement of habitat to support the Regent Honeyeater, and the financial contribution to the proposed Regent Honeyeater Recovery Program.

6.2 Rehabilitation and Final Landform

The existing landform of the project area consists of a combination of steep slopes in the southern reaches of the site adjacent to the Munghorn Gap Nature Reserve, to gentle undulating slopes in the lower reaches of the site.

In relation to the rehabilitation of the site post mining, this has generally been summarised previously in this report, however it is understood by the Commission that the intended final outcome for the site is a final vegetation outcome focused specifically on establishing native woodlands supporting Regent Honeyeater habitat and linking the Goulburn River National Park with the Munghorn Gap Nature Reserve.

Due to the shallow nature of the resource and the low strip ratio required for resource extraction, the Applicant has developed a proposed final landform that is generally reflective of the existing topography of the site, including the placement of drainage lines within the site. The exception is the proposed location of three separate final voids which are proposed to be located in Pits 2, 6 and 8. The Department has made reference to the potential opportunity for the Applicant to integrate the Pit 6 final void with the final landform in the adjacent Moolarben mining complex to the west of the site. The Commission notes that Wilpinjong's current project approval permits two final voids, and the Applicant's statement that the backfilling of Pit 8 alone would cost in excess of \$15m. The Commission noted several submissions expressing concern about leaving another mining void in perpetuity.

Over the long term, as groundwater recovery occurs, Pits 2 and 6 will form saline lakes. Pit 8 is proposed to remain above the groundwater recovery level and would remain dry and without groundwater inflows. The Department and the Department of Primary Industries – Water (DPI-W) are satisfied that the project would not pose any significant impacts.

6.2.1 Commission's Considerations and Final Landform and Remediation Recommendations

In its review of the Final Landform and Remediation component of the project, the Commission has given consideration to the EIS and supporting specialist reports, the preliminary SEAR, the briefings provided to the Commission, including the submission by DRE and OEH, and to the concerns which have been raised by the community, either verbally during the public hearing, or by way of written submission.

Community submissions in particular raise a number concerns including, but not limited to, the final landform being consistent with the original topography, the presence of final voids and the mines ability to successfully rehabilitate the site as it approaches and reaches close down based on its historical performance to date.

The Commission has given significant thought and consideration to both the potential impacts of the project on the landscape at a local level but also the long term final outcomes for the site. Consultation with both DRE and OEHL have occurred in developing the rehabilitation objectives for the project. Additionally, it is noted that further consultation between the Department, Government agencies and the Applicant is likely to occur prior to the final SEAR being completed.

Whilst the Commission is generally satisfied with the information provided by the Applicant, and generally agrees with the position achieved by the Department in its conclusions, the Commission has formed the view that additional consideration of impacts and the management of those impacts is required, and subsequently the Commission makes the following recommendation to the Department and Applicant regarding the requirement for final voids prior to finalising the project:

- whilst the Commission acknowledges that the existing mining project has approval for two final voids, the Applicant and the Department should further explore opportunities to limit the extent of the pits, in particular to keep the depth shallow enough as to not form saline sinks, unless it is operationally and biophysically required. The Commission is of the view that the proposal to create an additional long term void for Pit 8 is not justified based on the information available, including stated cost, and further consideration should be given to preventing this permanent void.

6.3 Water Quality

The EIS was accompanied by a specialist Surface Water Assessment, prepared by WRM Water and Environment, and a specialist Groundwater Assessment, prepared by Hydrosimulations. The Commission was advised that both these reports were subsequently peer reviewed by Emeritus Professor Thomas McMahon and Dr Frans Kalf.

The Department has acknowledged that the project modelling, combined with extensive monitoring data collected from the existing mine operations indicate that there are a number of potential impacts the project may have on water resources, which include:

- reducing the catchment area and runoff to downstream waters as mining progresses;
- affecting downstream water quality from surface water discharges from the mine;
- altering geochemistry from waste rock, reject and tailings with potential mobilisation of contaminants and seepage into surrounding aquifers and surface waters; and
- affecting groundwater extraction and quality in aquifers sourced by private users.

6.3.1 Site Water Management

The Commission notes that there is a site water management regime operating within the existing mining operations. It is proposed that this system would be expanded into the proposed extension areas. The overall water balance for the project is predicted as being in water surplus for the majority of mining operations, with water shortages predicted in the mid to later stages of operations and during periods of low rainfall.

Importantly, it is noted by the Department that no surface water resources are required to supplement water requirements and that the existing approved borefield is licensed for sufficient water extraction limits to cater for predicted demand.

6.3.2 Surface Water Resources

Modelled base flow loss associated with the project is stated to increase by 0.04 ML / day upstream of the Goulburn River to Hunter River confluence, and 0.03 ML / day upstream of the Wollar Creek to Goulburn River confluence. There is no predicted base flow loss for the Wilpinjong Creek to Wollar Creek confluence. The Department acknowledges that whilst there is a negligible increase in base flow loss as a result of the project, this loss would be offset by discharges from the mines reverse osmosis plant which would be required to meet water quality and discharge requirements under the mine's Environmental Protection License (EPL).

Further to the potential loss of surface water flows are potential impacts to surface water quality due to the extent of site disturbance. The two primary contributors to impact on the quality of surface waters are seepage of salt from the disturbed mine workings and from the sediment dams.

The long term average salinity impact on the Goulburn River and Wilpinjong and Wollar Creeks is projected to be less than 1% which is consistent with the Level 1 impacts under the NSW Aquifer Interference Policy (AIP). This conclusion considered the extent of surface water baseflow loss and the controlled discharges from the reverse osmosis plant. The DPI-W has raised concerns that Wilpinjong Creek is indicating the presence of increased salinity and has recommended that ongoing monitoring and analysis be undertaken to establish if existing mining operations have been impacting on existing and historical salinity levels within the creek.

In addition to possible salinity impacts, there is also the further potential for a reduction in surface water quality due to overland flow occurring on areas of disturbed land. This overland flow is proposed to be captured by various sediment dams within the site, however it is noted that the Department does not include the catchment areas where runoff from areas which contain coal stockpiles or other pollutants can occur.

The Environment Protection Authority (EPA) has requested the Applicant increase the design of the sediment dams to cater for a 95 percentile 5 day rainfall event to reduce the potential for uncontrolled discharges from the dams. The Department is supportive of this outcome as it is consistent with the management requirements of the adjoining Moolarben mine operation. It is further noted that the existing EPL does include the ability to discharge from the sediment dams directly into any receiving waters.

As a result of the changes to the sediment dams, the water balance for the project will need to be reviewed, as well as any associated management plans.

The Applicant and surface water study state that there would be negligible downstream impacts for the following reasons:

- the mine water management system is designed to prevent uncontrolled discharges of water from mine water storage dams or catchments affected by mining activities;
- overflow from sediment dams would only occur during significant rainfall events which would also generate runoff from surrounding catchments, and mean that sediment dam overflows would be unlikely to have a measurable impact on receiving water quality; and
- water treated in the reverse osmosis plant would continue to be released to Wilpinjong Creek in accordance with the existing EPL criteria, which is generally of a higher standard than the receiving water quality.

6.3.3 Groundwater Resources

The groundwater modelling provided for the project considers both project specific impacts, but also cumulative impacts associated with the Moolarben mining operations. The Commission notes that the Moolarben operations are responsible for depressurising the Ulan seam, which is the primary coal resource for the Wilpinjong project. To achieve this approach, the modelling incorporated actual groundwater monitoring data from the adjoining mines. The IESC is noted as initially requesting that a sub-regional groundwater model be prepared involving nearby mines and significant water uses. Since the initial request, the committee has accepted that the approach adopted is satisfactory.

It is acknowledged that as mining progresses, the pits will begin to act as localised groundwater pits as the Ulan seam is dewatered. Average peak inflow is currently modelled at 4.5 ML / day. This inflow is predicted to cause a widespread depressurization of the Ulan seam of up to 2m for a distance of 15 – 20 km to the north of the mine. The only private bore predicted to be impacted by more than 2m of drawdown is located at the Wollar Primary School, which is expected to experience up to 6 m of total loss to the existing water levels.

In addition to the depressurization of the porous rock aquifer, and in response to this depressurization there will be predicted drawdown within the alluvial aquifers. The preliminary SEAR is not however clear on the total extent of this drawdown. The Department does state that the existing monitoring for the current operations has not identified any significant drawdown; however, it is noted that this has not been numerically quantified.

Total water loss from the alluvium is predicted to peak at 171 ML / year. The Applicant currently holds sufficient entitlements for the total take, including those required to be retired post mining to account for the predicted post mining take of 147 ML / year. In addition to the total alluvium take, the predicted take from the hard rock aquifer is predicted to peak at 1,099 ML / year.

The Department has further concluded that the modelling predicts that total drawdown within both aquifers will have no effect on local natural features, culturally significant sites, groundwater dependent eco-systems or groundwater springs within the Goulburn River National Park. The DPI-W has concluded that under the AIP the project meets Level 1 impact requirements on the alluvium aquifer, the exception being at Wollar Public School as discussed previously, which achieves Level 2 impacts on the hard rock aquifer.

Mining operations may have a significant impact on groundwater quality through enrichments and soluble chemicals in overburden emplacements, coal rejects, sodic or potentially acid forming materials. The groundwater assessment has concluded that due to the poor existing quality of groundwater and surface water in the area there would be no discernable reduction in groundwater quality.

Geotechnical testing conducted by Geo-Environmental has confirmed that most waste rock and reject materials are non-saline, non-sodic and non-acid forming. The geotechnical assessment made a number of management recommendations which the Department has proposed to be incorporated into the existing water management plan for the site.

6.3.4 Commission's Consideration and Water Quality Recommendations

In its review of the Water Quality component of the project, the Commission has given consideration to the EIS and supporting specialist reports, the independent peer reviews, the preliminary SEAR, the briefings provided to the Commission, including the submission by DPI-W, and to the concerns which have been raised by the community, either verbally during the public hearing, or by way of written submission. Community submissions in particular raise a number concerns including, but not limited to, loss of surface and groundwater, water quality impacts and the adequacy of the groundwater and surface water modelling.

The Commission has given significant thought and consideration to both the potential impacts of the project on groundwater and surface water resources within the site, and the potential impacts on these resources at both a local and regional level. Consultation with DPI-W has occurred in developing a suitable monitoring and reporting program for the project. Additionally, it is noted that further consultation between the Department, Government agencies and the Applicant is likely to occur prior to the final SEAR being completed.

Whilst the Commission is generally satisfied with the information provided by the Applicant, and generally agrees with the position achieved by the Department in its conclusions, the Commission has formed the view that additional consideration of impacts and the management of those impacts is required, and subsequently the Commission makes the following recommendations to the Department and Applicant regarding water quality impacts prior to finalising the project recommendation:

- the final assessment report should present the modelling and prediction information as being independent of the existing mining operations, however cumulative impacts of the whole of project are still to be presented. This will permit a clear delineation of the proposed project impacts;
- where an agency raises concerns regarding existing mining impacts, such as salinity increases within Wilpinjong Creek, the Department should in its final assessment report give significant time to clearly describe the concerns, how the agency believes the concern should be best managed, and how the Department in reaching its final conclusion has addressed those concerns, and where possible specific management outcomes should be referenced by way of conditions of consent;
- the Department is to give consideration to requiring, through the implementation of conditions of consent, the establishment of baseline surface water and groundwater data to enable the development of a reference point to establish the impacts of mining on water resources within the locality;
- the Department should ensure that the water balance assumptions are updated prior to finalising the preliminary SEAR to ensure it is reflective of the outcomes of requiring sediment dams to be designed to cater for the 95 percentile 5 day rainfall event;
- the Department is to clarify how "mine water" as reference on page 60 of the preliminary SEAR is captured and managed so as to not pose a risk to the environment;
- the Department is to confirm that the cumulative impact assessment of groundwater includes what has occurred / been approved by the existing mining operations at Wilpinjong, or alternatively it clearly delineates the two projects and provides information on the experienced drawdown against what was predicted for the existing operation;
- the Department is to ensure that an appropriate regulatory regime is developed through either a statement of commitments or conditions of consent with regard to the Applicant's "in-principle make good provisions" with regard to groundwater impacts on the Wollar Public School;

- the Department is to provide further clarification as to the full extent of drawdown on the alluvial aquifers within and around the project site to enable a full assessment of the predicted impacts;
- where the Department elects to make statements regarding the significance of an impact it should provide a numerical description as to the extent of that impact;
- in determining the impact of mining on groundwater quality, the Department should provide evidence to support the statement that groundwater and surface water quality is relatively poor and that this is not the result of ongoing mining operations within the locality; and
- where a specialist expert report makes recommendations as to the ongoing management of an impact, the Department shall ensure that these are appropriately adopted through conditions of consent or other appropriate means.

6.4 Indigenous and Non-Indigenous Heritage

6.4.1 Indigenous Heritage

The EIS was accompanied by a specialist Aboriginal Cultural Heritage Assessment prepared by South East Archaeology. The assessment considered the findings of previous assessments completed for the site and included new work within the extension areas of new operations.

The archeological assessment identified a total of 296 sites within the project area. Of this, 92 sites are located within open cut areas and a further 138 sites are within mine infrastructure areas. The assessment has assumed all these sites will be impacted, although there may be some opportunities for infrastructure design to avoid those impacts. Of these 230 sites, three are listed as high local significance, three as moderate local significance, and a further 22 are listed as having low to moderate significance.

Whilst the impact on a vast number of items is acknowledged the primary impact on aboriginal heritage is within Pit 8 for a site known as the Rocky Hill Complex. This area contains a number of sites considered as low significance, however, and most importantly to this project it also contains all three sites of local high significance. These include:

- a cultural area associated with the landscape features which comprise a visually prominent hill top situated in the valley floor;
- a rock shelter with artefacts and art (site WCP579); and
- a rock shelter with artefacts and an ochre quarry (site WCP578).

The Department has acknowledged that the Aboriginal community has raised concerns about the classification of significance within the assessment and the indirect impacts of the proposal within the immediate locality. The Aboriginal community also raised concerns about the Castle Rock site which is protected under the existing operations and the Department notes that mining operations would not proceed any closer to this site beyond what is permitted by the existing approval. Despite the concerns raised by the Aboriginal community the Department is satisfied with the assessment given that:

- it concludes that the majority of sites in the Rocky Hill Complex are of high cultural significance to the Aboriginal community;
- it has been undertaken by qualified archaeologists in consultation with the Aboriginal groups;
- OEHL is satisfied that the assessment has been undertaken in accordance with relevant guidelines; and

- the Applicant proposes to implement a number of measures to mitigate the potential impacts of the project on Aboriginal heritage. These include general measures for open artefact sites including surface collection and sub-surface testing and excavation. The Applicant also proposes to implement a number of measures specific to the highly significant sites associated with the Rocky Hill Complex (WCP578 and WCP579). These include:
 - salvage excavation of deposits and surface collection of artefacts;
 - detailed recording of the ochre quarry evidence and rock art and removal of samples for further analysis where feasible; and
 - an archaeological research program to improve knowledge about the heritage value of the sites.

Whilst OEH has not raised any project specific concerns, the Department, in the preliminary SEAR has made reference to previous advice provided by OEH to the Department on the Bylong Coal Project. The advice emphasised the importance of ochre sources and rock art within the region, and recommended a region wide investigation given the cumulative impact of mining across the region. In response to this the Department believes that to assist in countering the loss of known heritage sites, the Applicant should be required to undertake a survey of its offset sites to assist in the identification and preservation of sites not currently known. Further to this, the Department sees merit in the participation of all western coalfield mining operations to contribute towards further research and investigation into art site patterns within the region.

During the Commission's inspection of the Wilpinjong project area on 28 November 2016, the Commission inspected the Rocky Hill Complex which included the rock art site.

6.4.2 Non-Indigenous Heritage

The EIS was accompanied by a specialist Historic Heritage Assessment prepared by Niche. In a manner comparable to the Aboriginal Cultural Heritage Assessment, the assessment considered both previous investigations and completed new surveys over the extension areas.

A total of 21 sites of local heritage value were identified around the project area, of which 4 sites are to encounter direct, or indirect impacts. The Heritage Council raised concerns in particular regarding potential impacts on subsurface archeological material associated with the possible location of the Caretakers Cottage. In response to this the Heritage Council has requested to be consulted on any excavation program to ensure those excavations occur to a satisfactory standard.

6.4.3 Commissioner's Considerations and Indigenous and Non-Indigenous Heritage Recommendations

In its review of the Indigenous and non-Indigenous component of the project, the Commission has given consideration to the EIS and supporting specialist reports, the preliminary SEAR, the briefings provided to the Commission, including the submission from OEH, and to the concerns which have been raised by the community, either verbally during the public hearing, or by way of written submission. Community submissions in particular raised concerns about the loss of significant indigenous and non-indigenous cultural heritage from within the project area, and the cumulative loss of this heritage across the wider region.

The Commission has given significant consideration to the potential impacts of the project on the Indigenous and non-Indigenous heritage within the project area at a local, regional and state level. Consultation with OEH has occurred in determining the significance of impacts created by the project, and appropriate mitigation and management plans to address these impacts.

Additionally, it is noted that further consultation between the Department, Government agencies and the Applicant is likely to occur prior to the final SEAR being completed.

Whilst the Commission is generally satisfied with the information provided by the Applicant, and the position achieved by the Department in its conclusions, the Commission has formed that view that additional consideration of impacts and the management of those impacts is required, and subsequently the Commission makes the following recommendations to the Department and Applicant regarding Indigenous and non-Indigenous heritage impacts prior to finalising the project recommendation:

- develop clear performance management objectives to be applied to any development consent which specify the acceptable level of impact on sites of significance;
- that the Department, OEH and the Applicant take all reasonable steps to consult, and where possible reach an agreement with the local Aboriginal community as to the level of acceptable impacts on items of significance;
- the Department should ensure that a strong regulatory management regime is in place which puts an emphasis on impact avoidance for significant sites, and where avoidance is not possible the suitable recording and salvage of artefacts; and
- the Department, in consultation with the OEH should engage in discussions with mine operators within the western coalfields regarding participating in a voluntary capacity to the contribution to a regional investigation into Indigenous and non-Indigenous archeology within the region.

6.5 Noise and Blasting

The EIS was accompanied by a specialist Noise Impact Assessment prepared by SLR Consulting. The noise assessment has been prepared in accordance with relevant guidelines including the NSW Industrial Noise Policy (INP), Rail Infrastructure Noise Guidelines (RING) and the NSW Road Noise Policy (RNP). The Department engaged Wilkinson Murray to undertake a peer review of the noise assessment and it concluded that the noise model was in line with best practice, consistent with attended and real-time noise monitoring results, and if anything, may marginally over-predict noise impacts.

6.5.1 Background Noise Levels

The Department acknowledges that a number of submissions raised concerns about the background noise levels adopted for the assessment and that those levels as applied under the INP are too high given the low density rural environment.

The Project Specific Noise Level (PSNL) for Wollar Village is set as 36 dB(A) during the day and 35 dB(A) for evening and night time periods. All other locations are set at 35 dB(A). The Department notes that these levels are the lowest permitted to be set under the INP and are consistent with those applied in 2006 pre mining, and in addition to this, the INP sets the acceptable night time noise criterion at 40 dB(A), with a recommended maximum of 45 dB(A).

The INP states - *a development will be deemed to be in non-compliance with a noise consent or licence condition if the monitored noise level is more than 2 dB above the statutory noise limit specified in the consent or licence condition.*

6.5.2 Noise Mitigation Measures

As part of its obligation to minimise operational noise impacts the Applicant has implemented a number of management techniques over its existing operations. This includes the operation of a continuous noise management system and automated weather station to permit pre-emptive management actions and operational changes to maintain compliance.

Based on the existing mitigation measures the noise modelling undertaken indicates that the project could exceed its PSNL by up to 7 dB(A) at the privately owned residences within Wollar Village during adverse meteorological conditions. The Applicant has conducted further modelling on the mitigation measures to achieve the target 35 dB(A) within Wollar and this would require significant restrictions to the operations within Pit 8 and significant noise attenuation to existing equipment with the mine. The project capital cost of these measures has been estimated at \$56 million over the life of the mine.

Due to the significant cost and operational restrictions to achieve 35 dB(A), the Applicant has proposed alternative management strategies, which when modelled indicate a noise level of 37 dB(A) is achievable. The cost of these operational measures is estimated at \$14 million.

6.5.3 Operational Noise Impacts

The noise assessment has modelled the predicted impacts of the project at operational years 2, 4, 8, 12 and 15. The modelling suggests that with the adoption of the noise mitigation measures discussed immediately above in the report, the project will exceed its PSNL at four privately owned residences. Three of the residences are within Wollar and the other is to the north east of the site off Mogo Road, and this is shown below in **Table 2**.

Table 2: Summary of Noise Impacts

Receiver No.	Worst Case Noise Prediction (dBA LAeq(15min))		
	Day	Evening	Night
102	22	36	38
903	21	36	37
908	22	37	37
933	21	37	37

Despite non-compliance with the PSNL, the project will comply with the applicable amenity criteria. The Department notes that under the NSW Voluntary Land Acquisition and Mitigation Policy (VLAMP), exceedances of 2 dB(A) of the PSNL is considered negligible and would not be discernible to the average listener. Exceedances of 3 dB(A) are considered moderate and would require additional noise treatments to affected residences.

It is noted that the modelling provided is designed around worst case meteorological conditions, combined with peak mining operations within the closest possible proximity to sensitive receivers. For residence 102, exceedances are only predicted to occur in one modelled scenario during year 2020.

It is considered important to refer to the Applicant's land purchase strategy, in which it has undertaken to purchase any property within the Wollar village regardless of the level of any impacts it may, or may not be subject to. It is noted that the levels of impact predicted to occur within Wollar would not be significant enough to trigger acquisition under the VLAMP.

Further consideration was given to the cumulative noise impact of the development in conjunction with the neighbouring Ulan and Moolarben mining projects. Noise levels at Wollar are expected between 33 and 38 dB(A) which is significantly less than the applicable amenity criteria. It should be noted that the PSNL does not apply to cumulative assessments.

Other receivers within the locality are not considered to be sufficiently impacted by noise to result in any material loss of amenity.

In addition to the consideration of standard noise impacts, the noise assessment also gave consideration to the potential impacts generated by low frequency noise. The methodology to the assessment was challenged by the peer review which utilised the Draft Industrial Noise Guidelines which provide for a more contemporary assessment of low frequency noise impacts. The findings of the peer review confirmed that the mine does not contain dominant low frequency noise content.

6.5.4 Traffic and Train Noise Impacts

The noise assessment considered the cumulative contribution of the project to existing noise levels due to the predicted increase in operational and construction related traffic along Ulan Road which has 14 privately owned residences. It is noted by the Department that there are no privately owned residences along the Ulan – Wollar Road and hence its exclusion from the assessment.

The assessment has concluded that there will be a potential increase in traffic volumes of between 6 and 25% which would result in a road noise increase of between 0.3 and 0.8 dB(A) during daytime periods and an increase of between 0.2 – 1 dB(A) during the night time period. The RNP recommends that any increase in total traffic noise resulting from additional traffic generated by new projects should be limited to 2dB(A).

It is noted by the Department that some existing receivers along Ulan Road are subject to noise levels above the RNP, however the assessment concludes that the project will not result in additional exceedances. The Ulan Roads Strategy is discussed in further detail below in the report, however it is noted that this strategy does provide mitigation outcomes to any receivers where noise impacts exceed the relevant criteria.

The assessment also considered the impact of rail noise on receivers between Wilpinjong and Bylong, and included the cumulative impact of the project plus those movements contributed by the Ulan and Moolarben mining operations. The existing operations are currently approved for an average of 6 trains per day, with a maximum of 10 trains per day. It is noted that this is a conditional requirement and under this proposal there is no request to increase the existing train numbers.

The assessment found that for the 10 receivers located between Wilpinjong and Bylong, there would be no increase in rail noise. The assessment further found that compliance with the RING would be achieved at a separation of 105m from the rail line, and that the nearest receiver was located more than 500m away. It is further noted that the railway is owned by the Australian Rail Track Corporation and rail noise is licensed under their relevant EPL.

6.5.5 Blasting and Vibration Impacts

The Noise Impact Assessment prepared by SLR Consulting, and peer reviewed by Wilkinson Murray has been completed in accordance with relevant guidelines to consider the impact of the proposal on human comfort and structural damage to buildings. In addition to this, the assessment considered the impacts on livestock, public infrastructure and heritage items. It is noted that impacts on native fauna were not considered.

The assessment's conclusions have included consideration of the existing blast management practices of the existing mining operations which, since 2012 indicate that there have been no blast exceedances on private residences and no evidence of blast damage to public infrastructure or significant indigenous heritage items. Despite this 23 complaints were received in 2014 and a further 13 in 2015.

The assessment concluded that the project would achieve compliance well under the applicable amenity and structural damage criteria at all privately owned receivers, public infrastructure and heritage sites. The blasting predictions were based on a maximum instantaneous charge of 3,900kg, with a smaller modelling charge for areas close to sensitive sites and infrastructure.

Given the number of sensitive sites, including heritage items and the Bentwing Bat roosting site which could be indirectly impacted by blasting operations, the Applicant has recommended adopting a performance ground vibration limit of 80mm/s which is significantly less than the maximum of 250mm/s recommended by the SLR assessment.

6.5.6 Commission's Considerations and Noise and Blasting Recommendations

In its review of the Noise and Blasting component of the project, the Commission has given consideration to the EIS and supporting specialist reports, independent peer review of the specialist reports, the preliminary SEAR, the briefings provided to the Commission, and to the concerns which have been raised by the community, either verbally during the public hearing, or by way of written submission. Community submissions in particular raised concerns about, but not limited to the accuracy of the noise modelling, absence of low frequency noise impacts from the assessment, and the application of the Draft Industrial Noise Guidelines.

The Commission has considered the potential noise and blasting impacts of the project on receivers within the locality. Consultation with the EPA has occurred and it is noted that in the EPAs correspondence with the Department dated 10 June 2016 there are outstanding issues with the adequacy of the noise impact assessment. Additionally, it is noted that further consultation between the Department, Government agencies and the Applicant is likely to occur prior to the final SEAR being completed.

Whilst the Commission is generally satisfied with the information provided by the Applicant, and the position achieved by the Department in its conclusions, the Commission has formed the view that additional consideration of impacts and the management of those impacts is required, and subsequently the Commission makes the following recommendations to the Department and Applicant prior to finalising the project recommendation:

- the Department should exhaust all reasonable means to reach a position of agreement with the Applicant that the voluntary acquisition of private residences within Wollar be extended to include the residence known as 102 within the preliminary SEAR. In the absence of this, consideration should be given to setting a noise level of 35 dB(A), rather than 37 dB(A) as recommended by the Department given the reference in the INP (see 6.5.1 above) that 2 dB(A) above the statutory limit is deemed to be in compliance ;
- the Applicant should take all reasonable measures to ensure that private residences along the Ulan Road are aware that mitigation measures are available where road noise exceedances occur and information on how this is conducted should be reflected through a statement of commitments or other means as considered appropriate by the Department;
- the Department should engage in further consultation with EPA to resolve any residual noise assessment issues;
- the Department should give consideration to the creation of specific performance targets for blasting and vibration impacts on sensitive sites which would then be reflected by conditions of consent, and incorporated in an appropriate Blasting Management Plan for the site; and
- the Department and Applicant should provide a response which addresses the “Additional Acoustic Peer Review” prepared by Day Design Pty Ltd on behalf of the Wollar Progress Association.

6.6 Social Impacts and Wollar Village

The preliminary SEAR acknowledges the potential for the project to have both positive and negative social impacts, which would be experienced differently by different communities, groups and individuals. Positive impacts of the project include those associated with employment, which would benefit communities residing primarily in the broader region, including Mudgee and Gulgong. Negative impacts of the project would primarily affect the Wollar Community including residents in the village, their families and others who feel connected to the village.

The EIS was accompanied by a Social Impact Assessment (SIA), prepared by Elliot Whiteing which considered the potential impacts at a local and regional level. The assessment was informed by consultation with various stakeholders including the Wollar community, Council, social infrastructure and service providers and employees of the Applicant.

The Department commissioned Elton Consulting to provide independent advice regarding the adequacy of the SIA. Elton Consulting concluded that the impact assessment ‘appears to be of a high standard and aligns with leading practice’ and includes a ‘wide-ranging’ stakeholder engagement process and good understanding of baseline conditions.

The Department received a number of submissions that were critical of the SIA, suggesting that the methodology, analysis and assessment were inadequate. Specifically, a number of issues were raised regarding the consultation undertaken as part of carrying out the assessment, independence of the process, as well as gaps in information required to inform views of potential impacts.

The Department considers that in combination with the assessment and the findings of the peer review, it has sufficient information to assess the potential social impacts of the project.

6.6.1 Positive Social Impacts

The positive impacts of the project primarily relate to employment benefits. The Department considers it is important to recognise the significant positive social impacts that would be realised should the project proceed.

Positive impacts include the direct employment of up to 625 people, ongoing contributions to infrastructure and services through contributions to council, sealing of the remaining unsealed section of Ulan-Wollar Road, and the broader social benefits associated with indirect employment in the region. Employment numbers and durations are considered further in Section 6.10 of this report.

Since obtaining the original approval, the Applicant has implemented a number of measures and initiatives to mitigate negative social impacts and provide support to the community. Some of these measures include financial and in-kind support for local schools, equipment purchases for the Rural Fire Service (RFS), contribution towards operating costs of the Wollar Community Hall and support for community and cultural events. Public submissions in-support of the project, received during the public hearing, confirmed the benefits associated with these strategies and how the community would continue to benefit from them should the project proceed.

Additional potential benefits and opportunities of the project should it proceed, identified in the SIA, include:

- a continuation of employment and longer-term job security for community members employed by the mine, and support for flow-on employment;
- support for local and regional businesses through potential construction and supply contracts;
- a contribution to the stability or growth of the Council area's population;
- direct and indirect benefits for the regional economy and regional business confidence for the life of the project;
- support for the capacity of the RFS through additional employee volunteers;
- engagement with service providers regarding service provision to Wollar area residents commensurate with the population; and
- continued community investment to contribute positively to community development in the local government area.

6.6.2 *Wollar Village*

The village of Wollar is located approximately 3 km to the east of the approved mining operations, and approximately 2 km from the proposed new open cut pit. The village comprises 23 residential dwellings, a primary school, an Anglican and Catholic Church (no longer operational), a community hall and a local store which also functions as a post office. The population of Wollar has declined significantly since the mine commenced operations in 2006, from approximately 304 residents to about 70 residents in 2015. The Applicant has a proactive acquisition strategy, having acquired the majority of privately-owned properties in the village apart from three residences and one vacant parcel of land. The Applicant currently subsidises the general store to keep it operating.

The negative impacts of the project would primarily affect Wollar Village, including residents and those in surrounding areas, their families and others who feel connected to the village. Through submissions and consultation undertaken for the SIA, the Wollar community have reported negative impacts as a result of the operation of the existing mine and raised concerns that the project would increase these impacts and contribute to further decline of the village.

The Department notes that since mining commenced in the area, the Wollar community has regularly raised concerns regarding negative social impacts of the mine, which include:

- declining population and adverse changes in the composition of the community;
- reduction in the availability of community services;
- loss of social cohesion and opportunities for social interaction in the area; and
- impacts on health and amenity of residents as a result of noise and dust emissions from the mine and nearby railway.

The declining population has affected the viability of a range of community services in the area. The Wollar Store is commercially unviable and no longer provides some services it previously offered. The RFS has lost capacity forcing amalgamation with the neighbouring Cooks Gap RFS.

The Department acknowledges concerns raised by the community, but considers it important to place these issues in the context of the current proposal. While the current proposal has the potential to exacerbate negative social impacts, the Department considers that the most significant social impacts have already occurred as a result of the original approval of the mine in 2006, and there is limited scope to effectively reverse these impacts.

The Applicant proposes to continue a number of initiatives to support the local community. Elton Consulting raised concern over the adequacy of these measures to effectively address negative social impacts of the project. Subsequently, the Department's report made a number of recommendations to strengthen these measures, including:

- ongoing support for the Wollar Store or convenience shopping and postal needs;
- funding or works in-kind to restore or maintain buildings, properties and lands;
- funding or in-kind support for a specific number of RFS volunteers; and
- offering acquisition to the remaining residents of Wollar Village, should they wish to relocate.

6.6.3 Commission's Considerations and Social Impact Recommendations

In its review of the impacts on Wollar Village, the Commission has given consideration to the EIS and supporting specialist reports, independent peer review of the specialist reports, the preliminary SEAR, the briefings provided to the Commission, and to the concerns which have been raised by the community, either verbally during the public hearing, or by way of written submission. Community submissions in particular raised concerns about the ongoing viability of Wollar Village as a result of continued mining operations and the historical impact created by the existing mine.

The Commission has given significant consideration to the potential impacts on the village and acknowledges the community's concerns over the decline of Wollar Village and how negative impacts of the mine have contributed to its decline. However, the Commission notes that while many of these impacts have been exacerbated by the mine, it is unlikely that the decline of Wollar Village can be attributed solely to the existence of the mine. The Commission considers that these social impacts are consequential of a number of factors, such as market forces that would likely have been experienced by Wollar Village, even if the original approval of the mine had not been obtained in 2006.

In response to the Department's recommendations, the Applicant raised no objection to offering acquisition rights for the remaining residential properties in the village. The Applicant considers its existing support of the RFS, including financial contributions and encouragement of volunteers is appropriate and no further commitment is required. The Department agrees with this position. However, with regard to providing ongoing support to Wollar store, the Applicant does not support ongoing funding given that it is not commercially viable. The Department acknowledges the social value of the store, but does not consider that any requirement for its ongoing operation would fairly or reasonably relate to the project or a planning purpose.

Whilst the Commission is generally satisfied with the information provided by the Applicant, and the position achieved by the Department in its conclusions, the Commission has formed the view that additional consideration of impacts and the management of those impacts is required, and subsequently the Commission makes the following recommendations to the Department and Applicant regarding the impacts on Wollar Village prior to finalising the project recommendation:

- the Applicant and Department should give further consideration in establishing what the social impact on the locality, and particularly Wollar Village will be post mining closure;
- the Applicant, in consultation with the Department should prepare a long term strategy for the management of mine owned assets within Wollar Village. The strategy should include details on maintenance or replacement of assets where possible, or the timely removal and remediation of assets should maintenance or replacement not be a viable option on public safety grounds. The Applicant would be encouraged to take all possible and reasonable measures to preserve the village fabric; and
- The Applicant should develop a workplace strategy that actively encourages employees at the mine to become engaged within the local community, particularly through organisations such as the RFS who rely heavily on volunteers.

6.7 Traffic and Roads Strategy

The preliminary SEAR considers the potential for increased traffic and transport impacts as a result of the project. The EIS includes an assessment of transport and traffic related impacts and consideration of the cumulative impacts from existing and proposed mines in the area.

The assessment concludes that the road network would satisfactorily accommodate additional road traffic associated with the project. The Applicant proposes to realign Ulan-Wollar Road to accommodate extensions to the Pit 8 mining area and to seal the remaining unsealed sections of the road adjacent to the mine.

The Wollar community have raised concerns regarding potential impacts on the safety of Wollar Road and concerns relating to mine traffic travelling through the village. The Department considered these issues and notes that the project is not anticipated to have any significant impacts on the safety or capacity of Wollar Road or any increased traffic related impacts on the village.

The Department recommends that the Applicant be required to comply with the existing conditions regarding cumulative traffic impacts, scheduled shift changes outside of school bus hours and contributions towards implementation of the Ulan Road Strategy. The Department also recommends a condition requiring the Applicant to realign and upgrade Ulan-Wollar Road to the satisfaction of the Council.

Based on the scope of the project, the Commission agrees with the Department's consideration of the potential impacts and its approach to the proposed conditions with regard to traffic and transport.

6.8 Air Quality

The preliminary SEAR states that the Department is satisfied with the assessment of air quality impacts and the proposed management of any potential dust impacts.

The EIS was accompanied by an Air Quality Impact Assessment, which was peer reviewed by Dr Nigel Holmes (on behalf of the Applicant). The peer review concluded that the assessment report followed the relevant procedures and was a realistic assessment of the air impacts of the project.

The preliminary SEAR notes that the Council requested independent modelling of air quality impacts in its submission, raising concern that it had not been undertaken satisfactorily. However, both the Department and the EPA are satisfied that the air quality predictions are a conservative representation of the potential dust impacts of the project.

The Department also commissioned an independent expert, Ramboll Environ to undertake a review of the Applicant's air quality assessment. Subject to implementing real-time monitoring and associated amendments to the Air Quality Management Plan, the Ramboll Environ review considers that the air quality impacts of the project can be managed to comply with all relevant criteria.

The Department notes that monitoring has shown that the existing mine has been able to comply with the dust criteria, apart from isolated events where exceedances of short term dust criteria have occurred. These instances have generally coincided with widespread dust events, but there have been no exceedances of the long term annual average dust criteria. The preliminary SEAR acknowledges that the project would comply with applicable air quality criteria at all privately-owned residences as well as the criteria established by the EPA for a rural area.

In this regard, the Commission agrees with the Department that air quality impacts of the project have been adequately considered, subject to implementation of dust minimisation and management measures and the Department's recommended conditions.

6.9 Spontaneous Combustion

The preliminary SEAR identifies the potential for spontaneous combustion events to occur as a result of the project. Spontaneous combustion occurs when a substance such as silage, hay, compost or some types of coal ignites as a result of rapid oxidation, without heat or ignition from an external source. Spontaneous combustion is commonly associated with smoke and gaseous hydrocarbons, potentially causing offensive odours.

Spontaneous combustion events have occurred at the Wilpinjong mine in the past, primarily associated with a temporary emplacement area, which was established prior to identifying the spontaneous combustion propensity of some materials at the mine. As a result of these events, odours are sometimes perceptible on Ulan-Wollar Road and residents of Wollar have also complained about offensive odours.

The Department notes that the Applicant is currently removing the temporary emplacement area to address the historical issues, and expects this to be completed by May 2017. Notwithstanding, the Department notes there would continue to be some potential for spontaneous combustion in the new areas associated with the project, as extracted materials are expected to have similar propensity to that currently being handled and managed at the mine. The Department notes that the Applicant has complied with the relevant air quality criteria for all pollutants at Wollar Village, including those associated with odour.

The Applicant proposes to continue to implement a number of measures to prevent spontaneous combustion events. These measures include propensity testing, appropriate placement of higher risk materials, sealing exposed seams of non-active mining faces with inert materials, and capping carbonaceous material.

The Department has also recommended that the Applicant be required to update and implement its existing Spontaneous Combustion Management Plan to cover the new areas of the project. The Commission considers this to be an appropriate response for managing potential spontaneous combustion.

6.10 Employment and Economics

The preliminary SEAR acknowledges an economic assessment and cost-benefit analysis (CBA) was undertaken as part of the EIS for the project. The assessment considers a range of matters, including environmental and social impacts, the principles of ecologically sustainable development and the cost of rehabilitating the site.

The preliminary SEAR identifies that the project would result in significant social and economic benefits for the region as well as the State as a whole. The CBA calculates that the project would have a net benefit of approximately \$735 million (net present value), including \$190 million in royalties to the NSW Government and \$173 million in company taxes to the Commonwealth Government.

In addition, the preliminary SEAR notes that peak operational employment numbers would increase from the current 550 employees to 625 in 2024 as a result of the project. This would steadily decrease over the ensuing nine years and cease at 149 employees in 2033-34. There would be an increase of around 100 people during the first 18 months of construction and development. The project is also expected to result in indirect employment opportunities with the assessment estimating this could be up to 2,900 jobs across the region and NSW.

A number of submissions raised concerns over the Applicant's ability to fulfil their financial obligations under any consent, particularly with regard to rehabilitation. Although the consent authority is not required to consider the financial viability of an applicant in determining a development application, under the EP&A Act, there are processes in place to ensure financial obligations, including rehabilitation of the site, can be met. As a requirement of the *Mining Act 1992*, the Division of Resources and Energy (DRE) hold security deposits for the rehabilitation of every mine in NSW. The Applicant has lodged a security deposit for the Wilpinjong mine which addresses all operations covered by its current Mining Operations Plan (MOP). The bond for rehabilitation is assessed and determined by DRE on the lodgement of a MOP which is amended over the life of the mine. The MOP details the amount of rehabilitation completed and the outcomes of existing rehabilitation against the objectives of the project. Based on this, the bond amount is recalculated and can be increased or decreased based on the mines performance.

The Commission notes that while the project would result in a net economic benefit, the increase in employment numbers would not be for the life of the mine, with numbers tapering back to approximately 550 employees once the peak operational period is complete. Notwithstanding, the Commission considers that the overall net benefit would outweigh the impact of reduced employment numbers once the project extension is operational.

7. OTHER ITEMS

7.1 Strategic Vision of Mining

The Wilpinjong mining operation is located in the northern section of the Western Coalfields, and when combined with the nearby Ulan and Moolarben mining operations they form a large coal mining complex. There are significant coal resources which are known to extend from this area heading to the south east towards Bylong which is another coal project currently under assessment at the Department.

Based on experiences occurring elsewhere in other NSW coalfields, particularly the Central and Hunter coalfields the Commission considers it important to make reference to the need for a long term strategic plan for the western coalfields. The development of a high level strategic vision for the NSW coalfields, and in particular for the western coalfields would be of considerable benefit in the assessment of individual projects and would give mining companies, government agencies, investors and the community confidence in the long term strategic direction of mining within the State.

7.2 Recommended Conditions

The Commission has considered it not appropriate to review or provide comments on the proposed conditions of consent during this review. This is due to the nature of the recommendations which may prompt a significant review or amendments of the proposed conditions, and the review of such conditions is considered to be most appropriate during the determination stage of the application once all concerns have been addressed and relevant information provided.

8. COMMISSION'S RESPONSE TO COMMUNITY ISSUES

The Commission received a total of 312 written submissions from the community before and after the public hearing.

The main concerns raised in submissions relate to noise, air quality, heritage, biodiversity, water modelling, post mining land use, climate change and social impacts. The lack of certainty over the Applicant's financial position was raised as a concern, as well as property acquisition rights.

9. COMMISSION'S RECOMMENDATIONS AND FINDINGS

9.1 Commission's Consolidated Recommendations

Biodiversity and Offsets

- should insufficient evidence be provided by the Applicant to satisfy the Department of Environment and Energy as to the identification and classification of derived native grassland, than for the purposes of establishing an appropriate offset liability, the area in question shall be deemed as satisfying the requirement for derived native grassland;
- incorporate as a minimum the Department's recommendations listed on page 50 of the preliminary SEAR within any proposed consent requirements to minimise impacts on the Nature Reserve;
- incorporate as a minimum the Department's recommendations listed on page 51 of the preliminary SEAR within any proposed consent requirements to minimise impacts on the abandoned adit to protect potential roosting sites of the Bentwing Bat. In addition to this, the Applicant and Department should give consideration to the impacts of mine lighting on bat movements to and from the adit;
- given the critical status of the Regent Honeyeater, the Department and the Applicant shall provide additional evidence to confirm that any shortfall in species credits are available for purchase by the Applicant. The Commission would not be supportive of any reduction in Regent Honeyeater credit liabilities;
- the Department should provide sufficient evidence to demonstrate that the proposed Regent Honeyeater breeding program is operational, or if not already operational, provide evidence that appropriate agreements are in place with relevant stakeholders, and that the program would become operational in less than five years;

- the Commission would encourage the development and adoption of a progressive offset strategy that focuses initial efforts on those land holdings that can offer the quickest biodiversity returns for endangered ecological communities and threatened flora and fauna species, for example ECA – B; and
- the Commission would encourage the Department, OEH and the Applicant to give consideration to develop a long term strategy to provide for the maximum potential habitat outcome for the Regent Honeyeater within the site and land offset areas.

Rehabilitation and Final Landform

- whilst the Commission acknowledges that the existing mining project has approval for two final voids, the Applicant and the Department should further explore opportunities to limit the extent of the pits, in particular to keep the depth shallow enough as to not form saline sinks, unless it is operationally and biophysically required. The Commission is of the view that the proposal to create an additional long term void for Pit 8 is not justified based on the information available, including stated cost, and further consideration should be given to preventing this permanent void.

Water Quality

- the final assessment report should present the modelling and prediction information as being independent of the existing mining operations, however cumulative impacts of the whole of project are still to be presented. This will permit a clear delineation of the proposed project impacts;
- where an agency raises concerns regarding existing mining impacts, such as salinity increases within Wilpinjong Creek, the Department should in its final assessment report give significant time to clearly describe the concerns, how the agency believes the concern should be best managed, and how the Department in reaching its final conclusion has addressed those concerns, and where possible specific management outcomes should be referenced by way of conditions of consent;
- the Department is to give consideration to requiring, through the implementation of conditions of consent, the establishment of baseline surface water and groundwater data to enable the development of a reference point to establish the impacts of mining on water resources within the locality;
- the Department should ensure that the water balance assumptions are updated prior to finalising the preliminary SEAR to ensure it is reflective of the outcomes of requiring sediment dams to be designed to cater for the 95 percentile 5 day rainfall event;
- the Department is to clarify how “mine water” as reference on page 60 of the preliminary SEAR is captured and managed so as to not pose a risk to the environment;
- the Department is to confirm that the cumulative impact assessment of groundwater includes what has occurred / been approved by the existing mining operations at Wilpinjong, or alternatively it clearly delineates the two projects and provides information on the experienced drawdown against what was predicted for the existing operation;
- the Department is to ensure that an appropriate regulatory regime is developed through either a statement of commitments or conditions of consent with regard to the Applicant’s “in-principle make good provisions” with regard to groundwater impacts on the Wollar Public School;
- the Department is to provide further clarification as to the full extent of drawdown on the alluvial aquifers within and around the project site to enable a full assessment of the predicted impacts;

- where the Department elects to make statements regarding the significance of an impact it should provide a numerical description as to the extent of that impact;
- in determining the impact of mining on groundwater quality, the Department should provide evidence to support the statement that groundwater and surface water quality is relatively poor and that this is not the result of ongoing mining operations within the locality; and
- where a specialist expert report makes recommendations as to the ongoing management of an impact, the Department shall ensure that these are appropriately adopted through conditions of consent or other appropriate means.

Indigenous and Non-Indigenous Heritage

- develop clear performance management objectives to be applied to any development consent which specify the acceptable level of impact on sites of significance;
- that the Department, OEH and the Applicant take all reasonable steps to consult, and where possible reach an agreement with the local Aboriginal community as to the level of acceptable impacts on items of significance;
- the Department should ensure that a strong regulatory management regime is in place which puts an emphasis on impact avoidance for significant sites, and where avoidance is not possible the suitable recording and salvage of artefacts;
- the Department, in consultation with the OEH should engage in discussions with mine operators within the western coalfields regarding participating in a voluntary capacity to the contribution to a regional investigation into Indigenous and non-Indigenous archeology within the region.

Noise and Blasting

- the Department should exhaust all reasonable means to reach a position of agreement with the Applicant that the voluntary acquisition of private residences within Wollar be extended to include the residence known as 102 within the preliminary SEAR. In the absence of this, consideration should be given to setting a noise level of 35 dB(A), rather than 37 dB(A) as recommended by the Department given the reference in the INP (see 6.5.1 above) that 2 dB(A) above the statutory limit is deemed to be in compliance ;
- the Applicant should take all reasonable measures to ensure that private residences along the Ulan Road are aware that mitigation measures are available where road noise exceedances occur and information on how this is conducted should be reflected through a statement of commitments or other means as considered appropriate by the Department;
- the Department should engage in further consultation with EPA to resolve any residual noise assessment issues;
- the Department should give consideration to the creation of specific performance targets for blasting and vibration impacts on sensitive sites which would then be reflected by conditions of consent, and incorporated in an appropriate Blasting Management Plan for the site; and
- the Department and Applicant should provide a response which addresses the “Additional Acoustic Peer Review” prepared by Day Design Pty Ltd on behalf of the Wollar Progress Association.

Social Impacts and Wollar Village

- the Applicant and Department should give further consideration in establishing what the social impact on the locality, and particularly Wollar Village will be post mining closure;

- the Applicant, in consultation with the Department should prepare a long term strategy for the management of mine owned assets within Wollar Village. The strategy should include details on maintenance or replacement of assets where possible, or the timely removal and remediation of assets should maintenance or replacement not be a viable option on public safety grounds. The Applicant would be encouraged to take all possible and reasonable measures to preserve the village fabric; and
- The Applicant should develop a workplace strategy that actively encourages employees at the mine to become engaged within the local community, particularly through organisations such as the RFS who rely heavily on volunteers.

9.2 Commission’s Findings

The Commission, in response to the Ministers Terms of Reference have carefully considered the proposal and the submissions made, including the issues raised in written submissions to the Commission, presentations at the public hearing, the submissions made on the Environmental Impact Statement, the Response to Submissions, and various other documents provided by the Applicant and agencies as included within the preliminary Secretary’s Environmental Assessment Report. The Commission also sought further clarification surrounding biodiversity and heritage issues.

The Commission has given due consideration to all relevant NSW Government Policy, and has given significant attention to the potential impact of the project on Wollar village.

The Commission notes that the SEAR for this project does not represent a full assessment or final position on the issues of consideration, and that there are a number of recommendations made to the Department to seek further information, and undertake additional consultation with relevant agencies prior to determination.

In summary, the Commission considers that the recommendations of this report must be satisfactorily addressed before the project can be further considered.



Joe Woodward PSM (Chair)
Member of the Commission



David Johnson
Member of the Commission



Alan Coutts
Member of the Commission

**APPENDIX 1
RECORDS OF COMMISSION MEETINGS**

This meeting is part of the determination process		
Meeting note taken by Alana Jelfs	Date: Tuesday, 22 November 2016	Time: 11:00am
Project: Wilpinjong Extension Project – R039/16		
Meeting place: Planning Assessment Commission Offices		
Attendees: Commission Members: Joe Woodward PSM (Chair), David Johnson, Alan Coutts Commission Secretariat: David Koppers and Alana Jelfs Department of Planning and Environment: Mike Young (Director, Resource Assessments), Matt Riley (Planning Officer)		
The purpose of the meeting: Department of Planning and Environment (the Department) briefing to outline the Wilpinjong Extension Project (the Project) and discuss potential issues associated with the project		
<ul style="list-style-type: none"> The Chair provided an overview of the Planning Assessment Commission (the Commission) process and explained that the Commission had been requested by the Minister for Planning to carry out a review of the Wilpinjong Extension Project, handing over to Department to brief the Commission. 		
<u>Background</u> <ul style="list-style-type: none"> The Department provided an overview of the existing mine and surrounding area. The mine is surrounded by National Park and comprises thick vegetation. Wilpinjong is operated by Peabody Energy (PE). The mine has always been earmarked for supply of thermal coal. Approximately 70% of coal produced goes toward power generation of Hunter Valley, and represents around 20% of base load power generation for NSW. Coal is extracted from 7 contiguous pits, operated all together. The current approval runs out in 2027 as does PE’s contract with AGL Macquarie (AGL). AGL pays \$32.90 per tonne, well below forecast prices for thermal coal on the export market (currently \$60 to \$80 per tonne). 		
<u>Strategic context</u> <ul style="list-style-type: none"> The Department discussed the strategic context of the project and the future of domestic coal in the Western Coalfields, noting the unallocated coal reserves adjacent to existing operations and that have the potential to be developed in the future. The future of coal on a strategic level was discussed in the context of where coal will come from over the next 20 years, recognising land use constraints. The Department observes some appetite in the area to expand some projects, mostly for export. There are however constraints, including water reserves and biodiversity. PE prefers open cut mining over underground, although the site has some underground potential through the south-eastern area. The Department identified the impact on Wollar Village and noted that PE has acquired a number of properties in the village, which has had an impact on population numbers and exacerbated its decline. The surrounding area comprises minimal freehold agricultural properties. Around 2008, the mine experienced issues with the EPA regarding noise. PE were found to be on the cusp of compliance but were never taken to court. PE have a proactive acquisition strategy to ensure a buffer is provided around biodiversity offset areas. There is a current open offer by PE to purchase properties in the village. The Department raised concern over the condition of the village if PE does not maintain the acquired properties. PE preparing the Wollar Village Management Strategy ahead of the public meeting in recognition that the village needs to be maintained. Services in the village include community hall, shop/basic general store (PE funded) and pub on Wollar Road. There are postal services located outside the village. Some residents are not interested in discussing the project or their acquisition right. PE has offered acquisition to all affected landowners, however there has not been much interest. 		

- Since lodging the application at the beginning of the year, some properties have been acquired and PE are leasing properties back to some residents.
- There are 5 private landowners in the village proper. Mine renters on top of that equates to approximately 20-30 residents in Wollar Village. Closest residents are 2km away from the nearest pit. Potential amenity impacts are identified for the village and 1-2 residents in closest proximity to the mine.

Proposed project

- SSD project essentially seeking to tidy edges around lease boundary.
- Currently 2 key ridgelines. The Project would reduce to just one providing protection to the village. Residents closest to the mine will likely experience an increase in noise impacts compared to the village due to topography.
- Proposal includes washing coal on site and obtaining most water from incidental water on the site. Using the rail loop, the coal would be loaded onto trains and transported to Muswellbrook.
- The mine employs approximately 580 people. Original application underestimated simultaneous nature of pits. Numbers are higher than originally anticipated requiring 70 + additional employees. Generally reside in Mudgee.
- The Department and Office of Environment and Heritage (OEH) have discussed provision of 50m (11ha of native vegetation) setbacks for buffers. Site verification shows a reasonable amount of coal resource in these areas and PE raised concern over impacts to continuity of mining.
- Access to the site is via Ulan Road. Three operating mines in the area contribute to the maintenance and upgrading of the road through the Ulan Road Strategy. The mine is currently negotiating maintenance provision with Council. Part of the road is unsealed. The proposal includes resealing a section of road and provision of a level crossing.
- Concern have been raised over mine traffic and use of Wollar Road, which is also used by the quarry in the area.
- The transmission line that runs through pit 8 would be relocated. Transgrid on board and consider impacts to be manageable.

Process to date

- Project did not require a Gateway Certificate (no BSAL), therefore site verification was provided.
- Accredited assessment under the bilateral agreement. The final determination will be delivered by the PAC
- Some outstanding issues between State and Commonwealth legislation, Applicant applied State. Commonwealth raised concern regarding grassland in some areas was not considered adequately under State legislation. The offset calculator run for Commonwealth, NSW process drives a bigger offset obligation under the bilateral agreement.
- As part of the agreement, the Department refers to the Independent Expert Scientific Committee (IESC). Wilpinjong responded arguing what they have done is better. Any outstanding matters are to be addressed by conditions, particularly around water management and updating existing management plans etc.
- PE will be required to surrender their previous consent after 6 months, at which time the whole mine will operate under one consent to avoid confusion. Applicant required to notify the Department when it commences operation under the new consent.

Key issues

- The Department commissioned independent experts to review some assessments.
- The Department held a public meeting. The main issues raised included justification for project, acquisition issues, changing social fabric of the village, noise, lack of faith in the EIS process, inadequate prediction of impacts, cumulative water impacts, groundwater resources, Indigenous cultural heritage, biodiversity, presence of voids and adequacy of rehabilitation bonds.
- The Department engaged Elton Consulting to meet separately with residents, with a noise consultant, to offer information on potential impacts. This was not widely taken up by the community.
- The Department received 750 submission, 653 objections, many further afield, one-third in support.
- The project complies with regard to dust, however there are historical issues on the site due to presence of the ridgelines. Noise is within limits. There is a risk to project due to odour and spontaneous combustion, issues associated with the old emplacement area. In the longer term, odour will be managed through a management plan.
- With regard to noise, receivers are within village. PE considered measures to reduce noise i.e. switching off equipment, costing PE significantly in monetary terms. The approach is to acquire properties to provide safeguards.
- PE are currently in negotiations with landowners to acquire the remaining properties in the village. The Department considers PE are doing everything reasonable and feasible to address acquisition issues and noise.

- Social impact assessment peer reviewed by Elton. Methodology considered reasonable, however not much consideration given to post mining impacts on Wollar Village, once rehabilitation has been completed.
- The Commission queried whether this should be covered in a social impact assessment to consider the longer-term.
- The Commission noted a lack of Government policy on the issue of post-mining impacts.
- With regard to biodiversity, Wilpinjong is one mine that supported offsets. PE proposed 5 land based offsets. OEH showed interest as areas have good biodiversity value. Department considers PE's proposal for offsets weak.
- The site contains a bat cave, considered as potential roosting/maternity cave.
- Endangered Regent Honeyeater habitat is recorded, however no species recorded on site. NSW to set up program with Dubbo Zoo with OEH support. If successful other mining companies may contribute.
- With regard to rehabilitation, hybrid option was pushed in 2006, including restoring areas for grazing land with biodiversity corridors through the valley. Offset package including rehabilitation, provides an incentive to ensure highest and best use of land. The Department and OEH considers this to be conservation purchases.
- The Department noted it is not clear whether PE are compliant with the existing conditions relating to rehabilitation. The site contains 3 relatively modest sized voids and there is opportunity to make them smaller.
- With regard to Indigenous heritage, there is no Aboriginal land Council representative in the area. Other mines in the area have active in kind initiatives operating in the community.
- The Commission queried significance of the Indigenous rock art, which is considered 'high local' according to reports. There are rock shelters on the site, some contain art and potential for middens.
- The Department confirmed the issue had been interrogated closely and asked OEH to do a survey of the offsets on the site and identify other mitigation/management options.
- There is a historic shale, with concrete slabs, but no infrastructure evident. The Heritage Council provided advice and the Department included in conditions.

Outcomes/Agreed Actions: N/A

Meeting closed at 12pm

This meeting is part of the review process		
Meeting note taken by David Koppers	Date: 28 November 2016	Time: 14:00
Project: Wilpinjong Extension Project – Project Review		
Meeting place: Wilpinjong Mine – Administration Centre		
Attendees:		
Commission Members: Joe Woodward PSM (Chair), David Johnson, Alan Coutts		
Commission Secretariat: David Koppers and Alana Jelfs		
Peabody Energy: Michael Alexander - Director Projects & Portfolio Management, Blair Jackson – General Manager Wilpinjong, Ian Flood – Approvals Manager Wilpinjong, Peter Grosvenor - Mine Manager, Mal Edwards – Director Open Cut Studies		
Resource Strategies: Josh Hunt + Sterling Bartlam		
The purpose of the meeting:		
<p>Meeting notes:</p> <ul style="list-style-type: none"> • The Chair provided an overview of the Planning Assessment Commission (the Commission) process and explained that the Commission had been requested by the Minister for Planning to carry out a review of the Wilpinjong Extension Project (the project), handing over to Peabody (PE) to brief the Commission. • PE provided an introduction to the project and the itinerary for the day. • PE confirmed that Chapter 11 applies to USA operations only and Chapter 11 proceedings will not have impact on Australian operations. • Sold metropolitan – PE only NSW operations are Wambo and Wilpinjong. • PE explained if the project is not approved, operations will need to be scaled back as there is only enough current reserve to supply the AGL contract. • 550 FTE – 380 PE employees – 625 when operations at peak for 18 months and back to around 550. 100 FTE for construction. • Minor improvement in coal quality in area of proposed extension, as lower proportion of ash as progresses east. • PE has a good relationship with adjoining mines, engaged in data sharing, blast schedules, environmental monitoring and traffic management. Ulan Road Strategy plus \$1.2M contribution from PE which is smaller than other mines – based on % of workforce - quarterly environment meetings. • Community engagement via CCC – informal monthly meetings with Mudgee, Gulgong and Wollar residents. There is low interest in meetings in Mudgee and Gulgong. PE may consider focusing solely on Wollar. • 80% of the mine workforce reside in Mudgee. • Wollar Progress Association – stopped funding due to anti mining stance – still funds into community / Council to fund and build infrastructure. • RFS – encourages local staff to join – maybe 6 – 8 members who have joined. • Real time monitoring 24hr a day – weather station onsite to allow active management. Ability to see if mine ops causing issues or if it is background impacts. • 3-4 metre loss in topography. Rehabilitation occurs behind active mine pits, occurring in all pits simultaneously. • Shift from mix woodland and grazing to full woodland on request of DPE. • 11 types of vegetation communities for RHE – but OEH have been pushed down to 3 which are the highest nectar producing only which is restrictive a soil type might not match the vegetation type. PE would prefer all 11 and so that they can then specify a vegetation type that best suits each soil type etc. Raised with OEH and they don't budge. • 50% of PE properties in Wollar are occupied – the other 50% are not habitable. About 50 dwellings owned total in immediate area. • Generally have a good relationship with landowners in Wollar and continue to negotiate with residents as applicable. Many are not interested to be bought out. • Churches approached PE to buy their sites. 2 churches plus 1 cemetery – public access maintained and grounds maintained by PE. • Will do minor works to upgrade house to make habitable. But many house were not habitable when purchased and too far gone to refurbish. • Will demolish houses as required based on risk – i.e. asbestos / structural / not habitable. 		

- High voltage to go through an existing approved ECA – negotiating with OEH for offsets – locked up for perpetuity by 2015 – PE has done this. Now going to loose about 5 ha of ECA – A.
- No indication that it cannot be done – just have to be offset.
- Owner of 102 – visits infrequently – 5 weekends a year. Sons also do the same. Doesn't want to buy – noise agreement almost entered into – didn't sign as he said noise isn't currently an issue but will continue to discuss as needed.
- Most of the sensitive receivers are old and cannot be physically upgraded.
- 101 is unoccupied – hut but cannot make contact with them – no locals know.
- 160 – 10-12 km and multiple ridges to edge of pit 8.
- 5 landholding leases for agricultural activities of mine land – bought of the original landholders and then leased back to the same people – with some variations to the holdings but minimal. Shows land isn't just bought and locked up and left alone – still viable ag activities occurring.
- Wollar Public School 6-8 students.
- Rocky Hill Indigenous heritage is not unique to the region – number of mitigation measures – collection – recording – surveys of offset areas – no OEH issues.
- 5 separate land holdings for offsets – joined into National Park and assisted with management package / finances to assist National Parks with the additional land management
- 1007 ha offsets – 354 disturbance area – 2905 ha rehab + 600k RHE contributions
- Wollar Village Plan – demolitions and maintenance – community services / postal / ablutions / RFS – transport and infrastructure / Ulan Wollar Road – Amenity / signage / lighting / access to cemetery
- Local store subsidised by mine – locals don't support for local shop. Basics only. Requires operator to be open 6 days per week
- Indigenous consultation – December meeting first time that all the registered groups get together and discuss as one body rather than individually as previously occurred.
- Very little surface water flows – requires significant long term flows and very rare

At the completion of the briefing the Commission was taken on a site visit of the current operations, areas of proposed extension (including sensitive sites within and adjacent to Pit 8) and Wollar Village.

Outcomes/Agreed Actions: Peabody to supply PAC copy of PPT

Meeting closed: 1830

This meeting is part of the review process		
Meeting note taken by Alana Jelfs	Date: 6 December 2016	Time: 14:00
Project: Wilpinjong Extension Project – Project Review		
Meeting place: Planning Assessment Commission (the Commission) offices		
Attendees:		
Commission Members: Joe Woodward PSM (Chair), David Johnson, Alan Coutts		
Commission Secretariat: David Koppers and Alana Jelfs		
Office of Environment and Heritage (OEH): Steve Cox, David Geering		
Department of Environment and Heritage (the Department): Matt Riley		
The purpose of the meeting: Meeting to discuss biodiversity issues associated with the project		
Meeting notes:		
<ul style="list-style-type: none"> • The Chair opened the meeting and explained the purpose being for the Commissioners to ask questions of the OEH to aide their understanding of biodiversity issues. • OEH confirmed the issue between Commonwealth and State over grassland is currently being resolved. The Department to attend a site visit with a Commonwealth representative. OEH not involved, as is considered an administrative process issue. The Department consider the process issue will be resolved while review is being carried out. • Wilpinjong Coal (the Applicant) have expressed a view to limiting offsets to three species to ensure soil type is appropriate for species selected. OEH consider locally resident communities to be the preference. This is a way of managing the risk associated with rehabilitating a mine site. • OEH consider the soil type is not an issue, with only a couple of communities that are not appropriate on mined rehabilitated land due to the soil. • The communities set out are not utilised by the regent honeyeater and there is concern rehabilitation will not be successful in these areas. • North-west regional team have confirmed there are regent honeyeaters in the Wollar area. There is a world population of between 300-400 region honeyeaters. • The Commission queried what the tree survival rates are like? Bulga mine provides a good example of trees with a deeper soil profile. OEH noted there are no 50 year old mine rehabilitation sites to provide evidence of success or not. OEH confirmed they are not observing 15-20 year rehabilitated sites that have died, expect where there is evidence of incompatible species. • OEH confirmed there are reasonably good examples of trees and woodlands species for use in rehabilitation sites. • The Applicant are short of biodiversity offset credits. Not targeted as Plant Community Types (PCT)– not sure what the tree species is and whether its sufficient for regent honeyeaters. OEH are keen to create a link between the two national parks. If the Applicant supports and is happy to modify and create and stronger link, OEH supports this. • The Department confirmed this would form part of the mines overall offset package. If the Applicant does not provide the link, they will not achieve the credits they require. They are currently not achieving 100% of credits • The Applicant had a large credit shortfall when they first presented proposal to the Department. The Department have come up with a way for the Applicant to gain more credits and if successful the credits would not be lost. They could be used in future for other projects or mine. • If the offset areas are modified and made suitable for regent honeyeaters, they'll achieve 25%. • Query was raised regarding the meaning of 'perpetuity' in relation to biobanking agreements. Requires finding a replacement offset, essentially doubling the offset. Offset is provided then perpetuity sets in. • Ideally forever, but there are some circumstances where an area can be used, i.e. some biobanking sites, that be subject to a Voluntary Conservation Agreement (VCA). • VCA satisfies the perpetuity issue, however the Commission would like confirmation that the VCA allows an Applicant to go back in and use the land. • OEH provided advice from the conservation branch (in form of handout), which summarises the issue. • When conservation areas were first muted, there was no mining in conservation areas. It is now possible, as long as conservation values are not disturbed. 		

- OEH provided advice on the matter to the Department in its submission on the project.
- OEH confirmed it is satisfied with Aboriginal heritage and the proposed management measures. Prior to commencement of the project there are Indigenous cultural heritage issues and potential archaeology to be addressed. Essentially OEH require heritage to be recorded prior to any land disturbance.
- OEH Archaeologist has not raised issues with Wilpinjong and are satisfied with the assessment and management plan being undertaken.
- The Commission raised a broader question with regard to other mining developments and the suggestion of considering the cumulative impacts on Indigenous heritage and undertaking targeted surveys to consider other sites. Successful in the past and carried out for other projects (Ulan and Moolarben)
- OEH recommended targeted surveys of key features, in areas considered likely to have some heritage value.
- The Commission queried whether OEH has plans to extend the conservation area, in this area. OEH confirmed the area manager is aware of some areas that could be added to the nature reserve, which may across with future extensions to Wilpinjong. The Applicant owns a lot of land in this area.

Outcomes/Agreed Actions: N/A

Meeting closed: 15:00

**APPENDIX 2
PUBLIC HEARING SPEAKER REGISTRATION**

**Planning Assessment Commission
Wilpinjong Extension Project (SSD 6764)**

Date & Time: 10:00am, Tuesday 29th November 2016

Place: Mudgee Town Hall Theatre 64 Market Street, Mudgee NSW 2850

Hearing Schedule	
10 am	Opening Statement from the Chair – Joe Woodward PSM
Registered Speakers:	1. Marie Hensley – Cancelled
	2. Robert Gillham (Mudgee Leagues Club)
	3. Paul Grimes
	4. Michael J Fetch
	5. Margaret Reid
	6. Beverley Atkinson – Cancelled
	7. James Thomson
	8. Darrell Hair
	9. Todd Gegges (One Key Resources)
	10. Peter Vonanno
	11. Daniel Kent
	12. Shane Cusack - Cancelled
	13. (Mudgee District Environment Group) - Cancelled
	14. Aaron Goadsby
END	

**APPENDIX 3
SUMMARY OF ISSUES PRESENTED AT THE PUBLIC MEETING**

This meeting is part of the review process		
Meeting note taken by David Koppers	Date: 29 November 2016	Time: 10:08
Project: Wilpinjong Extension Project – Project Review		
Meeting place: Mudgee Town Hall - Mudgee		
Attendees: Planning Assessment Commission – Joe Woodward PSM (Chair), David Johnson, Alan Coutts Secretariat – David Koppers, Philippa Vale		
The purpose of the meeting: Public meeting to hear the views of the community on the project		
<p>Meeting Notes:</p> <ul style="list-style-type: none"> • Opening statement by Chair. • Comments made during the public meeting and in written submissions provided at the public meeting are synthesised and summarised below. <p><u>Social</u></p> <ul style="list-style-type: none"> • Raised in area, long standing local family since 1855, having seen a history of change in the Wollar area. • Mine has decimated the village. The community is worth saving. • Rural Fire Service (RFS) members in Wollar, and a members of the Wollar Progress Association. Membership with the RFS is a great skill to possess in a rural area. • Consider the main purpose of the Wollar Progress Association is to stop the mine. • Wants to stay in area, having lived in Wollar with wife and children for 3.5 years. • Prospects for Wollar are positive if the mine extension does not proceed and the village is upgraded. • Assumes no one would come to village if mine stopped which is unacceptable. • Residents have endured impacts way beyond what was going to happen under the proposed extension. • Wollar has been in decline for some time, not just since mine has been operating. • Mine has helped with carrying capacity and pasture performance. • Complaints are exaggerated regarding noise and dust. • Never encountered impacts, only as a result rail noise, which services 3 mines. Lives in Wollar as a lifestyle choice. • Mudgee and other regional areas would decline with absence of mining. • PE makes donations to local charities and organisations to keep them going. • Mines provide a population mass to lobby Government to improve level of services in regional areas. • PE has invested \$36,000 into training within Mudgee. • The mine supports local community events. • Mine has been loyal to local suppliers and not external contractors, showing serious commitment to staff and local businesses. • Project will provide for further growth and opportunities for the region. • Have not experienced problems with noise, dust, odour etc. and lives in Wollar in closest proximity to the mine site. • Occupational first aider level for emergency response providing a benefit to remote local communities. • As financial member of the Wollar Progress Association, I was never notified of the meetings, having only attended 2. • Locals claim mine workers are not part of the community, however it takes both parties to allow new members to become part of a community. • Children have gone through school in the area and are now enrolled local apprenticeships in the auto and building trade. <p><u>Acquisition</u></p> <ul style="list-style-type: none"> • Considered there to be no option but to sell property to Peabody (PE). Open door arrangement with senior staff of the mine. • Lease property back off PE. • Attempted to remain in Wollar. Rental properties continue to be purchased by the mine. 		

- PE leases a number of houses locally for new starters.

Assessment process

- Has no faith in this “box ticking exercise”
- The Minister did not respond to the community’s request to cancel hearing. The PAC process removes appeal rights.
- A 5 minute time limit to speak is unfair.
- Over 600 submissions against the extension – only a few positive submissions from mine employees
- No one in process cares what happens to small communities.

Economy and employment

- Mine only has short term economic benefits.
- Mines are not just mining workers, but families of the workers filter throughout the area in various roles.
- There are a number of service providers and suppliers to the mine providing various goods and services.
- Mining industry provides sponsorship and infrastructure support to various sporting groups in the area.
- Labour hire management specialist to mines, with 2000 employees nationally. Single supplier to PE in 2014. Currently hires 51 and recruiting a further 20 employees.
- Employees contribute significantly to the local economy and includes a mix of local and external employees.
- If not approved there will be a negative impact on local employment and economy.
- PE are aware of the tourism vibe of town and the local sentiment of not wanting to turn it into a high vis mining town.
- PE undertook changes to reduce hours and number of corporate cars during the down turn to prevent job losses.
- Any extension keeps employees in ongoing work.
- Not just mine jobs lost if the extension is not improved, but also losses in support industries.
- Many kilometres travelled daily by ‘pit patrol’, provides economic benefits throughout many communities.
- Mine provides economic benefits to wider community through the provision of goods and services.
- Road infrastructure improvements a great benefit to the community.

Compliance

- The mine comprises a 24 hour manned control room. PE takes compliance seriously.

Outcomes/Agreed Actions: No questions from the floor

Meeting closed: 11:10