Wilpinjong Coal Mine

Modification 3 - Pit 8 Extension

Response to Submissions Report

Peabody

EXECUTIVE SUMMARY

The Wilpinjong Coal Mine is an approved and existing open cut coal mining operation located approximately 40 kilometres north-east of Mudgee within the Mid-Western Regional Local Government Area, in central New South Wales (NSW). The Wilpinjong Coal Mine is owned and operated by Wilpinjong Coal Pty Ltd (WCPL), a wholly owned subsidiary of Peabody Energy Australia Pty Ltd.

The Wilpinjong Coal Mine operates under Development Consent (SSD-6764), which provides for the continued operation of the Wilpinjong Coal Mine at rates of up to 16 million tonnes per annum of run-of-mine coal, until 2033, and provides access to approximately 800 hectares of open cut extensions.

In September 2025, WCPL submitted a Modification Report (WCPL 2025a) to support a request to modify Development Consent (SSD-6764) under section 4.55(2) of the NSW *Environmental Planning and Assessment Act 1979* to seek approval for the extension of the existing Pit 8 (Pit 8 Extension) within Exploration Licence 9399 and development of associated supporting infrastructure and facilities.

The Modification Report was placed on public exhibition by the Department of Planning, Housing, and Infrastructure (DPHI) from 2 October 2025 to 30 October 2025. A total of 930 submissions on the Modification Report were received by DPHI, comprising 11 submissions (1 percent [%]) from government agencies and local council, 89 submissions (10%) from non-government organisations and 830 submissions (89%) from members of the public.

Of these submissions:

- 610 submissions (66%) were in support of the Modification, of which 549 were from members of the public and 61 were from organisations;
- 302 submissions (32%) objected to the Modification, of which 275 were from members of the public and 27 were from organisations; and
- 18 submissions (2%) were comments, of which 10 were from government agencies, one from the local council, one was from an organisation and six were from members of the public.

Almost half of all public and organisation submissions (48%) came from within the Mid-Western Regional LGA, primarily from Mudgee (22%) and other local suburbs (26%), while a further 41% were submitted from elsewhere in NSW. The majority of supporting public and organisation submissions received were from Mudgee (32%) and other Mid-Western Regional LGA suburbs (30%). The majority of objecting submissions were received from submitters located in broader NSW (outside of the Mid-Western Regional LGA) (70%).

Key matters raised in objecting submissions included justification of the Modification, biodiversity, water resources, greenhouse gas emissions and global warming, social impacts, Aboriginal heritage and amenity impacts.

Key matters raised in supporting submissions included maintaining job security for the existing Wilpinjong Coal Mine workforce and contractors/suppliers, contribution to the regional economy, training, apprenticeships, career development and financial support of community organisations, and contribution to royalties, taxes (and export revenues).

On 6 November 2025, DPHI requested that WCPL prepare and submit a Submissions Report for the Modification (this report). Accordingly, this Submissions Report provides WCPL's responses to issues raised in regulatory, organisation and public objecting submissions on the Modification. WCPL has not responded to supporting submissions but greatly appreciates the time and effort of all community members who made a submission.

Since lodgement of the Modification Report, WCPL has reviewed the submissions on the Modification and has continued to consult with members of the community, NSW Government agencies, and has sought additional advice from technical specialists. Based on this further consideration and analysis, WCPL has concluded that the key potential impacts and benefits of the Modification and the justification for the Modification remain consistent with the conclusions presented in Section 7 of the Modification Report.

No amendments to the Modification have been required to address the submissions received.

In response to issues raised and the advice from its technical specialists, WCPL has committed to securing the Box Gum Woodland CEEC revegetation area under a Biodiversity Stewardship Site Agreement, undertaking post-mining monitoring for evidence of breeding by two bat species in mapped rocky bat habitat adjacent to the Pit 8 Extension, and expanding the existing surface water and groundwater monitoring network with additional sites in the vicinity of the Pit 8 Extension.

In weighing up the main environmental impacts (costs and benefits) associated with the proposal as assessed and described within the Modification Report and this Submissions Report, the Modification remains, on balance, in the public interest of the State of NSW.

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1 INTRODUCTION

1.1 BACKGROUND

Wilpinjong Coal Pty Ltd (WCPL), a wholly owned subsidiary of Peabody Energy Australia Pty Ltd (Peabody), is the owner and operator of the Wilpinjong Coal Mine, an approved and existing open cut coal mining operation located approximately 40 kilometres (km) north-east of Mudgee within the Mid-Western Regional Local Government Area (LGA), in central New South Wales (NSW) (Figure 1).

The Wilpinjong Coal Mine produces thermal coal products which are transported by rail to domestic customers for use in electricity generation and/or to port for export. Open cut mining operations are undertaken 24 hours per day, seven days per week.

The approved Wilpinjong Coal Mine includes some eight named open cuts (i.e. Pits 1-8), plus significant ancillary and supporting infrastructure (Figure 2). This infrastructure includes run-of-mine (ROM) coal storage, coal handling and processing, rail spur, rail loading, internal roads, pipelines, electricity distribution, workshops and water management structures.

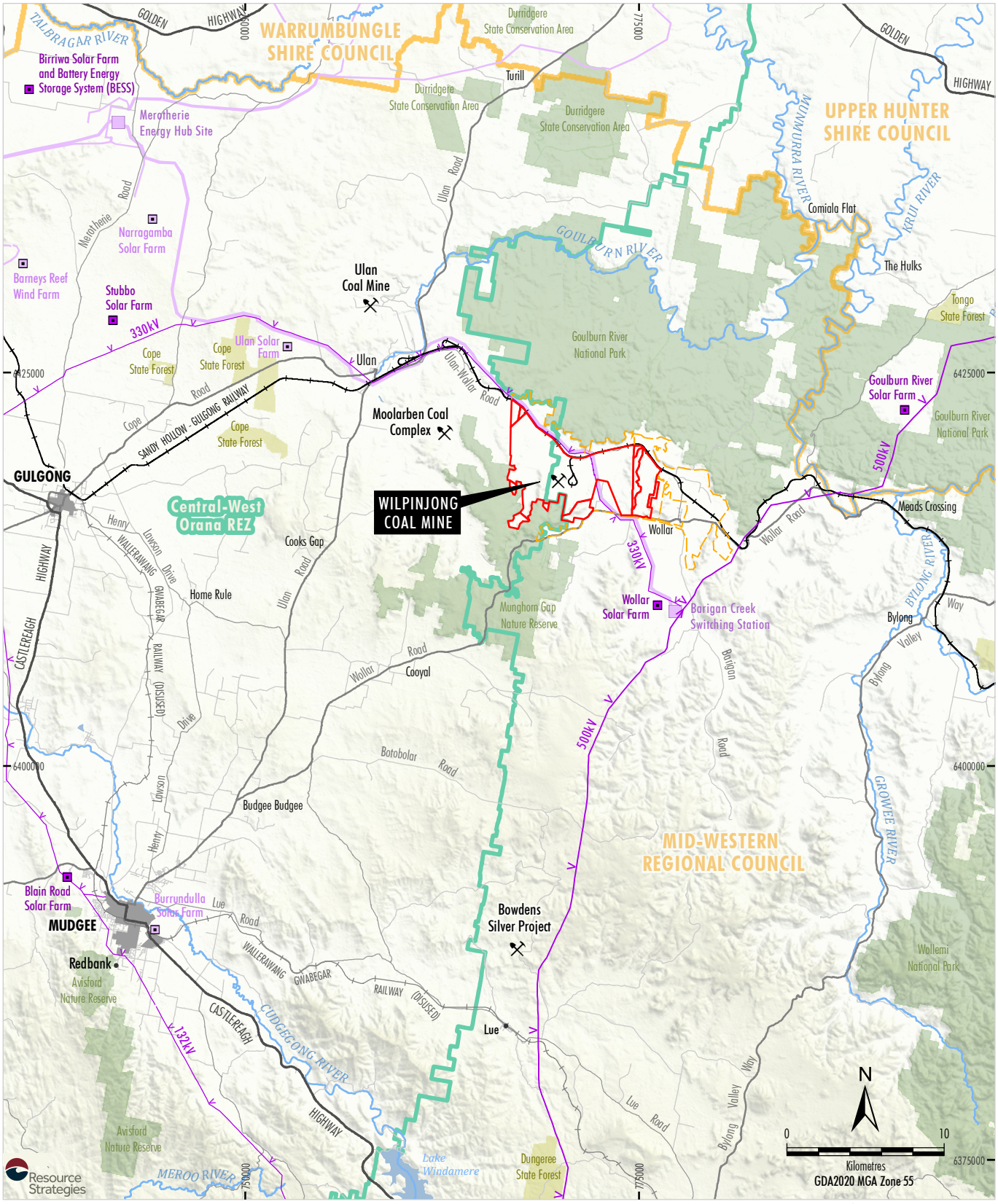
The Wilpinjong Coal Mine originally operated under Project Approval (PA 05-0021) that was granted by the Minister for Planning under Part 3A of the EP&A Act on 1 February 2006. On 24 April 2017, WCPL was granted Development Consent (SSD-6764) for the Wilpinjong Extension Project. This Consent provides for the continued operation of the Wilpinjong Coal Mine at rates of up to 16 million tonnes per annum (Mtpa) of ROM coal, until 2033, and provides access to approximately 800 hectares (ha) of open cut extensions. Development Consent (SSD-6764) has superseded the Project Approval (PA 05-0021), which was surrendered by WCPL on 8 April 2020.

1.2 MODIFICATION REPORT

In September 2025, WCPL submitted a Modification Report (WCPL, 2025a) to support a request to modify Development Consent (SSD-6764) under section 4.55(2) of the NSW *Environmental Planning and Assessment Act 1979* (EP&A Act) to seek approval for the extension of the existing Pit 8 (Pit 8 Extension) within Exploration Licence (EL) 9399 and development of associated supporting infrastructure and facilities (Figure 3).

The Modification Report was placed on public exhibition by the Department of Planning, Housing, and Infrastructure (DPHI) from 2 October 2025 to 30 October 2025. During and following the public exhibition period, submissions on the Modification Report were received from NSW Government agencies and members of the public.

WCPL has prepared this Submissions Report to directly address matters raised in the government, organisation and public submissions on the Modification Report.



Source: NSW Spatial Services (2025); EnergyCo (2025)

LEGEND

- National Park, Nature Reserve or State Conservation Area
- State Forest
- Local Government Area
- Central-West Orana Renewable Energy Zone (REZ)
- Central-West Orana REZ Transmission Project Preferred Corridor
- Central-West Orana REZ Transmission Project Energy Hub
- Proposed Energy Generation Site
- Existing/Approved Energy Generation Site
- High Voltage Electricity Transmission Line
- Mining Lease Boundary
- Exploration Licence Boundary
- Mining Operation

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WILPINJONG COAL MINE

Project Location

Figure 1

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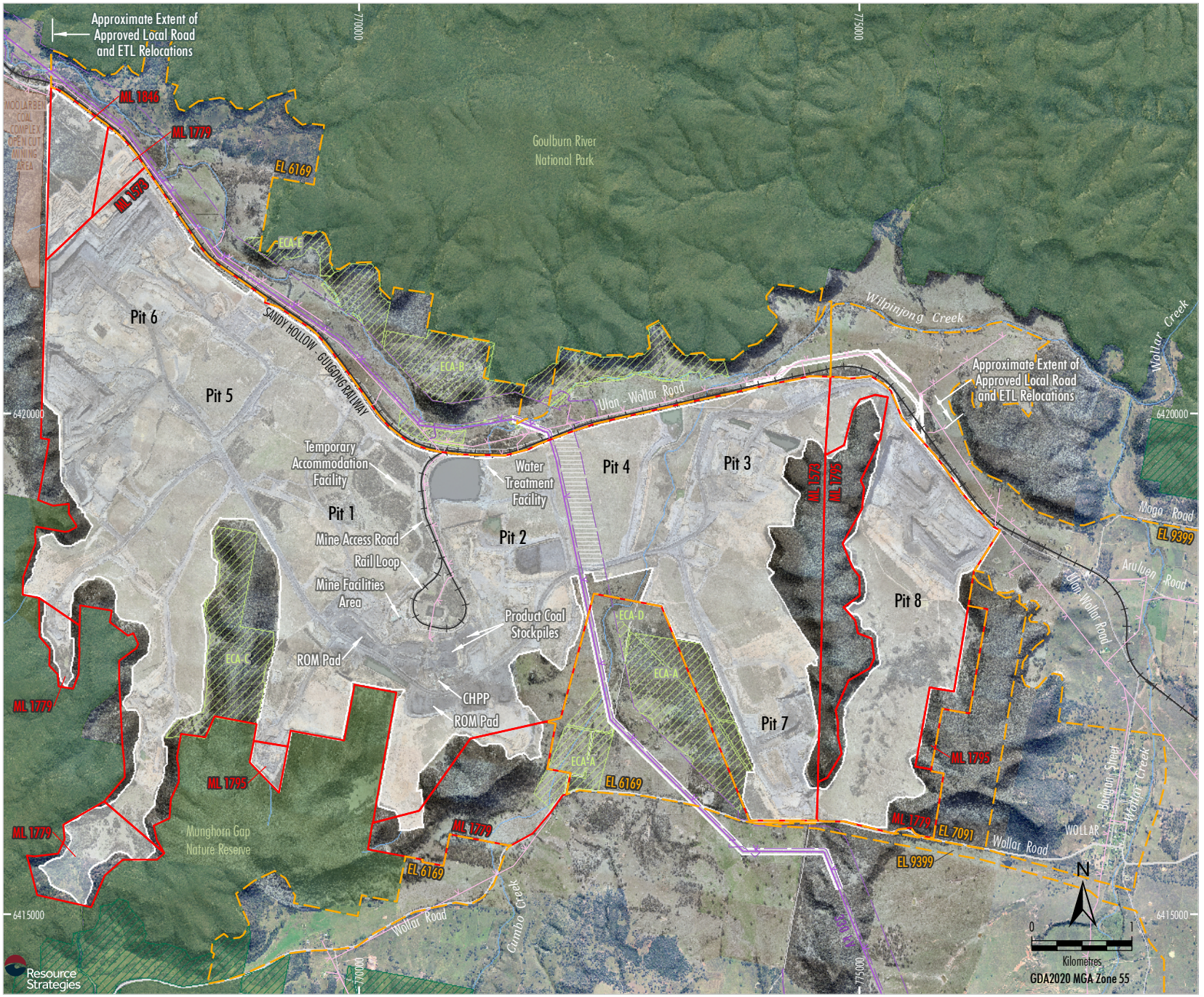

LEGEND

- Existing Local Electricity Transmission Line
- Existing TransGrid Electricity Transmission Line
- EnergyCo Transmission Project (SSI-48323210)
- National Park or Nature Reserve
- Existing Biodiversity Offset Transferred to the National Parks and Wildlife Service (NPWS) Estate
- Enhancement and Conservation Area
- Exploration Licence Boundary (EL)
- Mining Lease Boundary (ML)
- Approved/Existing Surface Development Area
- EnergyCo Construction Easement (CWOREZ)

Source: WCPL (2025); EnergyCo (2024); NSW Spatial Services (2025)
Orthophoto Mosaic: WCPL (July 2024 - Nov 2022)

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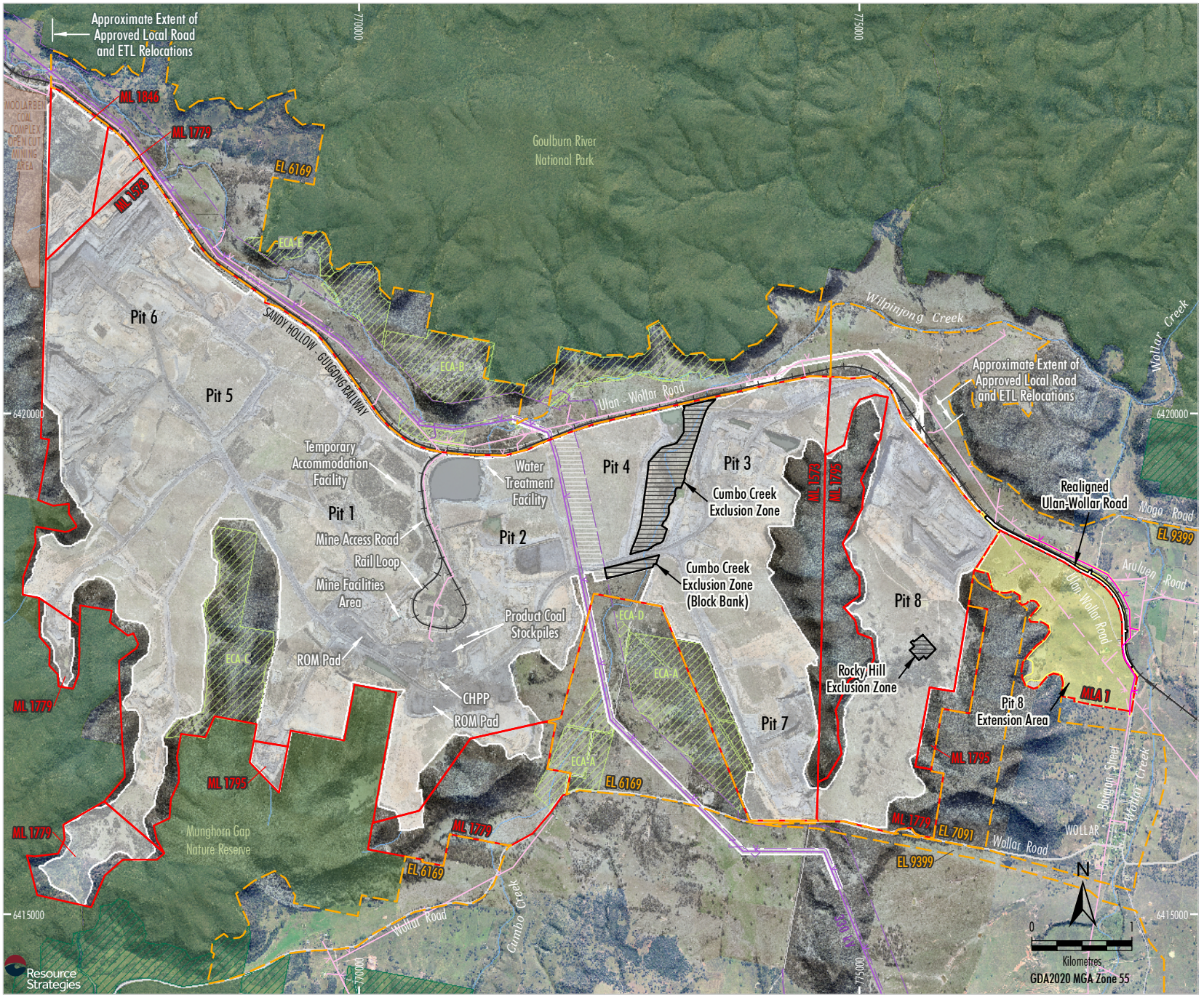
WILPINJONG COAL MINE

Approved General Arrangement

Figure 2

WIL-22-17 MOD3_RTS_206A



LEGEND

- Existing Local Electricity Transmission Line
- Existing Local Electricity Transmission Line to be Removed
- Existing TransGrid Electricity Transmission Line
- EnergyCo Transmission Project (SSI-48323210)
- National Park or Nature Reserve
- Existing Biodiversity Offset Transferred to the National Parks and Wildlife Service (NPWS) Estate
- Enhancement and Conservation Area
- Exploration Licence Boundary (EL)
- Mining Lease Boundary (ML)
- Proposed Mining Lease Application Boundary (MLA)
- Approved/Existing Surface Development Area
- EnergyCo Construction Easement (CWOREZ)
- Mine Exclusion Area
- Modification Indicative Development Footprint
- Indicative Public Road Realignment
- Indicative Local Electricity Transmission Line Realignment

Source: WCPL (2025); EnergyCo (2024); NSW Spatial Services (2025)
Orthophoto Mosaic: WCPL (July 2024 - Nov 2022)

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WILPINJONG COAL MINE

General Arrangement
Incorporating the Modification

Figure 3

WIL-22-17 MOD3_RTS_207A

1.3 OVERVIEW OF THE MODIFICATION

The Modification would comprise the following components (Figure 4):

- open cut mining within the Pit 8 Extension area;
- extraction of approximately 14 million tonnes (Mt) of ROM coal from the Pit 8 Extension area;
- development of ancillary infrastructure to support open cut mining activities;
- realignment of some public infrastructure to facilitate the Pit 8 Extension (e.g. sections of public roads, local low voltage powerlines and telecommunication services);
- in-pit crushing of waste rock for use as construction and/or stemming material;
- an additional six months of mining operations to backfill final voids and shape the final landform; and
- development of additional water management infrastructure (e.g. dams, drains, pumps and pipelines).

Mining operations at the Wilpinjong Coal Mine under Development Consent (SSD-6764) are currently approved until 31 December 2033. In this context, the Modification would provide access to additional ROM coal resources to augment coal production and require an additional six months of mining operations to backfill the final voids and shape the final landform (i.e. until 30 June 2034).

The Modification would maximise the use of existing infrastructure and help slow the natural decline in workforce numbers that would otherwise occur as the approved Wilpinjong Coal Mine progressively completes its current working faces (e.g. in Pit 6), by providing an additional working face for the life of the Modification.

Approval of the Modification would therefore support the continuation of ROM coal extraction and employment levels while WCPL evaluates opportunities to develop a future Wilpinjong Coal Mine State Significant Development (SSD) extension proposal (e.g. in EL 9399).

The Modification would also include the proposed avoidance of mining coal in the existing Cumbo Creek corridor and the Rocky Hill complex which are currently approved to be mined in Pit 4 and Pit 8, respectively, under Development Consent (SSD-6764). This avoidance would sterilise more than 7 Mt of approved ROM coal and reduce the approved Wilpinjong Coal Mine surface development footprint by approximately 50 ha. Any existing infrastructure within the Cumbo Creek exclusion area (e.g. soil stockpiles) would be removed and the area rehabilitated. No further disturbance would occur in the exclusion areas.

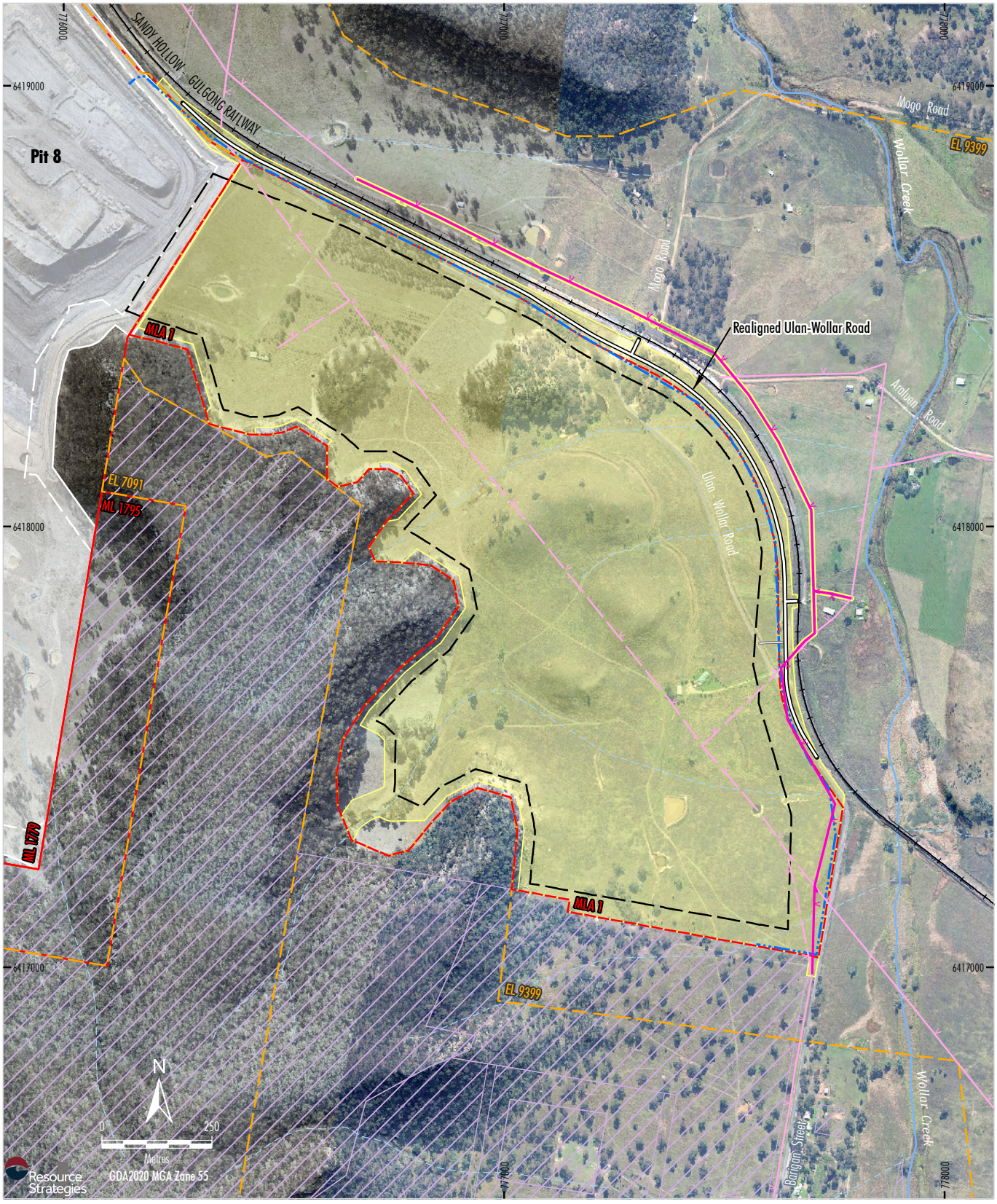
There would be no changes to the following approved components of the Wilpinjong Coal Mine for the Modification:

- mining method;
- timeframe for ROM coal production;
- maximum annual ROM coal and waste rock production;
- coal washing and handling systems;
- product coal transport systems;
- water supply and disposal; and
- hours of operation.

The amendments to Development Consent (SSD-6764) are sought under section 4.55(2) of the EP&A Act on the basis that the Wilpinjong Coal Mine's incorporation of the proposed modification would be "substantially the same" as the currently approved Wilpinjong Coal Mine.

Table 1 provides a comparative summary of the existing/approved and modified Wilpinjong Coal Mine. The approved and modified Wilpinjong Coal Mine arrangements are shown in Figures 2 and 3.

A description of the Modification is provided in Section 3 of the Modification Report (WCPL, 2025a).



Source: WCPL (2025); NSW Spatial Services (2025); Phronis (2025)
Orthophoto Mosaic: WCPL (July 2024 - Oct 2022)

LEGEND

- Existing Railway
- Existing Local Electricity Transmission Line
- Existing Local Electricity Transmission Line to be Removed
- Crown Land
- Exploration Licence Boundary (EL)
- Mining Lease Boundary (ML)
- Proposed Mining Lease Application Boundary (MLA)
- Approved/Existing Surface Development Area
- Approved/Existing Open Cut and Contained Infrastructure Area

Proposed Modification

- Modification Indicative Development Footprint
- Conceptual Pit Boundary
- Indicative Public Road Realignment (approx 2370 m)
- Indicative Local Electricity Transmission Line Realignment
- Indicative Communications Realignment

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WILPINJONG COAL MINE

Modified General Arrangement - Pit 8 Extension Area

Figure 4

Table 1
Overview of the Approved Wilpinjong Coal Mine and the Proposed Modification

Component	Approved Wilpinjong Coal Mine under Development Consent (SSD-6764)	Proposed Modification
Mining Method and Open Cut Extent	• Open cut mining operation with an indicative mine program for the extraction of approximately 349 Mt of total ROM coal over the life of the Wilpinjong Coal Mine[1]. • Eight open cut pits and associated contained infrastructure area comprising approximately 3,000 ha.	• Relinquishment of approved extraction of more than 7 Mt of ROM coal (Cumbo Creek corridor and Rocky Hill complex). • Extraction of approximately 14 Mt of additional ROM coal from the Pit 8 Extension area. • Extension of Pit 8 by approximately 115 ha, and a reduction in disturbance of approximately 50 ha associated with the Cumbo Creek corridor and Rocky Hill complex.
Maximum Annual ROM Coal Production	• Up to 16 Mtpa of ROM coal.	• No change.
Mine Life	• 28 years with mining authorised until 31 December 2033.	• No change to timeframe for ROM coal production (ceases in 31 December 2033). • Additional six months of mining operations to backfill voids and shape final landform.
Waste Rock Management	• Waste rock is placed predominantly within mine voids and select waste rock used for construction of mine components.	• No change, however, in-pit crushing of select waste rock for beneficial use is also proposed.
Annual Waste Rock Production	• Annual waste rock production of up to approximately 43 million bank cubic metres (Mbcm).	• No change.
Coal Washing and Handling	• Beneficiation of ROM coal in the Coal Handling and Preparation Plant (CHPP). • Facilities for the handling and stockpiling of both washed and unwashed (bypass coal).	• No change.
Maximum Annual Product Coal Production	• Up to approximately 13 Mtpa of thermal product coal for domestic electricity generation and export.	• No change.
Coal Transport	• An average of six and a maximum of 10 laden trains per day leaving the mine. • Transport via the Sandy Hollow-Gulgong Railway.	• No change.
Coal Rejects Management	• Coal rejects placed predominantly within mine voids. • Tailings filter press to allow co-disposal of tailings with coarse rejects.	• Continuation and extension of existing methodology.
Water Supply	• Make-up water demand to be met from runoff recovered from mine operational areas, recovery from tailings, open cut dewatering, advanced dewatering of pit areas and supply from borefield. • Water recovery from tailings via tailings filter press.	• No change to key sources of water supply.
Water Disposal	• Mine water treated in a reverse osmosis plant/water treatment facility and discharged to Wilpinjong Creek in accordance with Environment Protection Licence (EPL) 12425.	• No change to key aspects of water disposal.

Table 1 (Continued)
Overview of the Approved Wilpinjong Coal Mine and the Proposed Modification

Component	Approved Wilpinjong Coal Mine under Development Consent (SSD-6764)	Proposed Modification
Hours of Operation	• Open cut mining, handling and processing of ROM coal at the CHPP and train loading at the Wilpinjong Coal Mine is undertaken 24 hours per day, seven days per week.	• No change.
General Infrastructure	• Access roads, electricity supply and distribution, rail loop, CHPP, train loading infrastructure, ROM coal stockpiles, coal handling equipment, flood bunds, diesel storage, administration, workshop, ablution buildings, stores, heavy vehicle workshop, parking and washdown facilities.	• Continued use of existing approved infrastructure and progressive modifications to support the operations as required.
Infrastructure Relocations	• Realignment of a 330 kV Electricity Transmission Line, Ulan-Wollar Road and associated rail level crossing and local powerlines and services.	• Realignment of sections of public roads, local powerlines and services.
Operational Workforce	• Approximately 625 at peak[2].	• No new workforce. The Modification would counteract natural workforce decline rates.
Construction Workforce	• Approximately 100 people at peak.	• No change.

[1] Comprised of 254 Mt from the *Wilpinjong Coal Project EIS* and 95 Mt from the *Wilpinjong Extension Project EIS*.

[2] The current (Q1 2026) operational workforce of the Wilpinjong Coal Mine is approximately 705 people.

1.4 STRUCTURE OF THIS DOCUMENT

This Submissions Report has been prepared in consideration of the S*tate significant development guidelines – preparing a submissions report* (DPHI, 2024a). The remainder of this document is structured as follows:

Section 2 Provides an analysis of the submissions received during the public exhibition period.

Section 3 Summarises the actions taken since the commencement of the public exhibition period.

Section 4 Provides responses to the issues raised in the submissions.

Section 5 Provides an updated evaluation of the Modification.

Section 6 Lists the documents referenced in the Submissions Report.

Attachments 1 to 7 contain supporting information, including a register of the submissions received and specialist reports:

Attachment 1 Register of Submitters.

Attachment 2 Updated Summary of Mitigation Measures.

Attachment 3 Updated Biodiversity Development Assessment Report (BDAR).

Attachment 4 Updated Serious and Irreversible Impacts (SAII) Reports.

Attachment 5 Navin Officer Heritage Consultants (Navin Officer) Technical Response to Heritage NSW Advice on the Modification ACHA.

Attachment 6 SLR Consulting Australia Pty Ltd (SLR) Updated Assessment of Effects to Terrestrial Groundwater Dependent Ecosystems (GDEs).

Attachment 7 Square Peg Social Performance Pty Ltd (Square Peg) Response to Wollar Progress Association Social Impact Assessment (SIA) Submission.

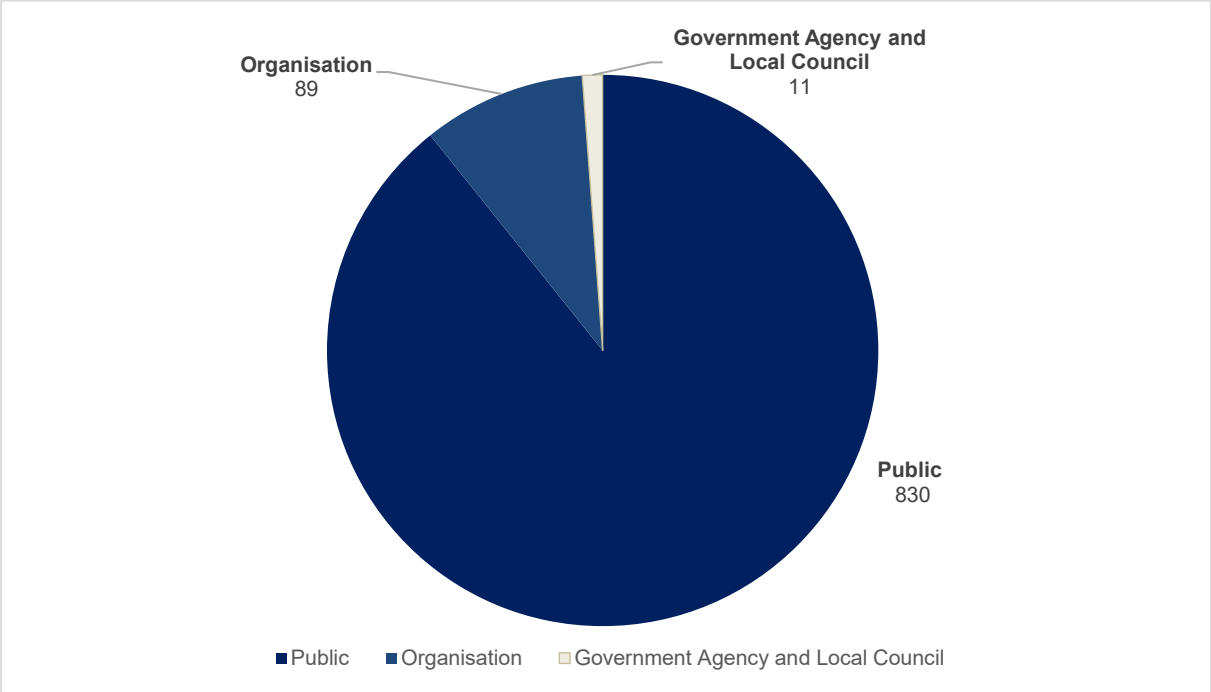
2 ANALYSIS OF SUBMISSIONS

2.1 NUMBER OF SUBMISSIONS

A total of 930 submissions on the Modification Report were received from NSW Government agencies and the local council, organisations and members of the public. The following provides a breakdown of the submissions by submitter category (Chart 1):

- 830 submissions (89 percent [%]) from members of the public;
- 89 submissions (10%) from non-government organisations; and
- 11 submissions (1%) from government agencies and the local council.

Chart 1
Summary of All Submissions



A register of submitters is provided in Attachment 1.

Of these submissions:

- 610 submissions (66%) were in support of the Modification, of which 549 were from members of the public and 61 were from organisations;
- 302 submissions (32%) objected to the Modification, of which 275 were from members of the public and 27 were from organisations; and
- 18 submissions (2%) were comments, of which 10 were from government agencies, one from the local council, one was from an organisation and six were from members of the public.

2.2 GOVERNMENT AGENCY SUBMISSIONS

A total of 10 submissions were received from government agencies and the local council, including:

- NSW Department of Climate Change, Energy, the Environment and Water (DCCEEW) – Conservation Programs, Heritage and Regulation Group (CPHR) (now NSW DCCEEW – Conservation, Planning and Offsets Division [CPO]) and National Parks and Wildlife Services (NPWS);
- NSW Environment Protection Authority (EPA);
- the Department of Planning, Housing and Infrastructure – Crown Lands (DPHI – Crown Lands);
- NSW Department of Primary Industries and Regional Development (DPIRD);
- Heritage NSW;
- NSW Department of Climate Change, Energy, the Environment and Water – Water (DCCEEW – Water);
- NSW Resources and NSW Resources Regulator;
- NSW Rural Fire Service (RFS);
- Transport for NSW (TfNSW); and
- Mid-Western Regional Council (MWRC).

Of these 10 submissions, five had limited or no comments on the Modification that would require a detailed response by WCPL, including:

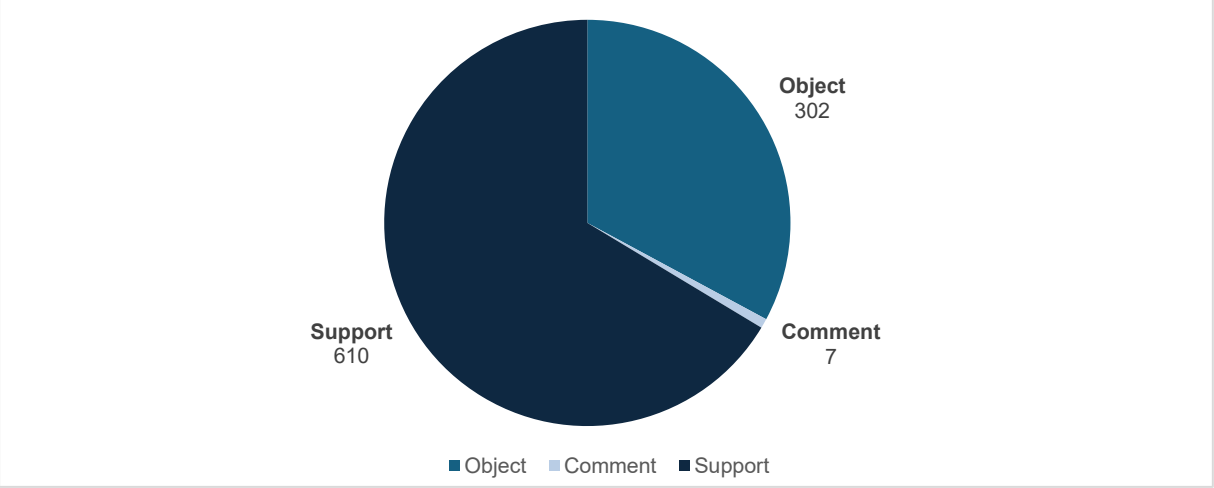
- DPHI – Crown Lands;
- NSW RFS;
- TfNSW;
- NSW DPIRD; and
- NSW Resources and NSW Resources Regulator.

In addition to the above, the Independent Expert Scientific Committee on Unconventional Gas Development and Large Coal Mining Development (IESC) provided advice on the Modification in accordance with the Commonwealth–NSW assessment bilateral agreement made under Part 5 of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act), which accredits the NSW assessment process for the purposes of the Commonwealth's consideration of impacts on water resources. This process is separate from the consideration of public submissions and agency comments undertaken under the NSW EP&A Act. Accordingly, responses to the IESC advice will be provided separately to the DPHI. Unless otherwise agreed by DPHI, those responses will be published on the NSW Major Projects Planning website.

2.3 PUBLIC AND ORGANISATION SUBMISSIONS

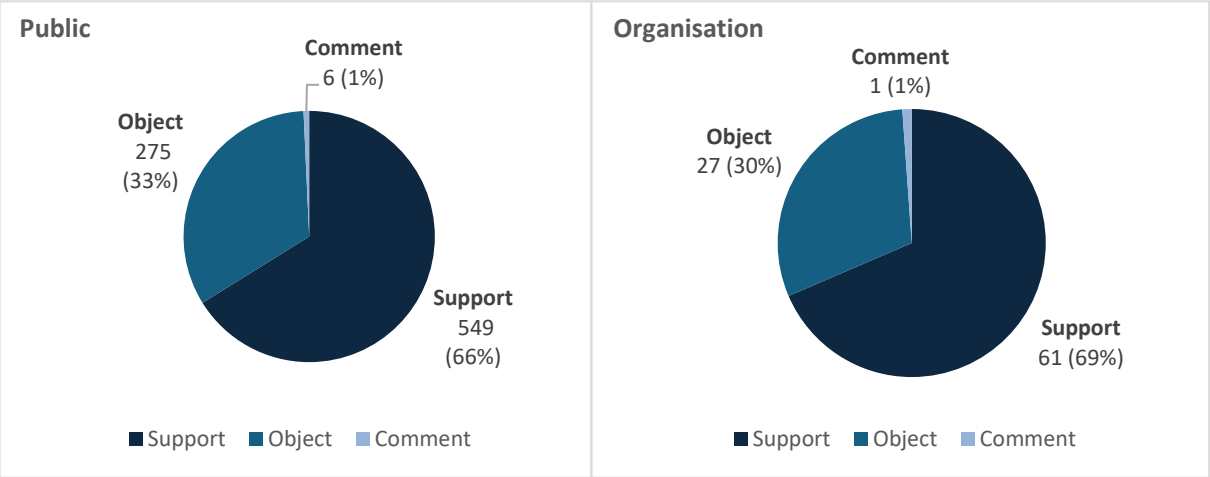
A total of 919 public and organisation submissions were received, of which 610 submissions were in support of the Modification, 302 submissions objected to the Modification and seven submissions commented on the Modification (Chart 2).

Chart 2
Summary of Public and Organisation Submissions by View



A total of 830 submissions were received from members of the public, of which 549 supported the Modification, 275 objected to the Modification and six commented on the Modification (Chart 3). A total of 89 submissions were received from organisations, of which 61 supported the Modification, 27 objected to the Modification and one organisation commented on the Modification (Chart 3).

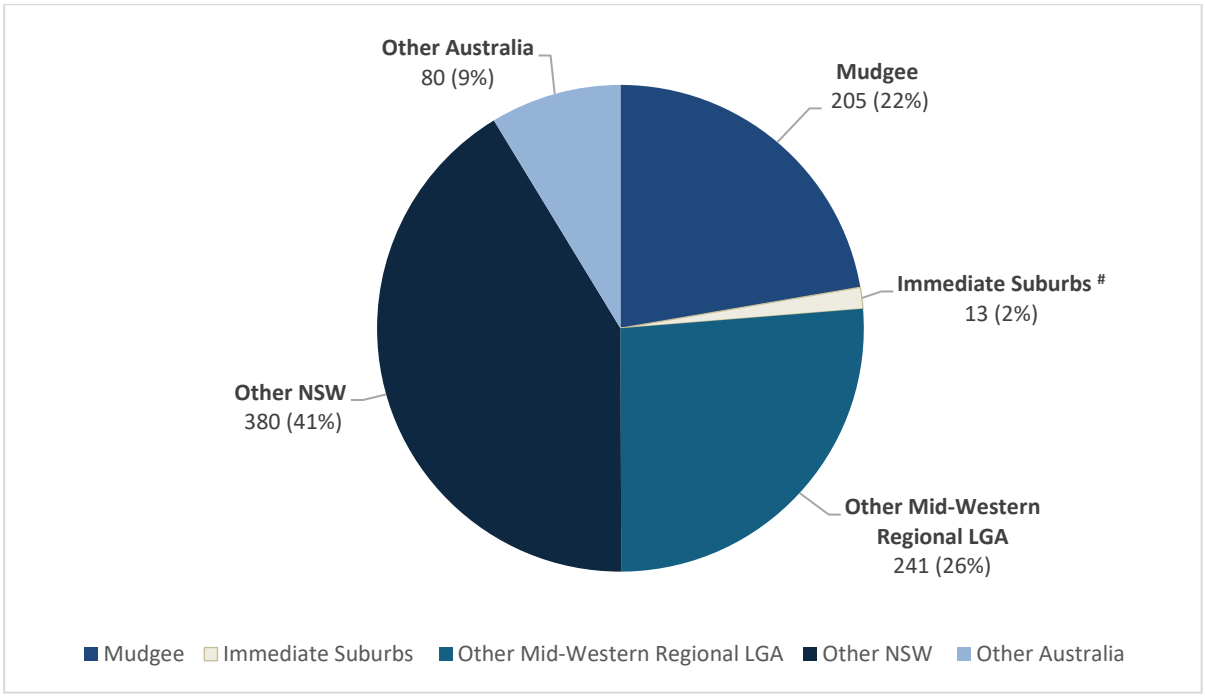
Chart 3
Summary of Public and Organisation Submissions by View



Submissions were received from a range of locations, including Mudgee, suburbs immediately surrounding the Modification, other suburbs within the Mid-Western Regional LGA, other areas in NSW, and interstate locations (Chart 4).

As illustrated in Chart 4, almost half of all public and organisation submissions (48%) came from within the Mid-Western Regional LGA, primarily from Mudgee (22%) and other local suburbs (26%), while a further 41% were submitted from elsewhere in NSW.

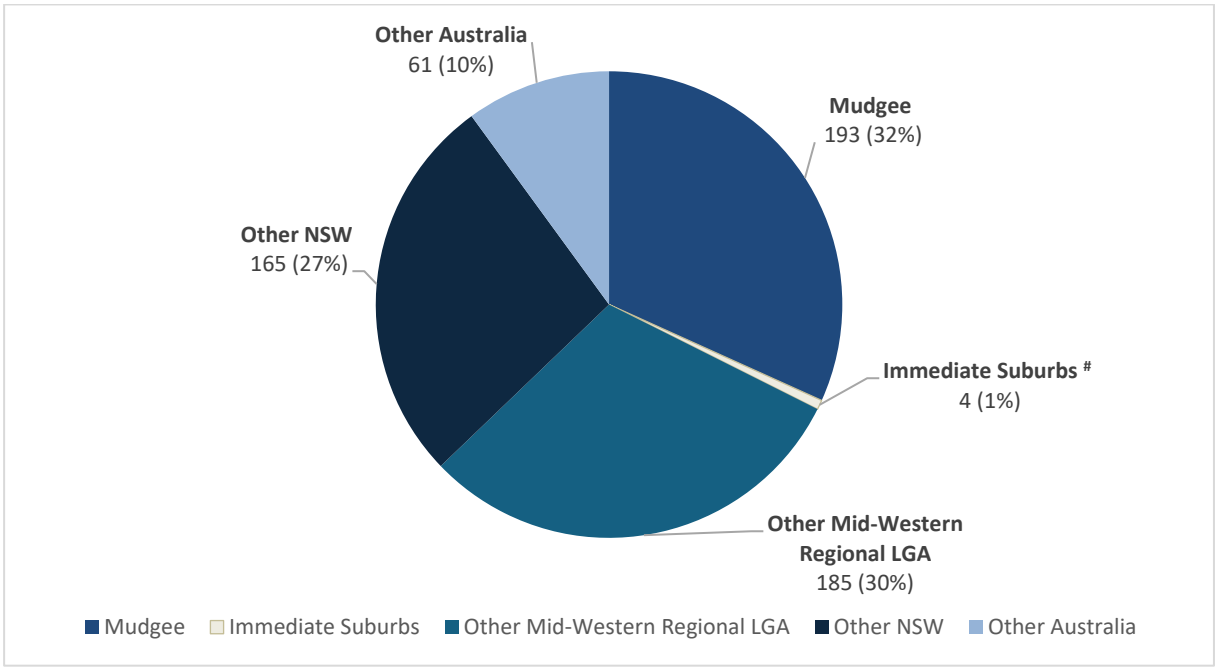
Chart 4
Summary of Total Public and Organisation Submissions by Location



Suburbs immediately surrounding the Modification comprise Wollar, Wilpinjong and Cumbo.

The majority of supporting public and organisation submissions received were from Mudgee (32%) and other Mid-Western Regional LGA suburbs (30%) (Chart 5).

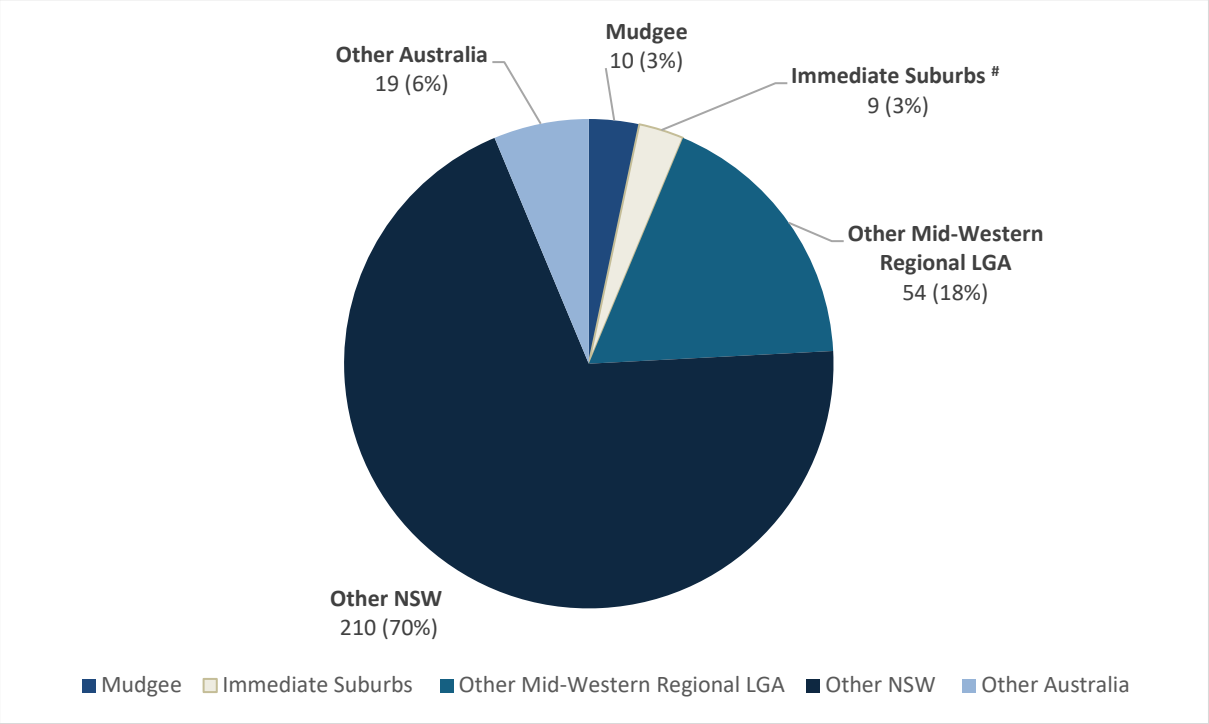
Chart 5
Summary of Public and Organisation Supporting Submissions by Location



Suburbs immediately surrounding the Modification comprise Wollar, Wilpinjong and Cumbo.

Conversely, the majority of objecting submissions were received from submitters located in broader NSW (70%) (Chart 6).

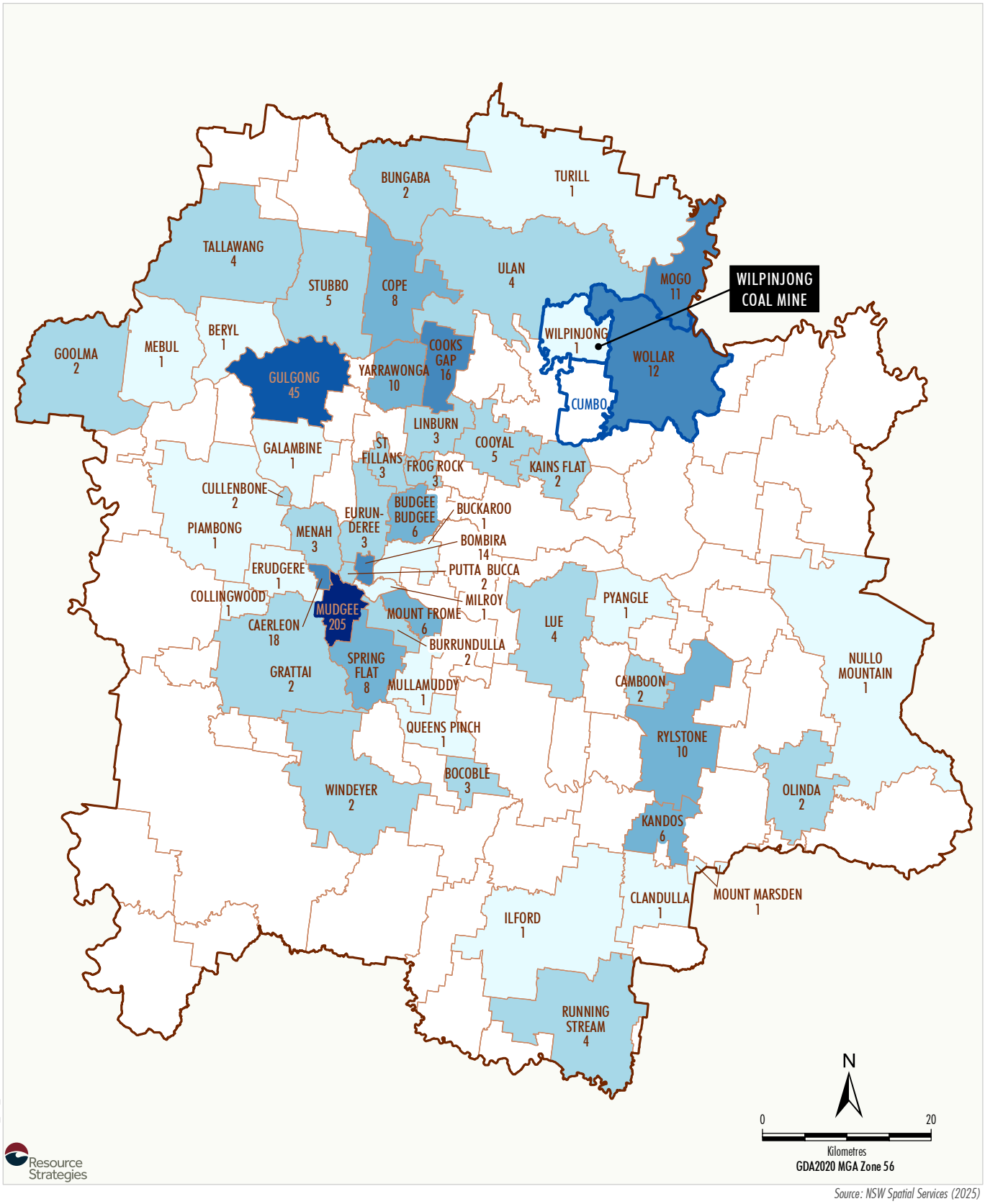
Chart 6
Summary of Public and Organisation Objecting Submissions by Location



Suburbs immediately surrounding the Modification comprise Wollar, Wilpinjong and Cumbo.

Figure 5 provides the number of public and organisation submissions received by individual suburb within the Mid-Western Regional LGA. Mudgee received the highest number of submissions in the Mid-Western Regional LGA (205). Other suburbs with greater than 10 submissions included Gulgong (45), Cooks Gap (16), Wollar (12) and Mogo (11).

Figure 6 shows the distribution of supporting versus objecting public and organisation submissions by location within the Mid-Western Regional LGA. Key immediate suburbs primarily lodged objecting submissions, such as Wollar and Mogo. Higher proportions of supporting submissions were primarily received from Mudgee and suburbs to the west and south-west of the Wilpinjong Coal Mine. The suburbs which received a higher proportion of objecting submissions are located in the vicinity of other regional mining operations, including Moolarben Coal Complex, Ulan Coal Mine, and the proposed Bowdens Silver Project to the south-east of the LGA.



Source: NSW Spatial Services (2025)

LEGEND

- Mid-Western Regional Council LGA
- Suburb Boundary
- Key Immediate Suburb
- WILPINJONG — Suburb Name
- 1 — Number of Submissions Received

Total Number of Submissions

- Nil
- 1
- 2 - 5
- 6 - 10
- 11 - 20
- 21 - 50
- > 200

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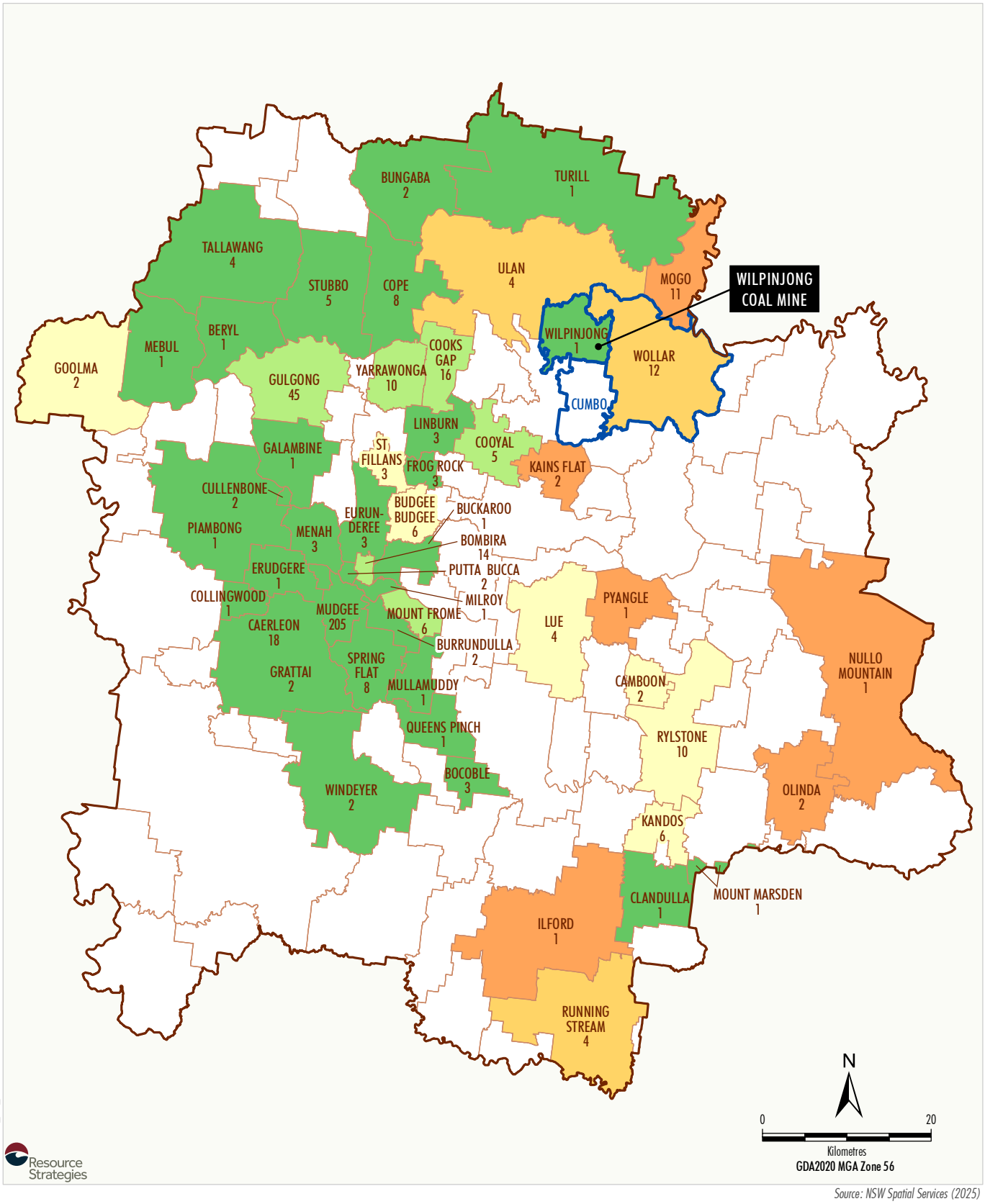
WILPINJONG COAL MINE

Number of Submissions per Suburb within Mid-Western Regional Council Local Government Area

Figure 5



Source: NSW Spatial Services (2025)

LEGEND

- Mid-Western Regional Council LGA
- Suburb Boundary
- Key Immediate Suburb
- WILPINJONG — Suburb Name
- 1 — Number of Submissions Received

Submission Type - Percentage of Total Submissions

- 80% to 100% Support
- 60% to 80% Support
- 60% Support to 60% Object
- 60% to 80% Object
- 80% to 100% Object

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WILPINJONG COAL MINE

Submissions Type per Suburb
within Mid-Western Regional Council
Local Government Area

Figure 6

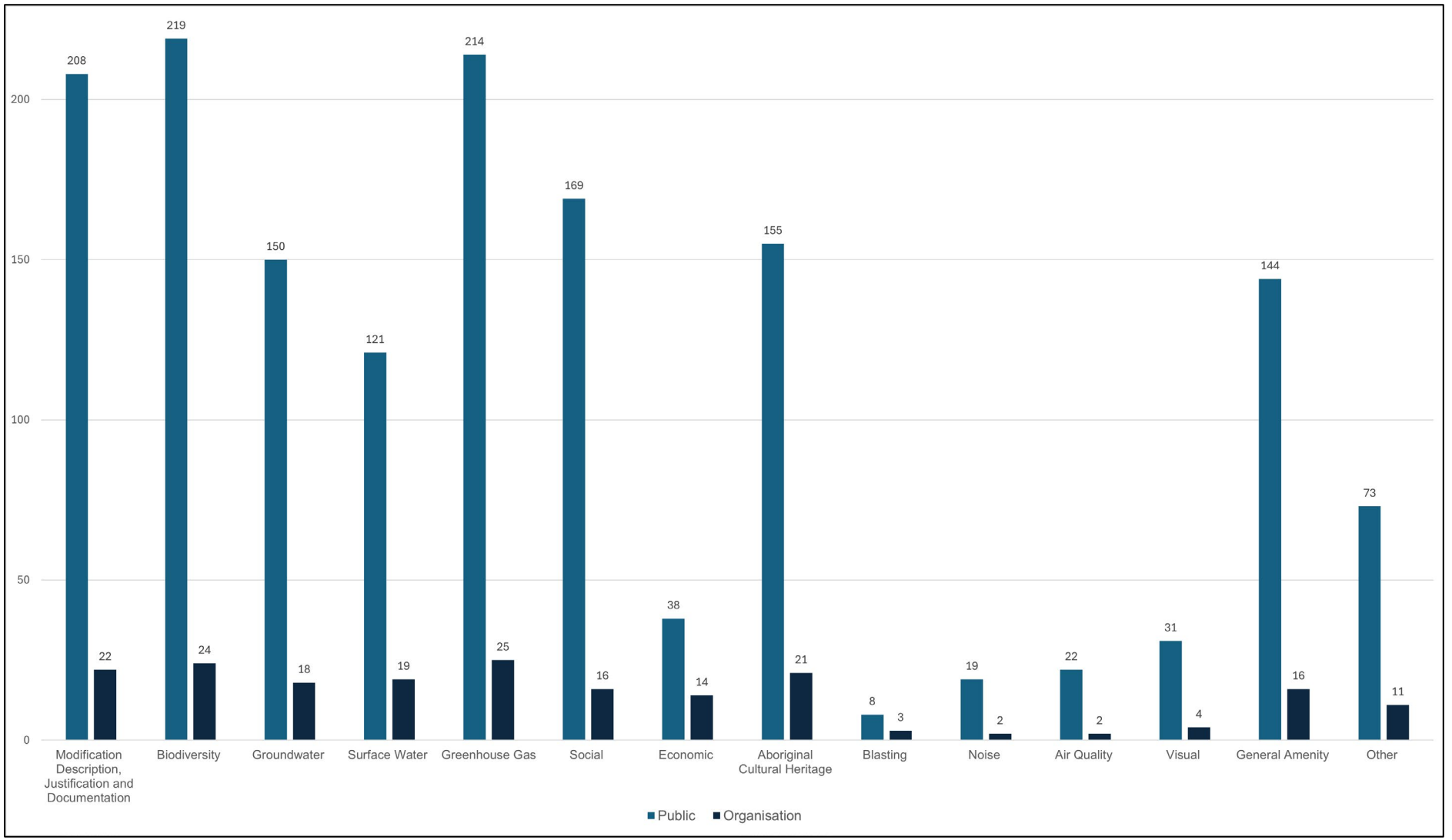
2.4 KEY MATTERS RAISED IN SUBMISSIONS

The most commonly raised matters in relation to the Modification are illustrated in Chart 7. The following key matters were raised in the seven comments and 302 objecting public and organisation submissions:

- Modification description, justification and documentation;
- biodiversity;
- groundwater;
- surface water;
- greenhouse gas;
- social;
- economic;
- Aboriginal cultural heritage;
- blasting;
- noise;
- air quality;
- visual;
- general amenity; and
- other environmental aspects.

A register of submissions and where comments are addressed in this Submission Report is provided in Attachment 1.

Chart 7
Summary of the Most Commonly Raised Matters



3 ACTIONS TAKEN SINCE PUBLIC NOTIFICATION OF THE MODIFICATION

3.1 ENGAGEMENT ACTIVITIES

Since lodgement of the Modification Report, WCPL has continued to consult with key stakeholders, including:

- site tour/inspection by DPHI representatives and consultation on various assessment matters;
- NSW EPA on-site meeting to discuss site operational water management;
- online teleconference with CPO to discuss its comments on the BDAR;
- meeting held with MWRC to discuss the Modification;
- Registered Aboriginal Parties Consultation Committee (RAPCC) – quarterly meeting;
- combined Cultural Heritage Liaison Sub Committee and Native Title Implementation Committee – quarterly meeting;
- Mudgee Local Aboriginal Land Council (MLALC) – targeted discussions regarding new freehold MLALC land ownership in Wollar;
- Moolarben Coal Complex and Ulan Coal Mine – quarterly meeting;
- Wilpinjong Coal Mine Community Consultative Committee – quarterly meeting; and
- monthly “Have a Chat” drop-in sessions (in Wollar).

WCPL will continue to engage with key stakeholders throughout the NSW Government assessment of the proposed Modification.

3.2 FURTHER ENVIRONMENTAL ASSESSMENT

WCPL has engaged technical specialists to provide specific written advice to address a range of concerns raised in submissions, including issues raised by NSW Government agencies.

Summaries of this technical advice are provided where relevant in Section 4 of this Submissions Report, with supplementary specialist advice attached where relevant as follows:

- Hunter Eco (Dr Colin Driscoll) – CPO and NPWS Submission (Attachment 4).
- Dr Stephen Debus – CPO and NPWS Submission (Attachment 4).
- Navin Officer – Heritage NSW Submission (Attachment 5).
- SLR – NSW DCCEEW – Water Submission, CPO Submission (Attachment 6).
- Square Peg – Wollar Progress Association’s Submission on the SIA (Attachment 7).

In addition, WCPL has consulted with its air quality, noise and blasting specialists to consider potential implications of the recent conversion of three parcels of vacant Crown Land to the south-west of Wollar to freehold MLALC ownership (i.e. through grant of a land claim) since WCPL conducted its Modification property ownership search. These recently granted freehold MLALC parcels would be exposed to elevated operational noise during the life of the Modification due to their location (Section 4.2.10).

3.3 REFINEMENT OF THE MODIFICATION

Based on WCPL's review of the submissions, consideration of the technical advice received and further consultation with key stakeholders, WCPL has made some minor amendments/clarifications to the proposed environmental mitigation and monitoring measures to address the comments received in submissions. A revised Summary of Mitigation Measures is appended to this Submissions Report (Attachment 2) reflecting the minor changes made.

No changes are proposed to the Modification open cut mining proposal that would require amendment of the Consolidated Project Description – Wilpinjong Extension Project (Attachment 9 of the Modification Report).

4 RESPONSE TO SUBMISSIONS

4.1 GOVERNMENT AGENCY SUBMISSIONS

Responses to comments from Government agency and local council submissions are provided below for CPO, NPWS, EPA, Heritage NSW, NSW DCCEEW – Water and MWRC.

Some submissions received had limited or no comments on the Modification that required a response by WCPL. On this basis, these comments are noted, and a specific detailed response has not been provided. These submissions include comments from DPHI – Crown Lands, NSW RFS, NSW DPIRD and NSW Resources and NSW Resources Regulator, which are noted below for reference.

Department of Planning, Housing, and Infrastructure – Crown Lands

The DPHI – Crown Lands submission advised WCPL that Crown Land subject to Mining Leases and ELs require agreements and/or licenses under the NSW *Mining Act 1992.*

Response

Any requirements for Crown Lands would be complied with in relation to the approval of any necessary mining tenements for the Modification under NSW *Mining Act 1992.*

NSW Rural Fire Service

The submission from NSW RFS stated:

> *The proposed modification to mining works are proposed on bushfire prone land (BFPL). As such, an assessment must be undertaken to achieve the aims and objectives of Planning for Bush Fire Protection (PBP) 2019. In this regard, a bush fire report prepared by an accredited bush fire consultant must be provided with the next stage of the proposal.*

Response

WCPL has developed a Bushfire Management Plan in consultation with NSW RFS to reduce the risk of bushfire within WCPL landholdings (Eco Logical Australia Pty Ltd [Eco Logical], 2013). The Bushfire Management Plan includes the identification of assets, assessment of fire risk and identification of management strategies to reduce the risk of fire to people and property (Eco Logical, 2013).

WCPL would continue to implement the existing bushfire management measures in the Bushfire Management Plan for the Modification and consult with the Cudgegong Bush Fire Management Committee and the RFS and provide assistance to these organisations as required.

Transport for NSW

The submission from TfNSW stated:

> *TfNSW has reviewed the information submitted, including the 'Road Transport Assessment' and notes that the extent of this proposed modification will largely be contained to the local road network. Accordingly, TfNSW has no objections to the proposed modification.*

NSW Department of Primary Industries and Regional Development

The submission from NSW DPIRD stated:

> *It is considered the modification will not adversely impact agricultural land use or agricultural production, and any potential impacts such as biosecurity incursion to and from the site will be managed as part of routine operations. The proposed rehabilitation of the site includes returning the land to predevelopment topography and vegetation, which will support agriculture. The department has no additional requirements for this proposal.*

NSW Resources

The submission from NSW Resources stated:

> *NSW Resources is satisfied that, should the operational outcomes be realised, the proposed mine design and mining method submissions adequately recover resources and is projected to provide an appropriate return to the state.*

NSW Resources Regulator

The submission from NSW Resources Regulator stated:

> *Should the modification be approved, it is the expectation of the Resources Regulator that the Rehabilitation Management Plan is updated to include the following:*
>
> - *The life of mine rehabilitation schedule to include the schedule beyond the cessation of mining until rehabilitation completion.*
> - *Topsoil balance to be detailed and stockpiling strategy to maximise viability of longer-term stockpiles.*
> - *Managing topsoil quality relating to weed seed blank from derived native grassland areas with exotic grasses and its impacts. Noting that Biodiversity Measure 6 refers to mapping Plant Community Types against the topsoil source.*

Response

WCPL accepts this comment and notes that the Rehabilitation Management Plan would be updated following approval of the Modification.

4.1.1 NSW Department of Climate Change, Energy, the Environment and Water – Conservation Planning and Offsets Division[1]

ATTACHMENT B RECOMMENDATIONS

Box Gum Woodland SAII Minimisation Proposal

Recommendation 1

Secure a conservation area for Box Gum Woodland CEEC within 12 months of project approval and manage it under a Biodiversity Stewardship Site Agreement (BSA).

Response

Section 8.5 of the BDAR (Resource Strategies Pty Ltd [Resource Strategies], 2026) has been updated to state:

In light of the CPHR recommendation, WCPL will secure the revegetation area for the Box Gum Woodland CEEC under a Biodiversity Stewardship Site Agreement (BSA). The timing of the security is outside WCPL's control as the Assurance and Biodiversity Stewardship Planning Division (ABS) of CPHR will assess the BSA application as part of a separate approval process. However, WCPL will commit to submit the BSA application to ABS within 12 months following approval of the Modification.

Recommendation 2

Include a framework of specific and measurable targets in the BDAR where grassland areas are proposed to be restored to Box Gum Woodland CEEC.

Response

Section 8.5 of the BDAR has been updated to state:

The BSA application will have a management plan that meets the requirements for the BSA. ABS will assess the BSA application as part of a separate approval process. A framework of specific and measurable targets is not required in the BDAR to comply with the BAM (DPIE, 2020) and providing this in a BDAR could potentially undermine the independence of the BSA application process that is managed by ABS.

Recommendation 3

Prepare and implement a management and monitoring plan for the conservation area prior to construction commencing. The management plan should be approved by the DPHI Secretary and should be to the satisfaction of CPHR.

Response

Section 8.5 of the BDAR has been updated to reflect WCPL's revised commitment to establish a BSA.

WCPL will commit to submit the BSA application to ABS (with a Biodiversity Stewardship Site [BSS] management plan) within 12 months following approval of the Modification. ABS will assess the BSA application as part of a separate approval process. To avoid duplication, a separate management plan is not proposed to be prepared under Development Consent (SSD-6764). The timing of implementation is outside WCPL's control as the ABS will assess the BSA application as part of a separate approval process.

[1] Since the advice from CPHR was provided, the organisation title has been changed to CPO. All direct quotes from CPHR's advice remain the same, however WCPL's responses refer to CPO.

Recommendation 4

Ensure all actions in the management plan adhere to the Specific, Measurable, Achievable, Realistic and Timebound (SMART) principles. Actions should be fully costed and include contingency measures that would be implemented if monitoring indicates that management actions are not tracking towards success criteria.

Response

Section 8.5 of the BDAR has been updated to reflect WCPL's revised commitment to establish a BSA.

The BSA application will have a management plan which meets the requirements for the BSA. ABS will assess the BSA application as part of a separate approval process. To avoid duplication, a separate management plan is not proposed to be prepared under Development Consent (SSD-6764).

Recommendation 5

If secured under a BSA, all credits generated should be immediately retired by the proponent and not used for offsetting.

Response

In light of CPO's recommendation, WCPL will secure the revegetation area for the Box Gum Woodland Critically Endangered Ecological Community (CEEC) (as described in Section 8.5 of the BDAR) under a BSA as part of a larger parcel of land.

Section 8.5 of the BDAR has been updated to reflect WCPL's revised commitment to forfeit all Box Gum Woodland CEEC ecosystem credits generated by the Revegetation Area (Figure 7-1 of the BDAR).

WCPL originally proposed to forfeit only additional biodiversity credits for the Active Restoration Management Action (above the standard credits for Required Management Actions). However, WCPL's revised commitment is to forfeit all Box Gum Woodland CEEC ecosystem credits generated by the Revegetation Area (Figure 7-1).

Recommendation 6

Consult with CPHR to ensure the size of the conservation area, and the proposed measures to mitigate and minimise impacts, will contribute to Box Gum Woodland CEEC recovery and effectively minimise potential SAII.

Response

In light of CPO's recommendation, WCPL will secure the revegetation area for the Box Gum Woodland CEEC (as described in Section 8.5 of the BDAR) under a BSA. Section 8.5 of the BDAR has been updated as follows:

The proposal would result in re-establishment of woodland in approximately 50 ha of current derived native grassland conforming to be Box-Gum Woodland CEEC (PCT 3396) conserved in perpetuity. This would result in a net increase in woodland in the future considering that only 3.3 ha of woodland form of Box-Gum Woodland CEEC listed under the BC Act would be cleared (the remaining is 2.3 ha of regeneration and 108.7 ha of derived native grassland). This is in addition to the biodiversity credit requirement for the Modification (as outlined in Section 9.2) being retired (based on an offset multiplier that is set by CPHR).

WCPL has already proposed the maximum available area for restoration. The restoration area cannot be expanded in the proposed BSA site because it is already covering the limits of the patch of Box-Gum Woodland CEEC derived native grassland (DNG) present. The outcome would be a much larger area of Box Gum Woodland CEEC (in woodland form) conserved in perpetuity than currently exists in the Development Footprint (i.e. approximately 1:15 ratio).

Section 7.1.4 of the BDAR has been updated to recognise that this would contribute to minimising WCPL's contribution to the cumulative impacts on the Box Gum Woodland CEEC and recognise that there is nil to negligible risk associated with active revegetation not occurring, as it would be a requirement of the BSA.

Regent Honeyeater SAII Minimisation Proposal

Recommendation 1

Propose specific SAII minimisation measures for the regent honeyeater that include:

1. *conservation of land containing mapped important habitat for the species, and/or*
2. *conservation actions to increase the size and density of the wild population, potentially achieved by contributing funding to captive breeding programs.*

Response

WCPL has identified measures to avoid and minimise impacts as well as mitigate and manage impacts on the *Anthochaera phrygia* (Regent Honeyeater) and these are described within the BDAR as required by the Biodiversity Assessment Method (BAM) (Department of Planning, Industry and Environment [DPIE], 2020).

Land containing mapped important habitat for the species will be conserved through the retirement of species credits for the species as per the BAM (DPIE, 2020) (based on an offset multiplier that is set by CPO). Figure 7 shows the location of the currently proposed BSAs and the Important Habitat Mapping for the Regent Honeyeater.

As described in the response above, in light of the CPO recommendations, WCPL would also secure the revegetation area for the Box Gum Woodland CEEC (as described in Section 8.5 of the BDAR) under a BSA and forfeit all Box Gum Woodland CEEC ecosystem credits generated by the Revegetation Area.

The BDAR is not required to justify an 'impact to conservation ratio' for the Regent Honeyeater. It is the role of the decision-maker (DPHI) to determine whether or not any of the residual impacts on the Regent Honeyeater are serious and irreversible and determine whether there are any additional and appropriate measures that will minimise those impacts.

Separate to the BDAR, to inform this assessment, Dr Stephen Debus has prepared the *Wilpinjong Coal Mine Pit 8 Extension Modification Review of the Assessment of Serious and Irreversible Impacts on the Regent Honeyeater*, which is provided in Attachment 4 of this Submissions Report (Debus, 2026).

Recommendation 2

Consult with CPHR to ensure that proposed measures to minimise impacts will contribute to the recovery of Regent Honeyeater.

Response

WCPL met with CPO on 25 February 2026 to discuss WCPL's responses to CPO's feedback, inclusive of proposed measures for the Regent Honeyeater as described above.

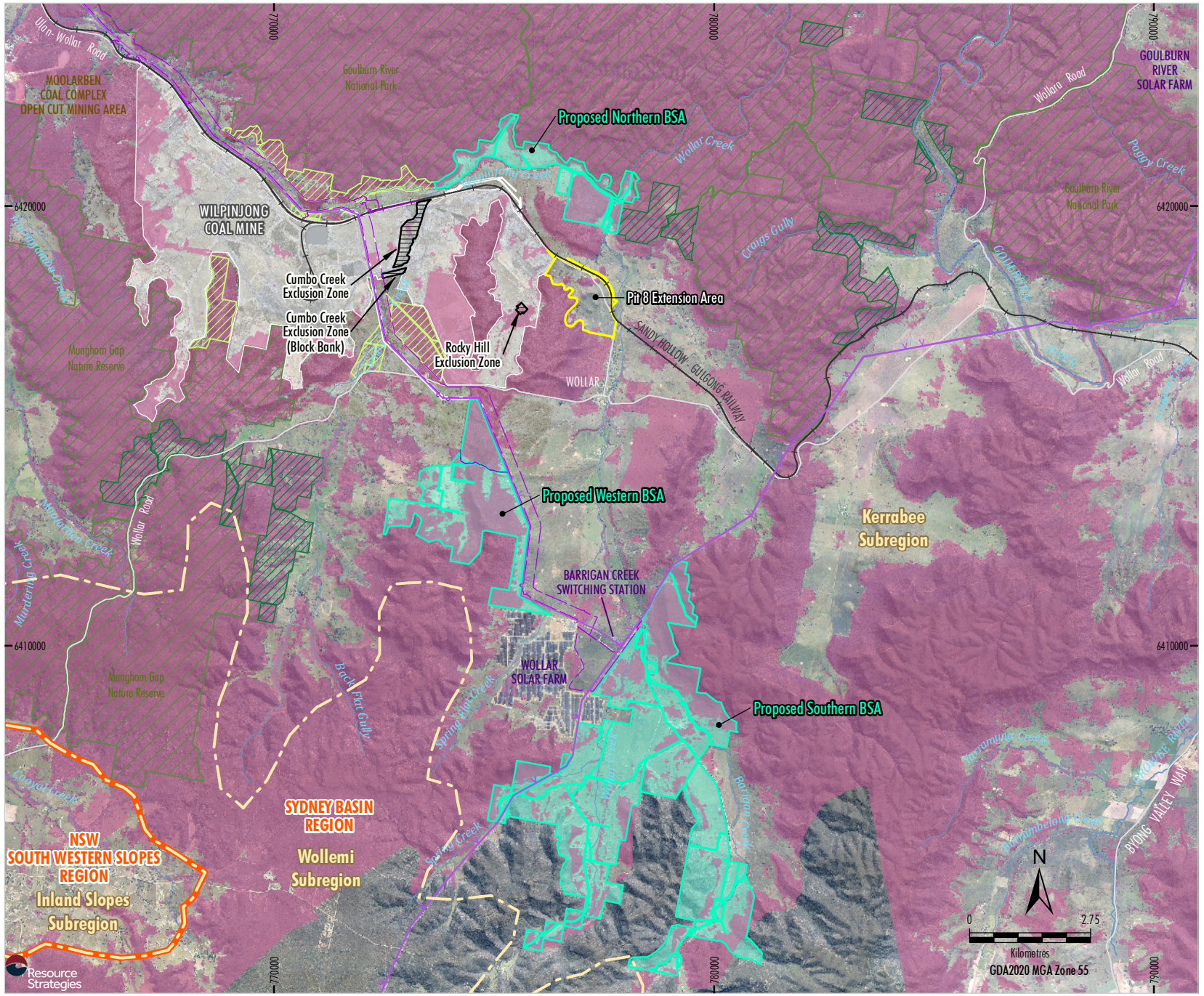
Large-eared Pied Bat and Eastern Cave Bat SAII Minimisation Proposal

Recommendation 1

Install 6 artificial roosts in local mine site rehabilitation areas for the eastern cave bat and large-eared pied bat. Two should be installed within 12 months of approval, with the remaining four installed within 24 months.

Response

WCPL agrees with this recommendation as it is summarising the commitment already within the BDAR.



LEGEND

- Existing TransGrid Electricity Transmission Line
- EnergyCo Transmission Project (SSI-48323210)
- IBRA Region Boundary
- IBRA Subregion Boundary
- NSW Government Regent Honeyeater Important Habitat Mapping
- National Park or Nature Reserve
- Existing Biodiversity Offset Transferred to the National Parks and Wildlife Service (NPWS) Estate
- Enhancement and Conservation Area
- Proposed Biodiversity Stewardship Site
- Approved/Existing Surface Development Area
- Mine Exclusion Area
- Modification Indicative Development Footprint

Source: WCPL (2025); NSW Spatial Services (2025); EnergyCo (2024)
Orthophoto Mosaic: WCPL (July 2024 - Nov 2022)

Peabody

WILPINJONG COAL MINE

Regent Honeyeater Cumulative Impacts

Figure 7

WIL-22-17 MOD3 Pit8 Ext_RtS_CPHR_201A

Recommendation 2

Prepare a detailed monitoring plan for artificial microbat roosts prior to construction commencing. This plan should be approved by the DPHI Secretary and should be to the satisfaction of CPHR.

Response

In light of the CPO recommendations, WCPL would prepare a monitoring plan for artificial microbat roosts in consultation with CPO. However, this would occur independent of construction so establishment of the artificial habitat is not unnecessarily delayed. Section 8.4.6 of the BDAR has been updated accordingly.

Recommendation 3

Establish a precautionary and conservative blasting threshold prior to approval.

Response

Background

Due to the prevalence of sandstone rock features in the natural environment, management of geological structures adjacent to open cut mining has been recognised as an environmental aspect that required management at the Wilpinjong Coal Mine since its inception.

For example, the *Director-General's Report, Proposed Wilpinjong Coal Project* (NSW Department of Planning, 2005) stated:

To assess the potential impacts of the project on the Aboriginal rock shelters, the Proponent used a criteria of 80 mm/s which is based on a German Standard for evaluating vibration impacts on structures. The Proponent believes the application of these criteria provides a very conservative approach to the assessment of potential impacts on the rock shelters, and cites research from the United States which indicates actual damage to geological structures would not occur until the vibration levels exceed 460 mm/s. The assessment indicated that the vibration at the rock shelters would comply with the criteria, and hence it would be unlikely that the project would result in any damage to the rock shelters as a result of vibration from blasting.

During the assessment of the Wilpinjong Extension Project in 2015 (which comprised a further 800 ha of open cut extensions), the presence of geological rock structures adjacent to open cut mining was also considered. In that case, some 60 Aboriginal heritage rock shelter sites were identified within 100 metres (m) of the proposed open cut extensions (WCPL, 2015).

Schedule 3 of Development Consent (SSD-6764) (Conditions 12 and 45) for the Wilpinjong Extension Project subsequently provided specific requirements with respect to the management of Aboriginal rock shelter sites as follows:

12. During mining operations on the site, the Applicant must:

…

(b) ensure that blasting at the site does not:

i. damage any identified rock shelters with moderate to high Aboriginal cultural heritage significance located within the Munghorn Gap Nature Reserve; and

ii. cause more than negligible damage to any identified rock shelters with low Aboriginal cultural heritage significance located within the Munghorn Gap Nature Reserve;

…

45. Unless otherwise authorised under the NP&W Act, the Applicant must ensure that the development does not cause any direct or indirect impact on the identified Aboriginal heritage items located outside the approved disturbance area of the development.

WCPL has been managing blasts in accordance with an approved Blast Management Plan to meet applicable Development Consent conditions since the Wilpinjong Coal Mine's commencement.

The current Blast Management Plan (WCPL, 2024a) states the following:

> *To ensure that blasting at the site does not:*
>
> - *Damage any identified rock shelters with art …;*
> - *Damage identified rock shelters with moderate to high Aboriginal cultural heritage significance located within the Munghorn Gap Nature Reserve …;*
> - *Cause more than negligible damage to any identified rock shelters with low Aboriginal cultural heritage significance located within the Munghorn Gap Nature Reserve …; and*
> - *Damage identified rock shelters located within the Rocky Hill buffer zone in Pit 8….*
>
> *…*
>
> *Blasting will be managed and monitored, to ensure that the relevant performance indicator of 80 millimetres per second and relevant damage criteria of 250 millimetres per second are maintained…*

Measures to be undertaken in the event of a recorded exceedance of either the 80 millimetres per second (mm/s) performance indicator or the 250 mm/s damage criteria at a relevant rock shelter site are described in the Blast Management Plan. It is noted that blast vibration management at relevant geological structures has been conducted successfully in accordance with the Blast Management Plan at the Wilpinjong Coal Mine for approximately 20 years, and to date the application of the current 80 mm/s performance criteria has been successful at managing impacts on relevant potentially vibration-sensitive geological structures (e.g. Aboriginal heritage rock shelters with art).

Modification Mapped Rocky Habitat

WCPL has identified measures to manage potential impacts on mapped rocky bat habitat, and these are described within the BDAR as required by the BAM (DPIE, 2020). Section 7.2.4 of the BDAR states:

> *To avoid physical damage to mapped rocky bat habitat from indirect impacts, WCPL would undertake blasting in a controlled manner consistent with the recommendations of PSM (2025), by:*
>
> - *conducting inspections of caves and cliff lines as mining advances to assess the local rock mass strength;*
> - *establishing an upper vibration blasting limit based on site specific evaluation of local rock mass strength;*
> - *maintaining a performance measure of 'no damage that is distinguishable from natural processes; and*
> - *monitoring to confirm compliance with the performance measure for rocky habitat.*

The following additional text has been added to Section 7.2.4 of the BDAR:

> *WCPL would undertake blasting in a controlled manner consistent with the recommendations of PSM (2025) with the intent that physical damage to mapped rocky bat habitat from indirect impacts is avoided (Section 7.2.4).*
>
> *…*
>
> *PSM (2025) state that 'blasts should be designed such that the PV at sensitive geological features (features with RMR greater than 45) does not exceed 50mm/s, unless a higher limit is justified following review of blast monitoring results in consultation with a geotechnical engineer'.*

On this basis, a *precautionary and conservative blasting threshold* for mapped rocky habitat in the vicinity of the Modification has been established prior to approval of the Modification, consistent with the CPO's request.

WCPL notes PSM's (2025) recognition that a higher limit could be justified and, therefore, considers that the 50 mm/s criteria be applied as the precautionary and conservative default vibration criteria, in the absence of the Secretary of DPHI agreeing to a higher value.

WCPL notes this approach would be consistent with the DPHI's recommended conditions for the Moolarben Coal Complex OC3 Extension Project (SSD-33083358), which nominate a ground vibration criteria for mapped rocky habitat of 50 mm/s *unless otherwise agreed by the Planning Secretary within the Blast Management Plan* (DPHI, 2025a).

There is strong evidence that the two bat species of interest (*Chalinolobus dwyeri* [Large-eared Pied Bat] and *Vespadelus troughtoni* [Eastern Cave Bat]) continue to use both remnant vegetation and mine rehabilitation areas for foraging within the current mine extents, which suggests a high tolerance for existing mining activities and associated noise, dust and blasting emissions. There is also strong evidence that the two bat species of interest continue to use rocky habitat in close proximity to currently active mining areas and in previously mined areas, including at existing verified breeding caves identified within the existing mine footprint and adjacent ridgelines.

WCPL notes that only approximately 6% of the mapped rocky bat habitat associated with the slopes on the ridgeline to the south-west of the proposed Modification is within 100 m of the proposed open cut extensions. However, there is sufficient proximal rocky habitat that setting back the pit 100 m would have a significant adverse impact on available ROM coal reserves in the Pit 8 Extension area.

The following additional text has been added to Section 6.3.1 of the BDAR:

> *WCPL considered maintaining a 100 m buffer from the mapped rocky bat habitat associated with the slopes on the ridgeline to the south-west of the proposed Modification and concluded that it would not be reasonable to do so on the basis that:*
>
> - *nearly all of the mapped rocky bat habitat associated with the slopes on the ridgeline to the south-west of the proposed Modification is greater than 100 m from the proposed open cut extensions (only approximately 6% of the mapped rocky bat habitat associated with the slopes on the ridgeline to the south-west of the proposed Modification is within 100 m of the proposed open cut extensions);*
> - *there is no basis for a specific 100 m setback as the long history of successful mining adjacent to geological structures at the open cut mines in the region, demonstrates that there is limited evidence that proximal mining to rocky habitat does pose a material risk, providing blast management measures continue to be applied to meet applicable vibration criteria;*
> - *constraining the mine extents to achieve a consistent 100 m pit setback in the Pit 8 Extension from rocky habitat would sterilise approximately 1.25 Mt (9%) of ROM coal and reduce the residual strip width, adversely impacting both Modification coal recovery and productivity; and*
> - *there is an undeniable abundance of available rocky habitat in the wider locality.*
>
> *WCPL is confident that both bat species will persist in the mapped rocky bat habitat associated with the slopes on the ridgeline to the south-west of the proposed Modification as there is evidence of the bats around the existing mine (e.g. BMS (2025b) (Attachment E of the BDAR), and will accept a condition requiring WCPL to confirm evidence of breeding (as per the 'Species credit' threatened bats and their habitats NSW survey guide for the Biodiversity Assessment Method [DPIE, 2021]) in the mapped rocky bat habitat within 5 years following mining. If evidence of breeding is not confirmed for either species, and this absence is attributable to mining, WCPL would provide species credits to compensate for the indirect impact within 2 years of the credit obligation being identified, to the satisfaction of the Secretary.*

Recommendation 4

> *Further strategies to minimise and mitigate indirect impacts from blasting and vibration should be proposed. If residual indirect impacts are likely, or remain uncertain, the development footprint should be reduced to maintain a minimum 100-metre buffer from the escarpment habitat.*

Response

As described above, there is strong evidence that the two bat species of interest (Large-eared Pied Bat and Eastern Cave Bat) continue to use both remnant vegetation and mine rehabilitation areas for foraging within the current mine extents, which suggests a high behavioural tolerance for existing mining activities and associated noise, dust and blasting emissions. There is also strong evidence that the two bat species of interest continue to use rocky habitat in close proximity to currently active mining areas and in previously mined areas, including at existing verified breeding caves identified within the existing mine footprint and adjacent ridgelines.

Notwithstanding, in consideration of CPO's comments, WCPL has considered whether it would be practical to exclude blasting during the nominal breeding season of the Large-eared Pied Bat and Eastern Cave Bat (i.e. indicatively November – January inclusive, based on BAM requirements) to reduce the potential for any indirect behavioral impacts and concluded it would clearly not be practical to restrict on-site blasting for one quarter of each year when the mine is currently permitted up to two blasts per day, and an average of five blasts per week.

As outlined in the response above, the proposed approach to managing blasting and vibration commits to an outcome of *'no damage that is distinguishable from natural processes'*.

Section 7.2.4 of the BDAR states:

> *PSM (2025) describe various different blast management techniques that may be used such as optimising the blast design or changing the blast technique.*

The report by PSM (2025) is provided in Attachment 8 of the Modification Report and it states:

> *Blast Design Optimization*
>
> - *Maximum Instantaneous Charge (MIC): Reducing the maximum instantaneous charge (MIC) per delay can help to directly control PPV values. By optimizing the charge weight, ground vibrations can be minimized, reducing the risk of damage to nearby geological features*
> - *Delay Timing and Staggering: Implementing precise timing between individual charges using delay intervals can reduce the cumulative energy released at any given time, further reducing PPV*
> - *Directional Control: Orienting the blast in a way that directs most of the energy away from sensitive features can help manage PV levels more effectively*
>
> *Blasting Techniques*
>
> - *Controlled Blasting: Techniques such as decked charges or air-decking can help to distribute explosive energy more evenly, reducing the intensity of ground vibrations. Controlled blasting ensures the energy is used more efficiently to break the rock, minimizing unnecessary ground motion*
> - *Pre-splitting and Cushion Blasting: These techniques can create a controlled fracture zone, reducing the transfer of energy into surrounding rock and limiting PPV values*
>
> *Blast Monitoring and Calibration*
>
> - *Vibration Monitoring: Installing blast vibration monitors at key locations near sensitive sites would allow for assessment of PPV levels during blasting operations. This data can be used to adjust subsequent blasts and ensure PV values remain below the recommended levels*

WCPL would update the Blast Management Plan for the Wilpinjong Coal Mine to address the management of blast vibration at rocky habitat. These updates would reflect the additional Development Consent (SSD-6764) conditions that may be applied by DPHI.

As described in the response above to Recommendation #3, WCPL is confident that both bat species will continue to persist in the mapped rocky bat habitat associated with the slopes on the ridgeline to the south-west of the proposed Modification as there is evidence of the bats around the existing mine (e.g. BMS [2025] [Attachment E of the BDAR]).

Recommendation 5

> *Consult with CPHR to ensure that proposed measures to minimise impacts will be effective for the large-eared pied bat and eastern cave bat.*

Response

WCPL met with CPO on 25 February 2026 to discuss WCPL's responses to CPO's feedback, inclusive of proposed measures for the Large-eared Pied Bat and Eastern Cave Bat, as described above.

There is an existing approved Biodiversity Management Plan for the Wilpinjong Coal Mine in accordance with Condition 42 Schedule 3 of Development Consent (SSD-6764) which documents the measures to mitigate and manage impacts on flora and fauna (WCPL, 2024b). The approved Biodiversity Management Plan was prepared in consultation with Biodiversity, Conservation and Science (BCS) (now CPO, previously CPHR) and Commonwealth Department of Climate Change, Energy, the Environment and Water (Commonwealth DCCEEW).

The approved Biodiversity Management Plan (WCPL, 2024b) would be updated to include the Modification. The revised Biodiversity Management Plan would be prepared in consultation with CPO and Commonwealth DCCEEW as per Condition 42 Schedule 3 of Development Consent (SSD-6764) (Section 8.1 of the BDAR).

ATTACHMENT C AND D RECOMMENDATIONS

Recommendation 1.1

The SAII assessment must fully consider the importance of the Mudgee – Wollar region in the context of the long-term survival of the regent honeyeater.

Response

This recommendation pertains to the *Wilpinjong Coal Mine Pit 8 Extension Modification Review of the Assessment for Serious and Irreversible Impacts on the Regent Honeyeater*, which has been revised by Dr Stephen Debus to state the following in Section 3:

Mudgee-Wollar formerly featured as a significant breeding population centre (DotE 2016), but is currently not specifically mentioned in more recent literature (Crates et al. 2021). If the population improves, then it is more likely that Regent Honeyeater individuals would once again visit the locality. Noting, however, that population modelling by Heinsohn et al. (2022) predicts a worsening trajectory for the population.

Recommendation 2.1

All available resources, including the national regent honeyeater recovery plan, should be used to determine whether the development area may be utilised by regent honeyeaters.

Response

This recommendation pertains to the *Wilpinjong Coal Mine Pit 8 Extension Modification Review of the Assessment for Serious and Irreversible Impacts on the Regent Honeyeater*, which has been revised by Dr Stephen Debus to clarify:

The Modification would clear approximately 28.81 ha of potential foraging habitat (noting approximately 7 ha of the potential habitat mapped by NSW DCCEEW as Important Habitat consists of derived grassland, exotic pine trees, dead grapevines and a farm dam [which is not habitat for the species]) (Figure 4). The Modification area occurs within the Important Habitat Mapping for the Regent Honeyeater (NSW DCCEEW 2025b) (Figure 4), although the species has not been recorded within the Development Footprint (BMS 2025; NSW DCCEEW 2025a).

Although the BAM (DPIE 2020) does not require targeted surveys for the Regent Honeyeater, targeted Regent Honeyeater surveys were conducted by BMS (2025) in the Modification area and surrounds over 242 survey days in September to December 2022, March 2023, June to November 2023, April to July 2024 and February 2025. BMS (2024) describes the environmental conditions at the time of the surveys. No Regent Honeyeaters were recorded (BMS 2025).

Despite the survey results, suitable habitat is present. Relevant vegetation types (Plant Community Types [PCTs]) associated with the Regent Honeyeater (NSW DCCEEW 2025c), i.e. flowering eucalypts supporting Regent Honeyeater food resources, on and around the Modification site include (Figure 8):

- *PCT 3388 Central West Valleys White Box Forest and derived native grassland (DNG)*
- *PCT 3396 Northwest Flats Box–Blakely's Red Gum Forest and DNG, including regeneration, exotic trees and River Red Gum plantation*
- *PCT 3402 Western Blue Mountains White Box Forest*
- *PCT 3403 Western Hunter Creekflat Apple Grassy Forest*
- *PCT 3404 Central West Flats Grassy Box Woodland*
- *PCT 3405 Central West Flats Inland Grey Box Grassy Forest and DNG*
- *PCT 3497 Western Hunter Escarpment Slaty Gum–Pine Forest*
- *PCT 3760 Munghorn Sandstone Grey Gum–Stringybark*
- *PCT 3780 Goulburn River Ironbark–Bloodwood Heathy Forest*
- *PCT 3781 Ulan Sandstone Ironbark–Pine Woodland*

The habitat in the Development Footprint is highly fragmented. BMS (2024) describes that the Noisy Miner already has a stronghold on the habitat on site due to existing fragmentation and edge effects.

Mudgee-Wollar formerly featured as a significant breeding population centre (DotE 2016), but is currently not specifically mentioned in more recent literature (Crates et al. 2021). If the population improves, then it is more likely that Regent Honeyeater individuals would once again visit the locality. Noting, however, that population modelling by Heinsohn et al. (2022) predicts a worsening trajectory for the population.

Recommendation 3.1

Analyse cumulative losses of habitat in the regent honeyeater SAII assessment.

Response

This recommendation pertains to the *Wilpinjong Coal Mine Pit 8 Extension Modification Review of the Assessment for Serious and Irreversible Impacts on the Regent Honeyeater*, which has been revised by Dr Stephen Debus to include an analysis of the cumulative loss of habitat and biodiversity offsets for the Regent Honeyeater (Attachment 4).

Recommendation 4.1

Mitigation measures proposed for the regent honeyeater must address the SAII principles and address the severe threat of extinction faced by the species.

Response

Section 6 of the *Revised Wilpinjong Coal Mine Pit 8 Extension Modification Review of the Assessment for Serious and Irreversible Impacts on the Regent Honeyeater* by Dr Stephen Debus addresses the SAII Principles as they relate to the impact of the Modification, as follows:

Principle 1

The Modification is unlikely to impact Regent Honeyeater individuals or cause a further reduction in breeding rates. The Modification would not result in a decline in the EOO or AOO. Accordingly, in relation to Principle 1, the Modification is not likely to contribute significantly to the risk of the Regent Honeyeater becoming extinct.

…

Principle 2

The Modification is unlikely to further reduce the population size, as it is unlikely to impact Regent Honeyeater individuals or cause a further reduction in breeding rates. Accordingly, in relation to Principle 2, the Modification is not likely to contribute significantly to the risk of the Regent Honeyeater becoming extinct.

As explained in the *Wilpinjong Coal Mine Pit 8 Extension Modification Review of the Assessment for Serious and Irreversible Impacts on the Regent Honeyeater*, a range of impact mitigation measures are proposed, including:

Revegetation of the Modification rehabilitation areas would include the use of plant species characteristic of the surrounding vegetation to produce a net increase in woodland vegetation. The target flora species would include species characteristic of Box–Gum Woodland Critically Endangered Ecological Community, which is also potential habitat for the Regent Honeyeater. Tube stock (established seedlings/plants) would be used in the Modification rehabilitation (for overstorey and understorey flora species) to fast-track revegetation.

The Modification would include the proposed avoidance of direct disturbance of the existing Cumbo Creek corridor, which is currently approved to be mined in Pit 4, under Development Consent (SSD-6764) (Figure 11). Any existing infrastructure within the Cumbo Creek Exclusion Zone (e.g. soil stockpiles) would be removed and the area rehabilitated. No further disturbance would occur in the Exclusion Area. The Cumbo Creek Exclusion Zone is approximately 45.8 ha in size. Within the zone, there is approximately 34 ha of native vegetation, comprising approximately 1.7 ha of Fuzzy Box Woodland, approximately 21.6 ha of native grassland derived from Fuzzy Box Woodland, approximately 11 ha of reed wetlands and approximately 0.2 ha of planted trees.

As an additional measure, WCPL would undertake a programme to regenerate woodland in approximately 50 ha of current derived native grassland conforming to Box-Gum Woodland CEEC (PCT 3396). The Revegetation Areas are directly north of Wilpinjong Creek, between Wilpinjong Creek and escarpment adjacent to Goulburn River National Park (Figure 7-2 of the BDAR). This revegetation area would be secured under a BSA as described in the responses above.

It is the role of the decision-maker (DPHI) to determine whether or not any of the residual impacts on the Regent Honeyeater are serious and irreversible and determine whether there are any additional and appropriate measures that will minimise those impacts.

Recommendation 5.1

Ensure that the quantum of impact and proposed mitigation measures for regent honeyeater are aligned between the BDAR and the SAII report.

Response

The *Wilpinjong Coal Mine Pit 8 Extension Modification Review of the Assessment for Serious and Irreversible Impacts on the Regent Honeyeater* has been updated by Dr Stephen Debus to correct:

- the area of potential habitat to 28.81 ha, consistent with the BDAR; and
- removal of the reference to Noisy Miner control as this is not proposed by WCPL, consistent with the BDAR.

With these amendments, no changes are required to the BDAR.

Recommendation 6.1

Develop additional mitigation and minimisation measures to address potential disturbance to bat colonies within the adjacent escarpment habitat. Where residual impacts remain likely, or uncertain after mitigation strategies have been considered, apply further avoidance measures, including reducing the development footprint to maintain a minimum 100-metre buffer from the escarpment habitat.

Response

The Modification is proposed to enable continuation of mining at the existing approved Wilpinjong Coal Mine. Noise and vibration are an unavoidable product of open cut mining, but there are a range of reasonable industry best practise measures to mitigate and manage noise and vibration.

Noise management at the Wilpinjong Coal Mine is currently undertaken in accordance with the Noise Management Plan (WCPL, 2024c) which outlines (Section 6.4.1 of the Modification Report):

- measures to minimise and manage mine-related noise;
- monitoring, reporting, and compliance procedures;
- how noise complaints and exceedances are managed;
- roles and responsibilities for noise management; and
- how the Noise Management Plan is reviewed and kept up to date.

The Noise Management Plan describes the use of a combination of off-site operator-attended monitoring sites, continuous real-time monitors and a WCPL-operated meteorological monitoring station to assess the performance of the Wilpinjong Coal Mine against noise criteria from Development Consent (SSD-6764).

Current real-time noise monitoring is focused to the east of Wilpinjong Coal Mine in the vicinity of the nearest privately-owned receivers. However, attended monitoring is also undertaken to the north-east and south in locations representative of nearby privately-owned receivers.

The Noise Management Plan describes general noise management and mitigation measures including:

- the training of contractors and staff on environmental noise control and awareness;
- the communication of noise levels for the previous 24 hours to key WCPL personnel at operational and management meetings;
- periodic noise emission test work on mobile equipment;
- consideration of sound power levels in equipment selection and maintaining equipment in good order;
- management of complaints received;
- real-time monitoring and an associated protocol for real-time management of noise emissions;
- monitoring for adverse meteorological conditions and adjusting mining operations where necessary;

- predictive meteorological forecasting to guide day-to-day planning of mining operations; and
- attended monitoring to verify ongoing compliance with noise criteria.

Blast management measures used at the Wilpinjong Coal Mine include (Section 6.5.1 of the Modification Report):

- public notification of upcoming blasts;
- coordinating the time of blasts with the timing of blasts at the Moolarben Coal Complex and Ulan Mine Complex to minimise the potential for cumulative blasting impacts;
- enforcing a minimum exclusion zone of 500 m;
- conducting pre-blast inspections;
- training relevant personnel in environmental obligations and safe handling of explosives;
- designing blasts to ensure that ground vibration and airblast overpressure criteria are compliant, including consideration of meteorological conditions and management of blast maximum instantaneous charge (MIC);
- flyrock management;
- a blast fume management strategy to minimise the occurrence of blast fumes associated with blasting;
- use of adequate stemming, a delay detonation system and careful drilling and hole loading;
- monitoring of blasts at:
  - representative sites of the closest privately-owned receivers;
  - Aboriginal heritage and archaeological sites;
  - historical mine adit; and
  - other infrastructure including railway line/culvert, Ulan-Wollar Road and Wollar Road, powerlines and tailing dams.
- ongoing review of site based prediction equations; and
- visual monitoring of all blasts.

Should the Modification be approved, the Blast Management Plan (WCPL, 2024a) would be updated to reflect the inclusion of measures to minimise potential impacts on rocky bat habitat, including maintaining a performance measure of 'no change that is distinguishable from natural processes' (refer response Recommendation 3 above).

Based on the above, and the response provided to Recommendation 3, WCPL concluded that a 100 m setback from rocky habitat is not reasonable or required.

Also of note, species credits would be provided for the Large-eared Pied Bat and Eastern Cave Bat consistent with the requirements of the BAM. There is evidence of breeding individuals within the proposed BSAs (Figure 8).

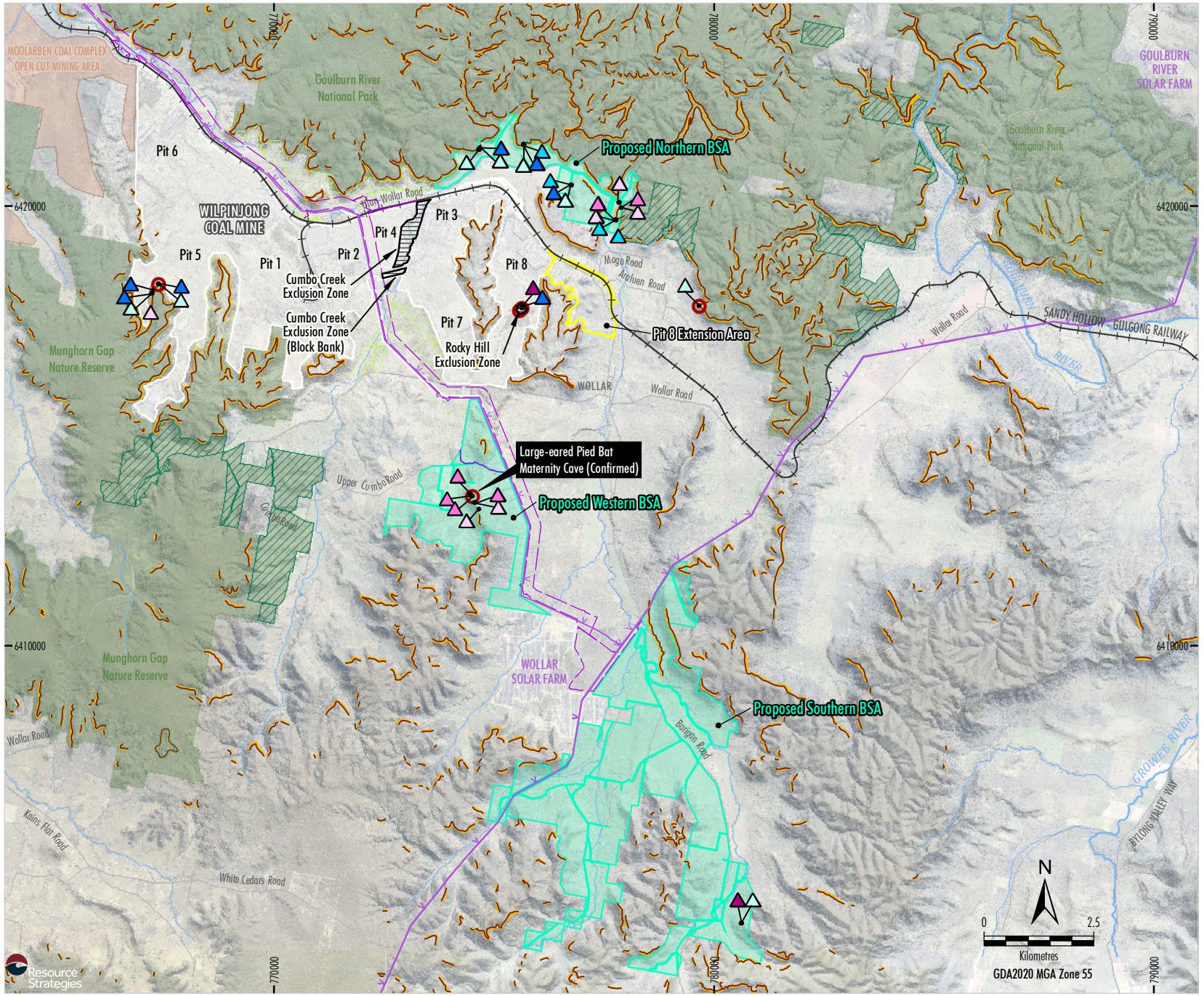
Recommendation 7.1

> *In the absence of detailed rock mass strength surveys being conducted prior to approval, establish a poor quality rock peak particle velocity threshold for the western escarpment prior to project approval.*

Response

WCPL has identified measures to manage potential impacts and these are described within the BDAR as required by the BAM (DPIE, 2020). Please refer to the response to Recommendation 3.

WCPL also notes that PSM (2025) has proposed a conservative vibration criteria for poor quality rock. However, the areas surveyed adjacent to the Modification by PSM to date were 'good quality rock'.



LEGEND

- Existing TransGrid Electricity Transmission Line
- EnergyCo Transmission Project (SSI-48323210)
- Cliff (Cliff Top and Area)
- National Park or Nature Reserve
- Existing Biodiversity Offset Transferred to the National Parks and Wildlife Service (NPWS) Estate
- Enhancement and Conservation Area
- Proposed Biodiversity Stewardship Site
- Approved/Existing Surface Development Area
- Mine Exclusion Area
- Modification Indicative Development Footprint
- Maternity Roost

Evidence of Breeding

- Eastern Cave Bat (Juvenile)
- Eastern Cave Bat (Lactating Female)
- Eastern Cave Bat (Post-lactating Female)
- Large-eared Pied Bat (Juvenile)
- Large-eared Pied Bat (Lactating Female)
- Large-eared Pied Bat (Post-lactating Female)

Source: WCPL (2025); NSW Spatial Services (2025)
Orthophoto Mosaic: WCPL (2024, 2022)

Peabody

WILPINJONG COAL MINE

Bat Maternity Roosts

Figure 8

Recommendation 8.1

> *Review the Threatened Species Scientific Committee's conservation assessment and other key publicly available information when revising the SAII report for Box Gum Woodland CEEC.*

Response

This recommendation pertains to the *Wilpinjong Coal Mine Pit 8 Extension Modification Assessment of Serious and Irreversible Impacts on White Box – Yellow Box – Blakely's Red Gum Grassy Woodland and Derived Native Grassland* (SAII Report for Box Gum Woodland CEEC), which has been revised by Dr Colin Driscoll to include an additional Section 3 and revised Attachment A. The revised SAII Report for Box Gum Woodland (Hunter Eco, 2026a) is presented in Attachment 4 of the Submissions Report.

Dr Colin Driscoll has reviewed the Threatened Species Scientific Committee's (TSSC) conservation assessment (2020) and other key publicly available information. An error was found in the TSSC (2020) estimate of Box-Gum Woodland CEEC. Section 3 of the updated Box Gum Woodland SAII Review (Attachment 4) states:

> *The NSW Conservation Assessment (TSSC 2020b) details areas of Box-Gum Woodland CEEC across parts of NSW sourced from seven publications (see the table reproduced in Attachment A). The geographic areas covered by these sources are shown in Figure 2, overlaid on the modelled distribution map (pink layer) and the SVTM Box-Gum Woodland CEEC mapping (dark blue layer). The NSW Conservation Assessment (TSSC 2020b) sources only cover a portion of the entire NSW distribution modelled or mapped Box-Gum Woodland CEEC (noting the large gap in the middle of NSW) and so do not provide a reliable estimate of the NSW Box-Gum Woodland CEEC extent.*

On this basis, the SAII Report for Box Gum Woodland CEEC conclusion remains unchanged.

Recommendation 8.2

> *Remove statements from the SAII report claiming there is no SAII for Box Gum Woodland CEEC, as this is a matter for the consent authority to determine.*

Response

This recommendation pertains to the *Wilpinjong Coal Mine Pit 8 Extension Modification Assessment of Serious and Irreversible Impacts on White Box – Yellow Box – Blakely's Red Gum Grassy Woodland and Derived Native Grassland*, which has been revised by Dr Colin Driscoll to state:

> *Accordingly, in my opinion the impact of the Modification on Box-Gum Woodland CEEC is not regarded as serious and irreversible, noting however this is a matter for the consent authority to decide.*

Recommendation 8.3

> *Update the SAII report to provide the necessary information for the decision maker to adequately evaluate the project's contribution against Principles 1 for Box Gum Woodland CEEC.*

Response

This recommendation pertains to the *Wilpinjong Coal Mine Pit 8 Extension Modification Assessment of Serious and Irreversible Impacts on White Box – Yellow Box – Blakely's Red Gum Grassy Woodland and Derived Native Grassland*, which has been revised by Dr Colin Driscoll to state:

> *An impact is to be regarded as serious and irreversible if it is likely to contribute significantly to the risk of a threatened species or ecological community becoming extinct. As described above, the loss of 120.5 ha (3.3 ha [2.7%] of woodland, 2.3 ha [1.9%] of natural regeneration, 2 ha [1.7%] of plantation, 0.2 ha [0.2%] of pasture, 108.7 ha of DNG [90.2 %] and 4 ha [3.3%] of DNG with exotic trees) of Box-Gum Woodland CEEC represents approximately 0.0004% of its EOO. Noting, however, that the EOO (overall geographic extent) would be unaffected by the Modification as the Modification is not at the limit of the range of Box-Gum Woodland CEEC. As described above, The AOO would not be reduced by the Modification because the loss of Box-Gum Woodland CEEC due to the modification would be approximately 10% of that occurring within the particular 10 x 10 km grid cell. Further, the remaining Box-Gum Woodland CEEC areas would not be isolated, being ultimately connected to natural forest across DNG.*
>
> *The impact of the Modification on Box-Gum Woodland CEEC as a whole would be extremely low, to the degree that it would be unlikely to change the trajectory of the ecological community by causing a further decline (i.e., a further continuing or projected decline).*

In regard to this principle, the impacts of the Modification are not likely to contribute significantly to the risk of Box-Gum Woodland CEEC becoming extinct within NSW.

In addition to the above assessment of Principle 1, it is noted that Box-Gum Woodland CEEC has been shown to respond to measures to improve its habitat and vegetation integrity and therefore, the implementation of the mitigation and offset measures for the Modification is intended to result in no net loss, and potentially a net gain over time.

Recommendation 9.1

Remove the overestimated analysis of Box Gum Woodland CEEC extent in the SAII report.

Response

Dr Colin Driscoll has reviewed the TSSC's conservation assessment (2020) and agrees the estimate was in error.

Dr Colin Driscoll has updated the *Determination of the Extent in NSW of White Box – Yellow Box – Blakely's Red Gum Grassy Woodland and Derived Native Grassland Critically Endangered Ecological Community* (Driscoll, 2025) (Attachment B of the revised SAII Report for Box Gum Woodland CEEC) to take into account the overlaps between the State Vegetation Type Mapping and the NSW Land Use mapping.

In summary, the update:

- adjusted total estimated Box-Gum Woodland CEEC to 3,068,064 ha in NSW using the method described;
- does not change the estimate of the woodland in the current extent of Box-Gum Woodland CEEC (1,788,703 ha in NSW); and
- does not change the Area of Occupation (AOO) or Extent of Occurrence (EOO).

The findings in the *Wilpinjong Coal Mine Pit 8 Extension Modification Assessment of Serious and Irreversible Impacts on White Box – Yellow Box – Blakely's Red Gum Grassy Woodland and Derived Native Grassland* (Hunter Eco, 2026a) remain unchanged because the assessment does not rely on the current extent of Box-Gum Woodland CEEC.

Recommendation 10.1

The accredited assessor should apply for a review of the regent honeyeater important habitat map if evidence exists that the map contains discrepancies.

Response

The identified habitat map discrepancies are clearly explained in the BDAR and no reduction in habitat area has been proposed. Rather, additional habitat has been included in the species polygon. This approach is inherently conservative.

Recommendation 11.1

Include all plots in the BAM-C or provide justification in the BDAR as to why they have not been entered.

Response

The baseline flora survey report included sampling vegetation integrity plots over a much larger study area and as such more vegetation integrity plots were sampled than required by the BAM (DPIE, 2020). The baseline flora survey report does not include vegetation integrity data for Plot 230613P6 and Plot 230613P7.

The vegetation integrity plots used in the Biodiversity Assessment Method Calculator (BAM-C) are shown on Figure 3-2 of the BDAR and listed in Appendix D of the BDAR. Plot 230613P6 and Plot 230613P7 are not on Figure 3-2 of the BDAR or in Appendix D.

The BAM (DPIE, 2020) does not require plots outside of the Subject Land to be used in the BAM-C and given the absence of vegetation integrity data for Plot 230613P6 and Plot 230613P7 in the baseline flora report there is no need to justify in the BDAR why they have not been entered.

Recommendation 12.1

Clearly list the specific dates of targeted survey for each species and the number of survey replicates undertaken (where relevant).

Response

Specific survey dates of targeted fauna surveys are listed in Appendix A of the *Wilpinjong Coal Mine Pit 8 Extension Modification Baseline Fauna Survey Report* (Biodiversity Monitoring Services [BMS], 2025).

Table 2-2 of the *Wilpinjong Coal Mine Pit 8 Extension Modification Baseline Fauna Survey Report* (BMS, 2025) provides the relevant reconciliation of methods used to target threatened species and survey effort completed within the Development Footprint. This table also listed the seasonal survey windows and survey effort (where relevant). BMS (2025) states that all survey requirements of the target threatened fauna species were met.

In addition, a detailed description of each survey technique is provided in Section 2.2.3 of the *Wilpinjong Coal Mine Pit 8 Extension Modification Baseline Fauna Survey Report* (BMS, 2025).

In response to CPO's comment, Table 2-2 of the *Wilpinjong Coal Mine Pit 8 Extension Modification Baseline Fauna Survey Report* (BMS, 2025) has been reproduced and included as Attachment M of the updated BDAR (Attachment 3 of this Submissions Report) to reference the specific dates of targeted survey for each species and the number of survey replicates undertaken, where relevant.

The specific months of targeted fauna surveys are listed in Table 4-4 of the BDAR.

ATTACHMENT E RECOMMENDATIONS

Recommendation 13.1

Install a ground water monitoring location downstream of Wollar Creek to validate predictions from the groundwater impact assessment and its contribution to cumulative groundwater drawdown.

Response

WCPL is prepared to extend its groundwater monitoring network to include an additional monitoring bore downstream of the Wilpinjong and Wollar Creek confluence and/or adjacent to the Goulburn River National Park boundary, subject to access and ground conditions. This extension in groundwater monitoring would be documented in an update to the Water Management Plan, should the Modification be approved.

Recommendation 14.1

Increase proposed enhancement conservation area C to be inclusive of adjacent uncleared vegetation as depicted in Figure 5 of this response.

Response

Enhancement and Conservation Area (ECA) C has already been secured under a Conservation Agreement, and part of the suggested augmentation area is Crown Land (i.e. is outside of WCPL's direct control). No changes are proposed to the existing Wilpinjong Coal Mine ECAs as part of the Modification.

Notwithstanding, WCPL would be happy to consult further with NPWS regarding potential mutually agreeable opportunities to extend the Munghorn Gap Nature Reserve following completion of mine rehabilitation and relinquishment of mining tenements (e.g. where mining has been completed in narrow valley inholdings adjacent to the Nature Reserve).

4.1.2 NSW Environment Protection Authority

Water Management

Recommendation 1

The EPA recommends that the assumptions and inputs used in the SWA are revised to ensure they reflect the applicant's proposed operations, including discharge rates from the ROP. If increased discharge rates are required from the ROP as part of this proposal, then the impact of those discharges should be assessed, which could include (but need not be limited to) salinity loads, ionic composition of salts, and other key site pollutants.

Response

The EPL 12425 variation application to increase the maximum discharge rate from 6.5 megalitres per day (ML/day) to 20 ML/day is not part of the Modification. The relevant assessments for the Modification, therefore, do not assess an increase in the maximum discharge rate.

On 23 February 2026, WCPL withdrew the portion of the proposed EPL variation application relating to a volumetric increase in discharge (that was unrelated to the Modification). Therefore, no revision of the Surface Water Assessment (WRM Water and Environment Pty Ltd [WRM], 2025) is necessary.

Recommendation 2

The EPA recommends that if additional discharges are required from the ROP, the proposal consider measures to reduce site inventory and avoid discharge, including but not limited to:

- *Treatment and discharge sediment laden water separate to the mine water system,*
- *Diverting additional clean water catchments where practicable.*

Response

As per the response to Recommendation 1, the Modification does not propose an increase in the maximum daily discharge rate and WCPL has withdrawn the EPL 12425 variation application where it related to a volumetric change in discharge.

As described in response to EPA Recommendation 3, the Modification does include new clean water diversion dams and pipelines to be constructed around the Pit 8 Extension.

Recommendation 3

The EPA recommends that:

- *Further information is provided regarding the design of the clean water diversion system, including the discharge point and practical measures considered to prevent, control, abate and/or mitigate impacts from the discharge.*
- *The clean water diversion system is considered in the surface water quality monitoring program.*

Response

Clean Water Diversion System Design

The location of the clean water discharge point from the Pit 8 Extension area would be confirmed through detailed design to be completed prior to construction of the infrastructure. WCPL would apply to vary EPL 12425, in consultation with NSW EPA, to include the new clean water discharge point once its location has been confirmed.

The design capacity of proposed upslope diversion dams (and supporting pipelines to transfer clean water) would depend on the size of the catchment, the design life of the upslope diversion system and the potential consequences of a breach. The upslope diversion dams would be operated as dry detention basins. Suitable energy dissipation works would be incorporated at the discharge point to achieve non-erosive flow velocities to Wollar Creek.

Further details on the upslope diversions would be provided in the revised Water Management Plan, subject to the conditions of the modified Development Consent (SSD-6764).

Additional Surface Water Monitoring

WCPL plans to establish an additional surface water quality monitoring site on Wollar Creek, downstream of its confluence with Barigan Creek and upstream of the Modification open cut extension. This site would be used as an upstream reference site for assessing the mine's contribution to downstream surface water quality on Wollar Creek.

WCPL also plans to establish an additional streamflow gauging station on Wollar Creek (refer below).

Recommendation 4

> *The EPA recommend that the SWMP is reviewed and updated to reflect current operations and the proposed modification as part of any approval of the proposal. The EPA can provide further detail on these matters as part of any recommended condition considerations for the proposal. The EPA recommends these matters be considered as part of any revision of the SWA.*

Relevant to this recommendation, NSW EPA also states:

> *In particular, the EPA provides the comments below on potential issues with the existing monitoring program for consideration:*
>
> - *Appropriateness of upstream monitoring locations, noting apparent extensions of Pit 6,*
> - *Monitoring locations downstream of Moolarben Coal Complex extension may not be representative of natural conditions,*
> - *Including an additional monitoring location further upstream on Wollar Creek, noting proposal may impact existing monitoring point,*
> - *Including additional monitoring locations in undisturbed catchments upstream of the site to measure potential deviations from natural conditions,*
> - *Considering all pollutants that have the potential to impact receiving waters and providing a rationale for the analytes to be tested, or alternatively where potential pollutants are not proposed for monitoring, inclusion of appropriate justification,*
> - *Clarifying methodology used to derive the proposed water quality impact criteria, including use of appropriate reference sites.*

Response

It is noted that the matters raised by NSW EPA relate to the existing surface water monitoring program for the Wilpinjong Coal Mine. WCPL would update the Surface Water Management Plan (a component of the Water Management Plan) to incorporate the Modification, should it be approved, subject to the conditions of Development Consent (SSD-6764). The comments raised by NSW EPA would be considered as part of the revision of the Water Management Plan to be prepared in consultation with NSW EPA and DCCEEW – Water.

NSW EPA's submission indicates that there are extensions to Pit 6. Pit 6 is currently an active mining area associated with the existing approved Wilpinjong Coal Mine. The Modification does not include any proposed extension to the approved Pit 6.

WCPL plans to establish an additional upstream surface water quality monitoring site on Wollar Creek. In addition, WCPL proposes to establish a new surface water flow gauging station on Wollar Creek, upstream of the confluence of Wollar Creek and Wilpinjong Creek, which would provide additional flow data for analysis of the mine's contribution to surface water flows in the locality.

Air Quality

Recommendation 5

The EPA recommends the AQIA be amended to include the following:

- *A scenario which employs reactive measures to demonstrate that no additional exceedances for 24-hour average $PM_{2.5}$ criteria will occur due to the proposal,*
- *Describes the actual reactive measures which will be utilised to achieve compliance with the impact assessment criteria,*
- *Specific details of reactive measures previously used at Wilpinjong Coal Mine to mitigate dust impacts.*

Response

The *Air Quality Impact Assessment* (AQIA) (Airen Consulting Pty Ltd [Airen Consulting], 2025a) identified a potential for minor short-term particulate matter criteria exceedances (i.e. cumulative criteria for 24-hour average particulate matter with a diameter less than 2.5 micrometres [$PM_{2.5}$]) occurring at the former Wollar Public School (Receiver 901 and 944) of approximately 0.1 to 0.5 micrograms per cubic metre (µg/m^3) above EPA assessment criteria in 2030 and 2032 (Airen Consulting, 2025a). The AQIA modelling adopted a conservative approach, as it did not incorporate any operational controls (i.e. reactive measures).

The modelling identified one day of potential exceedance of the 25 µg/m^3 (24-hour average) $PM_{2.5}$ criteria. On this day the modelled background $PM_{2.5}$ concentration was 23.3 µg/m^3 and the contribution from the Wilpinjong Coal Mine inclusive of the Modification was 1.8 to 2.0 µg/m^3 (i.e. the Wilpinjong Coal Mine would potentially contribute approximately 7.2 to 7.9% to total modelled $PM_{2.5}$ on this day at the former Wollar Public School) (Airen Consulting, 2025a).

The Wilpinjong Coal Mine air quality monitoring program, real-time response protocol and associated triggers are outlined in the approved Wilpinjong Coal Mine Air Quality Management Plan (WCPL, 2022). The Real Time Response Protocol is initiated when any of the following staged triggers are met, with response actions escalating by trigger level in accordance with the Real Time Response Triggers:

- 24-hour rolling average particulate matter with a diameter less than 10 micrometres [PM_{10}] reading is greater than 35 µg/m^3 at Tampered Element Oscillating Microbalance (TEOM)03 or TEOM04; or
- 24-hour rolling average PM_{10} reading is greater than 45 µg/m^3 at TEOM03 or TEOM04; or
- average wind speeds are greater than 8 metres per second (m/s) and there is no rain (i.e. adverse meteorological conditions).

The standard protocol would involve the following steps as outlined in the Air Quality Management Plan:

1) *Source Identification – identification of the mining activities with the most potential for excessive dust generation;*
2) *Management Strategy – determination of dust control and management measures that will be utilised to minimise air quality emissions. This may include modifying operations or shutting down equipment or increased dust suppression activities by water carts;*
3) *Implementation – implement the chosen dust control and management measures, generally effective immediately once the strategy is determined; and*
4) *Review – compare the results of the air quality monitoring program with the Air Quality Criteria.*

In practice, this is an integrated protocol that combines predictive meteorology and real-time monitoring with staged operational controls that are ultimately the decision of the Dispatch Operator and Environmental Department to avoid elevated particulate conditions.

WCPL operates continuous real-time $PM_{2.5}$ monitoring in Wollar (TEOM05, co-located adjacent to TEOM03), commissioned in December 2017. TEOM05 records instantaneous $PM_{2.5}$ concentrations and rolling 24-hour average $PM_{2.5}$ concentrations. The data is used as an operational management tool to identify ambient trends, gauge the potential influence of mine activities on Wollar, and support ongoing air quality model validation and comparative assessment.

No $PM_{2.5}$ trigger values are applied in the Air Quality Management Plan, for the reasons set out in the following extract from the Air Quality Management Plan:

> *Note: As described in the WEP EIS, the great majority of the mass of particles generated from WCPL activities are due to abrasion or crushing of rock and coal and general disturbance of dusty material. These particulates will generally be larger than 2.5µm, as sub-2.5µm particles are usually through combustion processes including combustible engines and wood fired smoke for example. Therefore, the emissions of $PM_{2.5}$ occurring from mining activities are small in comparison to the total dust emissions and in practice the concentrations of $PM_{2.5}$ in the vicinity of the mining dust sources are likely to be low.*
>
> *Since the commencement of monitoring for $PM_{2.5}$ in the Village of Wollar, WCPL air quality specialist has reviewed and analysed the $PM_{2.5}$ monitoring data (Appendix 5). This review has concluded there is no correlation between the Mine's activities and historical $PM_{2.5}$ results in the Village of Wollar. As a result of this review, WCPL do not propose real-time response triggers for $PM_{2.5}$ monitoring at this stage.*
>
> *However, this $PM_{2.5}$ assessment will be undertaken annually by WCPL's air quality monitoring specialist to ensure if there is a correlation between the Mine's activities and historical $PM_{2.5}$ results in the Village of Wollar, then appropriate triggers are identified and implemented in this AQMP. Any changes required to this AQMP as a result of $PM_{2.5}$ monitoring will be undertaken in accordance with Section 10.0 and summarised in the Annual Review.*

This is further reinforced by the modelling outcome, which shows that on the single day of potential modelled exceedance, the Wilpinjong Coal Mine's contribution to total $PM_{2.5}$ was limited to approximately 7.2 to 7.9% at the former Wollar Public School.

Notwithstanding the absence of $PM_{2.5}$ specific real-time triggers, the reactive management measures implemented under the existing PM_{10} and meteorological trigger framework reduce emissions from controllable dust sources and therefore, would also reduce the Wilpinjong Coal Mine's $PM_{2.5}$ contribution. To address the EPA's recommendation, an additional modelling scenario has been undertaken by Airen Consulting that represents the implementation of these reactive measures during the modelled exceedance day to demonstrate that the Modification would not result in any exceedances of the 24-hour $PM_{2.5}$ criterion at sensitive receptors when reactive measures are implemented consistent with the approved Air Quality Management Plan.

A revised dispersion model has been configured to simulate Wilpinjong Coal Mine's reactive air quality management system as accurately as possible. The hourly average modelled $PM_{2.5}$ concentrations at the closest sensitive receptor (Receiver 901) were examined and reactive controls were assumed to be implemented when an alarm was determined. An alarm was defined (based on the Air Quality Management Plan) by:

- modelled rolling 24-hour average $PM_{2.5}$ > 22.5 µg/m^3 (i.e. 90% of the $PM_{2.5}$ criterion, as per the setting of the PM_{10} alert level); and
- contributions from the Wilpinjong Coal Mine.

The modelled reactive controls included "Shut down all operations excluding train load out", as per the approved Air Quality Management Plan. There were 24-hours in the representative meteorological year when these reactive controls were triggered for the management of $PM_{2.5}$.

Figure 9 shows the results from the reactive control model in terms of 24-hour average $PM_{2.5}$ concentrations at Receiver 901. These results show, in all assessment scenarios, the implementation of reactive controls in response to elevated off-site air quality levels would be effective at reducing the Wilpinjong Coal Mine contribution to 24-hour average $PM_{2.5}$ concentrations at key sensitive receptors.

WCPL would continue to operate the Wilpinjong Coal Mine in accordance with the Air Quality Management Plan including reactive air quality management. WCPL aims to maintain compliance at all sensitive receptors and is committed to proactively modifying operational activities to minimise the risk of air quality impacts. This would include consideration of adding real-time $PM_{2.5}$ trigger levels in the update to the Air Quality Management Plan for the Modification.

WCPL also notes that Receiver 901 is not a privately-owned residence. Rather it is a residence associated with the former Wollar Public School which is owned by the NSW Department of Education (i.e. on Crown Land).

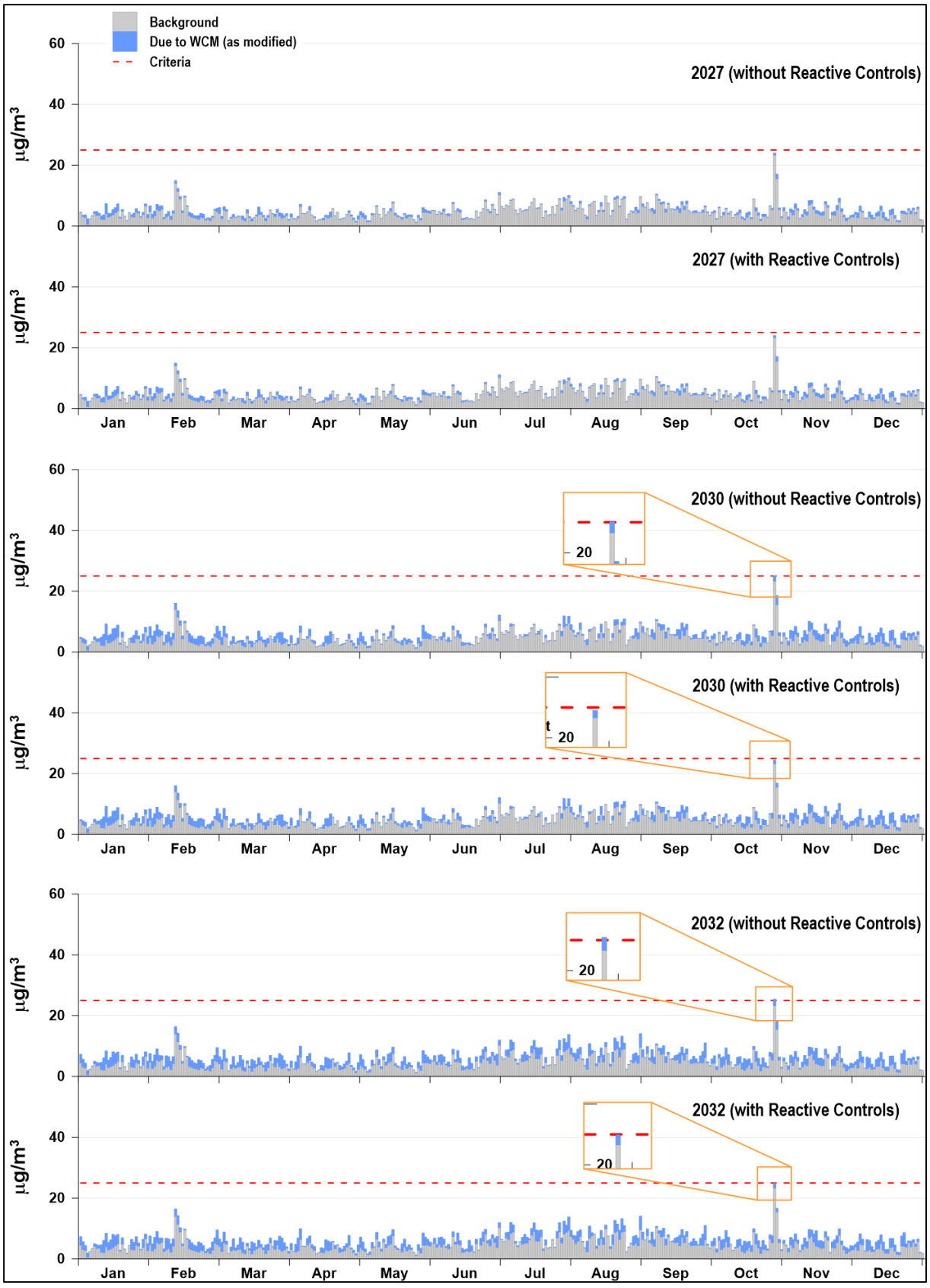


Figure 9
Modelled 24-hour Average $PM_{2.5}$ Concentrations at Receiver 901 With and Without Reactive Controls

Recommendation 6

The EPA recommends that:

- *The AQIA be amended to incorporate the most recent data projections from other nearby mining operations to ensure that the cumulative assessment of dust is adequate.*
- *The AQIA transparently outline how cumulative dust impacts from nearby sources (including open cut mines) have been assessed in the AQIA.*

Response

The nearest proposed active mining areas of the Moolarben Coal Complex would be over 15 km from Wollar. On that basis, and having regard to the separation and intervening regional setting, the incremental contributions from the Moolarben Coal Complex to predicted particulate matter concentrations at sensitive receivers adjacent to the Wilpinjong Coal Mine are expected to be very low. Notwithstanding, the AQIA cumulative impact assessment review has been updated.

Air quality impacts of the approved operation at the Moolarben Coal Complex were most recently assessed by Todoroski Air Sciences (TAS) (TAS, 2017). The modelling by TAS (2017) showed very little risk of cumulative air quality impacts between Wilpinjong Coal Mine and Moolarben Coal Complex in the key area of interest, being Wollar. Specifically, the modelling by TAS (2017) indicated that the Moolarben Coal Complex contributes less than 1 $\mu g/m^3$ to annual average PM_{10} concentrations in Wollar. These levels were not significant enough to change the outcome of the assessment. Moolarben Coal Operations Pty Ltd has subsequently proposed the Moolarben Coal Complex OC3 Extension Project. This project is yet to be approved, however, the potential air quality impacts of the project, by modelling, have been documented by TAS (TAS, 2022). The modelling by TAS (2022) did not include predictions at Wollar. The closest receptor to Wollar in the TAS (2022) assessment was Receiver 418, approximately 5.5 km west of Wollar.

Table 2 shows the maximum incremental concentrations and deposition levels (of the three assessment years) at Receiver 418 due to the Moolarben Coal Complex OC3 Extension Project. Incremental levels at Receiver 901 (Wollar) have been estimated from these predictions based on the additional 5.5 km distance between the two locations. Again, the Moolarben Coal Complex is estimated to contribute less than 1 $\mu g/m^3$ to annual average PM_{10} concentrations in Wollar. Estimates of cumulative levels at Wollar (Receiver 901) demonstrate compliance with the respective criteria. This is a conservative approach as the assumed background levels may already contain some contributions from Moolarben Coal Complex, so there is potential for double counting.

Table 2
Estimated Cumulative Particulate Matter Levels in Wollar
(Assuming the Moolarben Coal Complex OC3 Extension Project Proceeds)

Indicator and averaging time	Maximum incremental level at Receiver 418 due to Moolarben Coal Complex OC3 Extension Project (TAS, 2022)	Estimated incremental levels at Receiver 901 due to Moolarben Coal Complex OC3 Extension Project	Original maximum cumulative levels at Receiver 901 due to Wilpinjong Coal Mine Pit 8 Extension Modification and other sources (Airen Consulting, 2025a)	Revised cumulative levels at Receiver 901 due to Wilpinjong Coal Mine Pit 8 Extension Modification and other sources
Maximum 24-hour average PM_{10} ($\mu g/m^3$)	2.8	1.8	48	49.8
Annual average PM_{10} ($\mu g/m^3$)	0.4	0.3	19.6	19.9
Maximum 24-hour average $PM_{2.5}$ ($\mu g/m^3$)	0.7	0.2	25.5	25.7
Annual average $PM_{2.5}$ ($\mu g/m^3$)	0.1	0.1	6.2	6.3
Annual average TSP ($\mu g/m^3$)	0.7	1	33	34
Annual average dust deposition (g/m^2/month)	0	0	1.8	1.8

^ Modelling of the reactive measures scenario (as described in response to Recommendation 5 above) shows Maximum 24-hour average $PM_{2.5}$ criterion is reduced to 24.9 $\mu g/m^3$ (i.e. no exceedance at Receiver 901).

* Modelling of the reactive measures scenario (as described in response to Recommendation 5 above plus revised incremental contribution for Moolarben Coal Complex OC3 Extension Project) would result in a minor Maximum 24-hour average $PM_{2.5}$ criterion exceedance by 0.1 $\mu g/m^3$ at Receiver 901).

TSP = total suspended particulates

g/m^2/month = grams per square metre per month

It is noted that Table 2 indicates original and revised maximum cumulative 24-hour average $PM_{2.5}$ concentrations marginally above 25 µg/m³ at Receiver 901 (i.e. results without the reactive measures scenario). As documented in the response to Recommendation 5, the single day exceedance is driven by elevated background $PM_{2.5}$ (23.3 µg/m³), with the modelled contribution from the Wilpinjong Coal Mine limited to 1.8 to 2.0 µg/m³ (approximately 7.2 to 7.9% of total $PM_{2.5}$ on that day).

The reactive controls assessment undertaken in response to Recommendation 5 demonstrates that when elevated off-site $PM_{2.5}$ conditions occur, implementing reactive operational controls consistent with the approved Air Quality Management Plan would reduce the controllable mine contribution and remove the modelled exceedance risk attributable to the Wilpinjong Coal Mine. While a further conservative additional increment of 0.2 µg/m³ has been applied in Table 2 for the Moolarben Coal Complex OC3 Extension Project, the residual exceedance of approximately 0.1 µg/m³ remains dominated by background, rather than controllable mine emissions.

The background $PM_{2.5}$ concentration used in the cumulative assessment is not differentiated by source and therefore would already incorporate regional $PM_{2.5}$ contributions from multiple emitters, (i.e. including existing contributions from the Moolarben Coal Complex). Accordingly, treating the incremental $PM_{2.5}$ contribution from the Moolarben Coal Complex OC3 Extension Project as purely additive to the adopted background (and then adding that again to the Wilpinjong contribution) is inherently conservative and is likely to overstate cumulative $PM_{2.5}$ by introducing an element of double counting.

Maximum contributions from the Wilpinjong Coal Mine are also unlikely to occur on the same day as maximum contributions from the Moolarben Coal Complex, due to the direction of key mining areas relative to Wollar.

WCPL also notes that Receiver 901 is not a privately-owned residence. Rather it is a residence associated with the former Wollar Public School which is owned by the NSW Department of Education (i.e. on Crown Land).

Greenhouse Gas Emissions

Recommendation 7

The EPA recommends DPHI request the Proponent to clearly define the assessment boundary for the proposed Modification and consider all relevant estimates over the course of the project's lifetime.

Response

The Modification does not propose any change to the approved maximum annual ROM coal production rate of 16 Mtpa. The Modification proposes the extraction of an additional net 6.1 Mt of ROM coal and the annual ROM coal extraction under the Modification Scenario would remain below the 16 Mtpa ROM coal extraction limit in all years (Table 3).

Table 3
ROM Coal Extraction Under the Modification Scenario and Modification Only Scenario 2

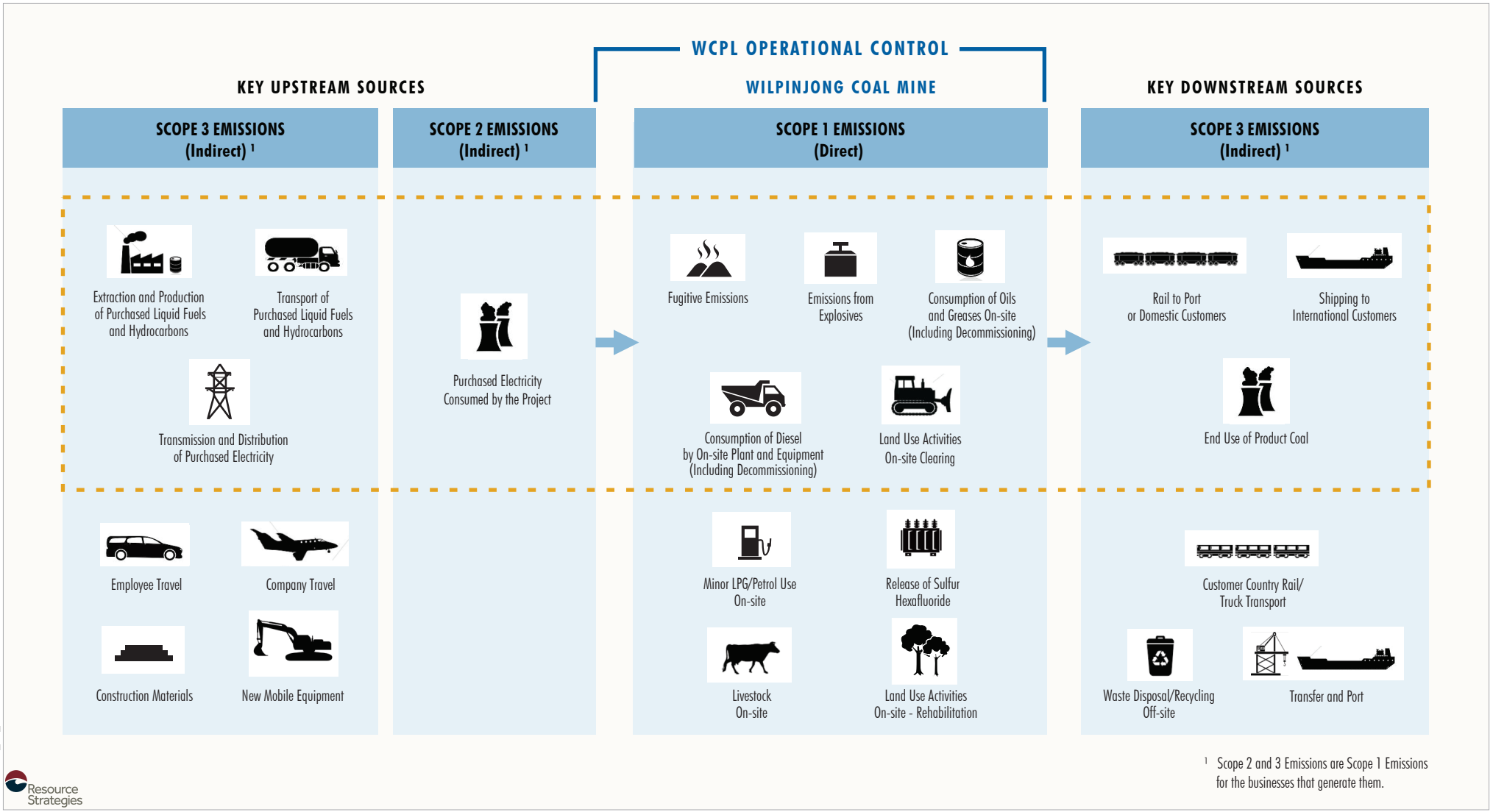
Financial Year (FY)	ROM Coal Extraction (Mt)	
	Modification Scenario	Modification Only Scenario 2
FY27	9.7	0.1
FY28	9.6	0.9
FY29	9.2	2.0
FY30	5.2	-2.6
FY31	6.0	1.2
FY32	6.7	2.7
FY33	3.7	1.8
Total	**50.1**	**6.1**

WCPL has confirmed that the greenhouse gas assessment boundary (Figure 10) adopted for the *Modification Greenhouse Gas Assessment* (WCPL, 2025b) and associated *Greenhouse Gas Calculation Report* (Airen Consulting, 2025b) is consistent with the NSW EPA Guide for Large Emitters and includes Scope 1, Scope 2, and material Scope 3 emissions across all development years of the Modification (i.e. FY27 to FY37). The Greenhouse Gas Assessment (WCPL, 2025b) provides emissions estimates for the operational period (i.e. ROM coal extraction period in FY27 to FY33), with estimates also provided for decommissioning years (FY34 to FY37), capturing emissions associated with backfilling and closure activities. Scope 1 and Scope 2 emission estimates for the Modification Scenario calculated by Airen Consulting (2025b) are summarised in Table 4.

Table 4
Scope 1 and Scope 2 Emissions Under the Modification Scenario

Financial Year	Scope 1 Emissions (Mt CO_2-e)	Scope 2 Emissions^ (Mt CO_2-e)
FY27	0.154	0.009
FY28	0.142	0.007
FY29	0.134	0.004
FY30	0.113	0.001
FY31	0.119	0.001
FY32	0.106	0.001
FY33	0.083	0.001
FY34	0.064	0.000
FY35	0.009	-
FY36	0.005	-
FY37	0.005	-

^ Scope 2 emissions have been updated to use the most recent emission factors released in November (discussed below)
Mt CO_2-e = million tonnes of carbon dioxide equivalent



WIL-22-17 MOD3_RTS_001A

Resource Strategies

LEGEND

Assessment Boundary (Quantified in this Assessment)

Peabody

WILPINJONG COAL MINE

Schematic Diagram

Adopted Greenhouse Gas Assessment Boundary

Figure 10

Recommendation 8

The EPA recommends DPHI request the Applicant to review and update their greenhouse gas emissions estimates using the most updated emission factors, and to provide sufficient details, including all assumptions, methodologies, and input data, to enable replication of the estimates.

Response

Revised Greenhouse Gas Calculations

The Greenhouse Gas Assessment (WCPL, 2025b) and associated Greenhouse Gas Calculation Report (Airen Consulting, 2025b) were based on the *National Greenhouse Accounts Factors 2024* (NSW DCCEEW, 2024). A revised publication was released in November 2025, referred to as the *National Greenhouse Gas Accounts Factors 2025* (NSW DCCEEW, 2025a). The relevant Scope 1 emission factors did not change between these two publications.

However, the Scope 2 emission factors were revised in November 2025 following lodgement of the Modification Report in September 2025. The latest emission factors are published in *Australia's emissions projections 2025* (Commonwealth DCCEEW, 2025). The 2024 and 2025 (revised) Scope 2 emission factors are provided in Table 5.

Table 5
Revised Scope 2 Emission Factors

Period	Old Emission Factors (Commonwealth DCCEEW, 2024a)			Revised Emission Factors (Commonwealth DCCEEW, 2025)		
	Scope 2	Scope 2 and 3	Scope 3*	Scope 2	Scope 2 and 3	Scope 3*
2026	0.51	0.55	0.04	0.55	0.57	0.02
2027	0.47	0.5	0.03	0.5	0.52	0.02
2028	0.4	0.43	0.03	0.38	0.40	0.02
2029	0.34	0.36	0.02	0.24	0.25	0.01
2030	0.21	0.23	0.02	0.11	0.12	0.01
2031	0.15	0.16	0.01	0.09	0.09	0.00
2032	0.15	0.16	0.01	0.09	0.10	0.01
2033	0.13	0.14	0.01	0.08	0.09	0.01
2034	0.09	0.09	0.00	0.07	0.07	0.00
2035	0.09	0.09	0.00	0.07	0.08	0.01
2036	0.07	0.08	0.01	0.08	0.08	0.00
2037	0.06	0.07	0.01	0.08	0.08	0.00
2038	0.06	0.06	0.00	0.08	0.08	0.00
2039	0.06	0.06	0.00	0.08	0.08	0.00
2040	0.06	0.06	0.00	0.08	0.08	0.00

Source: Commonwealth DCCEEW (2024a; 2025).
* Calculated by subtracting the Scope 2 column from the Scope 2 and 3 column.

Revised annual Scope 2 emissions for all scenarios along with annual averages and total emissions are provided in Table 6.

Table 6
Revised Scope 2 Emissions Under All Scenarios

Financial Year	Scope 2 Emissions (t CO_2-e)				
	Baseline Scenario 1	Baseline Scenario 2	Modification Scenario	Modification Only Scenario 1	Modification Only Scenario 2
FY27	8,901	8,901	9,037	136	136
FY28	6,021	6,021	6,768	747	747
FY29	3,305	3,305	4,325	1,020	1,020
FY30	846	1,868	1,185	339	-684
FY31	538	923	1,173	635	250
FY32	456	762	1,376	920	614
FY33	379	379	766	387	387
FY34	108	96	116	9	20
FY35	-	-	-	-	-
FY36	-	-	-	-	-
FY37	-	-	-		-
Annual Average^	**2,921**	**3,166**	**3,519**	**598**	**353**
Total	**20,554**	**22,257**	**24,747**	**4,194**	**2,491**

^ Annual Average excludes decommissioning years.
t $CO_{2\text{-}e}$ = tonnes of carbon dioxide equivalent

Scope 3 emissions have been updated to use the rail and freight emission factors in *Greenhouse gas reporting: conversion factors 2025* (Department for Environment, Food and Rural Affairs, 2025), noting that while the EPA referenced the 2024 factors, more recent factors are now available and have been applied. Previously calculated and Revised Scope 3 emission factors are provided in Table 7 and revised annual Scope 3 emissions for all scenarios along with annual averages and total emissions are provided in Table 8.

Table 7
Revised Scope 3 Emission Factors

Activity	National Greenhouse and Energy Reporting (Safeguard Mechanism) Rule 2015 (kg CO_2.e/t.km)	Greenhouse gas reporting: conversion factors 2025 (kg CO_2.e/t.km)
Transport (rail)	0.01630	0.02779
Transport (shipping)	0.00539	0.00353

Source: Department for Environment, Food and Rural Affairs (2025).

Table 8
Revised Scope 3 Emissions Under All Scenarios

Financial Year	Scope 3 Emissions (t CO_2-e)				
	Baseline Scenario 1	Baseline Scenario 2	Modification Scenario	Modification Only Scenario 1	Modification Only Scenario 2
FY27	18,520,590	18,520,590	18,734,797	212,965	212,965
FY28	17,132,701	17,132,701	18,692,987	1,551,230	1,551,230
FY29	14,556,305	14,556,305	17,961,941	3,385,850	3,385,850
FY30	6,958,614	15,374,307	9,517,253	2,543,814	5,822,978
FY31	5,398,801	9,267,445	11,353,724	5,920,349	2,074,184
FY32	4,604,845	7,699,720	12,626,215	7,974,759	4,897,868
FY33	3,706,299	3,706,299	20,386	3,355,530	3,356,093
FY34	2,316	1,900	16,039	13,723	14,139
FY35	2,316	1,900	2,316	-	416
FY36	1,158	950	1,158	-	208
FY37	1,158	950	1,158	-	208
Annual Average^	**10,125,451**	**12,322,481**	**12,701,043**	**3,563,500**	**1,379,316**
Total	**70,885,102**	**86,263,065**	**88,927,973**	**24,958,220**	**9,670,184**

^ Annual Average excludes decommissioning years.

The revisions were limited to updated emission factors for Scope 2 and Scope 3, and did not affect Modification Scope 1 emissions. As a result, the Scope 2 and Scope 3 estimates have been updated and applied retrospectively across the relevant assessment years, with total Scope 2 emissions for the Modification Scenario increasing by approximately 4.7% (relative to the Modification Greenhouse Gas Assessment) and total Scope 3 emissions for the Modification Scenario decreasing by 0.4% (relative to the Modification Greenhouse Gas Assessment), as reflected in the revised Scope 2 and Scope 3 totals presented.

Greenhouse Gas Emission Estimate Methodology

The *Greenhouse Gas Calculation Report* (Airen Consulting, 2025b) outlines the underlying assumptions and input data used to develop the greenhouse gas emissions estimates for the Modification. Table 2 of the *Greenhouse Gas Calculation Report* (Airen Consulting, 2025b) has been updated to reflect the changes described above and is presented as Table 9.

Table 9
Revised Greenhouse Gas Emission Estimation Methodologies

Activity	Description	Scope(s)	Emission Estimation Methodology	Emission Factor	
				Scope 1	Scope 3
Diesel usage	Combustion of diesel fuel from on-site mobile and stationary plant and equipment	1, 3	Emission factors from 'Diesel Fuel' in Table 8 of the National Greenhouse Accounts (NGA) Factors (NSW DCCEEW, 2025a).	2709.72 kg CO_2-e/kL	667.78 kg CO_2-e/kL
Fugitive	Fugitive emissions from the extraction of coal	1	Measurement Determination Chapter 3, Part 3.2. Division 3.2.3, Subdivision 3.2.3.2, Method 2. Fugitive emissions estimations have been undertaken using the site gas assignment model.	Discussed further below.	N/A
Blasting	Detonation of explosives used for blasting	1	Emission factors from NGA Factors (NSW Department of Climate Change, 2008). Blasting emissions are not reported in the more recent NGA Factors publications.	0.017 t CO_2-e/t Explosives	N/A
Vegetation removal	Loss of carbon sink from vegetation removal in construction	1	Calculated using "Carbon Gauge" developed by the Transport Authorities Greenhouse Group (Transport Authorities Greenhouse Group, 2013). Vegetation of "Class D Open woodlands" and "Class I Grasslands". Biomass class set to "Class 3:100-150 (tonnes of dry matter per hectare [t dry matter/ha])" based on site location.	Table 10	N/A
Greases	Emissions from greases	1, 3	Emission factors from 'Petroleum based greases' in Table 8 of the NGA Factors (NSW DCCEEW, 2025a).	135.8 kg CO_2-e/kL	698.4 kg CO_2-e/kL
Oils	Emissions from oils	1, 3	Emission factors from 'Petroleum based oils (other than petroleum based oil used as fuel), e.g. lubricants' in Table 8 of the NGA Factors (NSW DCCEEW, 2025a).	539.32 kg CO_2-e/kL	698.4 kg CO_2-e/kL
Electricity	Electricity usage	2, 3	Emission factor projections from Commonwealth DCCEEW (2025).	Table 5	Table 5
Transport (rail)	Transport of product coal by rail to port	3	Emission factors from *Greenhouse gas reporting: conversion factors 2025* (Department for Environment, Food and Rural Affairs, 2025). Freighting goods - Freight train	N/A	0.02779 kg CO_2-e/t.km
Transport (shipping)	Transport of product coal by ship to market	3	Emission factors from *Greenhouse gas reporting: conversion factors 2025* (Department for Environment, Food and Rural Affairs, 2025). Freighting goods - Cargo ship, bulk carrier, average	N/A	0.00353 kg CO_2-e/t.km
Energy production	Combustion of thermal coal in power generators by end users	3	Emission factors from 'Bituminous coal' in Table 4 of the NGA Factors (NSW DCCEEW, 2025a).	N/A	2436.48 kg CO_2-e/t

kg $CO_{2\text{-}e}$/kL = kilograms of carbon dioxide equivalent per kilolitre
t $CO_{2\text{-}e}$/t Explosives = tonnes of carbon dioxide equivalent per tonne of Explosives
kg $CO_{2\text{-}e}$/t.km = kilograms of carbon dioxide equivalent per tonne kilometre
kg $CO_{2\text{-}e}$/t = kilograms of carbon dioxide equivalent per tonne

Additional explanation in relation to emissions associated with land clearing, fugitives and explosives is provided below.

Land Clearing Emissions

As land clearing is not covered under the *National Greenhouse and Energy Reporting Scheme* (NGERS) or the NGA Factors (Commonwealth DCCEEW, 2025), the methodology in Appendix E of the *Greenhouse Gas Assessment Workbook for Road Projects* (Transport Authorities Greenhouse Group, 2013) was adopted to derive emission intensity values for woodland and DNG clearing.

Potential maximum biomass class mapping in the *Greenhouse Gas Assessment Workbook for Road Projects* places the Modification within a potential maximum biomass Class of 3. Accordingly, woodland disturbance was assigned an emission factor of 307 tonnes of carbon dioxide equivalent per hectare (t CO_2-e/ha), based on PCT alignment with Vegetation Class C (open forest), consistent with Table 2 of Appendix E of the *Greenhouse Gas Assessment Workbook for Road Projects* (replicated below as Table 10). DNG disturbance was assigned an emission factor of 110 t CO_2-e/ha, corresponding to Vegetation Class I (grassland).

Annual land clearing estimates (separated as DNG and woodland) for each scenario are provided in Table 11.

Table 10
Vegetation Class Emission Factors (t CO_2-e/ha)

	Potential Maximum Biomass Class						
Vegetation Class	**1**	**2**	**3**	**4**	**5**	**6**	**7**
A	-	-	237	384	532	594	768
B	-	-	237	401	554	618	-
C	77	209	307	521	718	-	-
D	77	209	307	-	-	-	-
E	80	217	316	-	-	-	-
F	106	287	-	-	-	-	-
G	113	-	-	-	-	-	-
H	115	309	-	-	-	-	-
I	110	110	110	110	110	110	110

Source: Transport Authorities Greenhouse Group (2013)
Note: Highlighted cells were adopted for the Modification estimates.

Table 11
Annual Land Clearing Estimates for All Scenarios (ha)

Financial Year	Baseline Scenario 1		Baseline Scenario 2		Modification Scenario		Modification Only Scenario 1		Modification Only Scenario 2	
	Woodland	DNG	Woodland	DNG	Woodland	DNG	Woodland	DNG	Woodland	DNG
FY27	65	10	65	10	66	10	1	0	1	0
FY28	55	5	55	5	64	6	9	1	9	1
FY29	48	4	76	4	68	7	20	3	-7	3
FY30	25	3	37	3	42	6	17	3	5	3
FY31	15	2	25	2	48	7	33	5	23	5
FY32	15	2	15	2	59	9	44	7	44	7
FY33	19	3	19	3	19	3	0	0	0	0

Fugitive Emissions

The fugitive emissions estimates in the Greenhouse Gas Assessment (WCPL, 2025) are based on the Fugitive Emissions Study undertaken for the Wilpinjong Coal Mine by CoalBed Energy Consultants Pty Limited (CoalBed) (CoalBed, 2023) and estimates of the annual extraction of ROM coal based upon relative depth from the surface.

The Fugitive Emissions Study has been prepared in accordance with the requirements of Method 2 as outlined in the:

- *National Greenhouse and Energy Reporting Regulations 2007*;
- *National Greenhouse and Energy Reporting (Measurement) Determination* 2008; and
- *Guidelines for the Implementation of NGER Method 2 or 3 for Open Cut Coal Mine Fugitive GHG Emissions Reporting (C20005)* (Australian Coal Association Research Program [ACARP], 2011) (ACARP Guideline).

22 borehole sites were used to provide fugitive emission gas sampling data including 16 'type' boreholes and six 'validation' boreholes as per the definition in the ACARP Guidelines (CoalBed, 2023). Data across all 22 borehole sites confirmed a single distinct carbon dioxide dominated 'depleted' gas zone (CoalBed, 2023).

CoalBed concluded that the sample sufficiency and uncertainty was found to be adequate for the Wilpinjong Coal Mine gas domain and that no supplementary drilling is required (CoalBed, 2023). The summary of gas content at the Wilpinjong Coal Mine is provided in Table 12.

A summary of carbonaceous material based on relative depth from the surface for the Baseline Scenario and the Modification Scenario is provided in Table 13 and 14 respectively.

Table 12
Summary of Gas Content at the Wilpinjong Coal Mine

Depth Interval	Gas Content (m^3/t)	Methane (CH_4) (Ratio)	Carbon dioxide (CO_2) (Ratio)	Total CO_2-e (t/t)
0 to 10 m	0.52	0.02	0.98	0.00113
10 to 20 m	0.64	0.01	0.99	0.00134
20 to 30 m	0.55	0.02	0.98	0.00116
30 to 40 m	0.51	0.03	0.97	0.00122
40 to 50 m	0.58	0.02	0.98	0.00126
50 to 60 m	0.69	0.01	0.99	0.00136
60 to 70 m	0.84	0.01	0.99	0.00168
70 to 80 m	0.76	0.02	0.98	0.00164
80 to 90 m	0.77	0.02	0.98	0.00166
90 to 100 m	1.22	0.01	0.99	0.00238
100 m+^	1.22	0.01	0.99	0.00238

Source: CoalBed (2023)

^ Depth intervals beyond 100 m are not reported in CoalBed (2023). For carbonaceous material occurring below 100 m, gas content and composition have been assumed equivalent to the 90 to 100 m interval for calculation purposes.

m^3/t = cubic metres per tonne

Table 13
Carbonaceous Material by Seam Depth for the Baseline Scenario

Depth (m)	FY25	FY26	FY27	FY28	FY29	FY30	FY31	FY32	FY33
0 to 10 m	126,639	208,918	228,633	165,736	80,901	104,540	52,919	35,993	10,982
10 to 20 m	800,498	947,535	725,828	407,482	619,236	377,909	237,507	350,441	127,421
20 to 30 m	1,530,418	1,591,049	1,564,103	1,394,405	836,528	395,090	359,385	243,808	217,175
30 to 40 m	1,409,663	1,363,412	1,477,845	1,595,953	1,566,474	1,003,786	983,997	542,439	685,768
40 to 50 m	2,393,327	1,852,724	2,429,823	1,455,254	2,329,977	1,609,826	1,372,870	1,138,638	980,575
50 to 60 m	5,446,993	3,100,141	2,462,846	1,858,054	2,212,960	1,199,068	794,314	819,255	556,771
60 to 70 m	3,268,826	2,438,382	2,108,188	2,026,649	1,145,344	251,292	81,393	159,861	63,102
70 to 80 m	318,157	707,770	1,726,539	2,297,669	969,374	27,631	3,074	0	1,046
80 to 90 m	338	78,323	740,305	674,784	265,436	0	0	0	0
90 to 100 m	0	0	2,129	1,640	467	0	0	0	0

Table 14
Carbonaceous Material by Seam Depth for the Modification Scenario

Depth (m)	FY25	FY26	FY27	FY28	FY29	FY30	FY31	FY32	FY33
0 to 10 m	126,639	208,918	234,066	172,490	82,779	108,024	59,163	53,884	12,183
10 to 20 m	800,498	947,535	805,630	553,613	987,165	605,957	395,751	550,172	151,934
20 to 30 m	1,530,418	1,591,049	1,636,701	1,625,349	1,054,524	768,801	611,953	463,332	298,415
30 to 40 m	1,409,663	1,363,412	1,477,905	1,732,036	1,731,673	1,306,318	1,184,245	884,240	939,207
40 to 50 m	2,393,327	1,852,724	2,429,837	1,646,022	2,535,941	1,855,557	1,574,203	1,753,637	1,430,352
50 to 60 m	5,446,993	3,100,141	2,462,846	2,150,963	2,885,359	1,380,256	924,463	1,374,435	1,217,709
60 to 70 m	3,268,826	2,438,382	2,108,188	2,108,233	1,976,627	646,036	342,350	668,045	584,012
70 to 80 m	318,157	707,770	1,726,539	2,297,669	1,206,303	483,924	654,921	722,366	221,267
80 to 90 m	338	78,323	740,305	674,784	267,577	142,447	804,840	800,187	95,037
90 to 100 m	0	0	2,129	1,640	467	35,433	593,923	536,584	25,540
100 to 110 m^	0	0	0	0	0	131	330,549	434,134	1,698
110 to 120 m^	0	0	0	0	0	0	209,756	234,168	821
120 to 130 m^	0	0	0	0	0	0	153,414	53,717	180
130 to 140 m^	0	0	0	0	0	0	109,508	6,307	0
140 to 150 m^	0	0	0	0	0	0	2,540	0	0

^ Carbonaceous material below 100 m constitutes only 1.6% of total carbonaceous material. For these intervals, emissions have been estimated by assuming gas content and composition equivalent to the 90 to 100 m interval. Depth values greater than 100 m reflect higher surface elevations where basalt and sandstone hills remain due to differential erosion.

The average depth of cover in the Pit 8 Extension area is approximately 60 m.

Depth values greater than 100 m reflect isolated small occurrences of higher surface elevations where localised basalt and sandstone hills remain above the coal seams due to differential erosion. The gas model applies values from the 90–100 m interval to these small areas (i.e. less than 2% of the Pit 8 Extension carbonaceous material [Table 14]) with localised elevated cover depths.

Blasting Emissions

Blasting emissions were estimated by applying an emission factor of 0.17 t CO_2-e per t of explosives to the annual explosives consumption under each scenario as shown in the Greenhouse Gas Calculation Report (Airen Consulting, 2025b).

The emission factor is sourced from the 2008 NGA Factors (NSW Department of Climate Change, 2008). Blasting emissions are not reported in more recent NGA Factors publications and, on this basis, the 2008 emission factor has been retained for the assessment.

Recommendation 9

> *The EPA recommends DPHI request the Applicant to expand and provide detailed information on the proposed greenhouse gas mitigation strategy, in accordance with Sections 4.3.1 to 4.3.3 and Section 4.4 of the Large Emitters Guide.*

Response

The Greenhouse Gas Assessment (WCPL, 2025b) adopted a qualitative mitigation evaluation, appropriate to the current stage of Modification planning (conceptual design for environmental approvals) and duration of the proposal (ROM coal extraction to 2033) (WCPL, 2025b). The evaluation focused on the most material Scope 1 and 2 sources, noting diesel dominates Scope 1 emissions (approximately 74.5%), and that major fleet purchases have already occurred in anticipation of ramp down and cessation of coal extraction by 31 December 2033, limiting practical opportunities for material equipment replacement during the Modification (WCPL, 2025b).

The Greenhouse Gas Assessment (WCPL, 2025b) qualitatively evaluated the following mitigation measures:

- diesel alternatives, including premium diesel, renewable diesel, biodiesel and hydrogen derived fuels;
- hybrid equipment, including diesel kinetic storage electric loaders and diesel battery electric haul trucks;
- electrification options, including grid connected excavators or shovels, trolley assist and battery electric haul trucks;
- methane management, including coal seam pre drainage; and
- Scope 2 supply measures, including on site renewable electricity and carbon neutral electricity contracting.

Premium diesel was the only abatement measure identified that warrants further reasonable and feasible evaluation for potential implementation at the Wilpinjong Coal Mine (including a marginal cost of abatement assessment and consideration of any blasting implications).

All other abatement measures were considered to not be reasonable and feasible within the Modification context as they are currently cost prohibitive (e.g. renewable diesel supply pricing at a large premium), not commercially available, require capital intensive enabling infrastructure that cannot be justified over the remaining mine life (e.g. electrification options), are constrained by site specific factors (e.g. very low fugitive gas content for pre drainage), or would deliver immaterial abatement (e.g. the small contribution of electricity consumption to estimated combined Scope 1 and 2 emissions).

The Wilpinjong Coal Mine has an established low emissions intensity position, including an existing ROM coal emissions-intensity determination (EID) of 0.009093 t CO_2-e per t ROM coal (i.e. the second lowest emission intensity coal mine in Australia out of 68 facilities) and under the Modification would have an emission intensity of 0.018 t CO_2-e per t ROM coal (i.e. the ninth lowest emission intensity coal mine in Australia out of 68 facilities) (WCPL, 2025b).

It is noted the Modification does not seek to extend ROM coal production beyond the currently approved 31 December 2033.

WCPL has undertaken a review of the NSW EPA commissioned EMM Consulting Pty Ltd (EMM) (2025) literature review and industry scan, which was prepared to inform development of the proposed greenhouse gas mitigation guidance for NSW coal mines, to benchmark the Wilpinjong Coal Mine's greenhouse gas management practices against current and emerging abatement measures identified for the NSW coal sector.

Existing abatement mitigation measures for Scope 1 and 2 emissions identified by EMM (2025) relevant to surface mines are already being implemented where reasonable and feasible at the Wilpinjong Coal Mine. Emerging Scope 1 and 2 mitigation measures for surface mines identified by EMM (2025) are summarised in Table 15, along with if they were considered in the Modification Greenhouse Gas Assessment (WCPL, 2025b).

Table 15
EMM 2025 – Summary of Emerging Scope 1 and 2 Mitigation Measures at Surface Mines

Greenhouse Gas Source	Mitigation Measure	Notes	Technology Readiness	Potential Barriers	Risks or Disadvantages	Consideration in Greenhouse Gas Assessment
Emerging measures for Scope 1 emissions – diesel combustion						
Haul trucks	Electrification	On-board: hybrid, BEV.	Research and Development (R&D) to demonstration (>2030-2035) (possibly earlier for underground mines)	• Technology development needed. • Lack of supply of vehicles. • Lack of supply of firmed renewable electricity. • Integration of the required supporting infrastructure to existing mines. • High CAPEX.	• Risk of collision due to quiet operation. • New worker safety issues. • Batteries. • Battery efficiency affected by climate. • Battery fires.	Diesel-Battery-Electric Haul Trucks, Battery-Electric Haul Trucks.
		On-board: fuel cell/hydrogen		• Lack of supply of renewable hydrogen. • High cost of renewable hydrogen.		Hydrogen Derived Alternative Fuel
		Tethering: connection to a fixed electricity supply.		• Impractical for haul trucks at surface coal. • Mines due to distances involved.		Trolley Assist
		Trolley assist: connection to an overhead cable to power an electric drive.		• Likely to be impractical for surface coal. • Mines due to evolving mine plans.		
Other heavy mining vehicles and equipment	Electrification	General electrification of mine equipment other than haul trucks.	R&D to demonstration (>2025)	• Technology development needed. • Lack of supply of vehicles. • Lack of supply of firmed renewable electricity. • Integration of the required supporting infrastructure to existing mines. • High CAPEX.	• Battery efficiency affected by climate. • Battery fires. • New worker safety issues.	Diesel-Kinetic Storage-Electric Loaders, Excavator and/or Shovel Electrification.

Table 15 (Continued)
EMM 2025 – Summary of Emerging Scope 1 and 2 Mitigation Measures at Surface Mines

Greenhouse Gas Source	Mitigation Measure	Notes	Technology Readiness	Potential Barriers	Risks or Disadvantages	Consideration in Greenhouse Gas Assessment
		Tethering: connection to a fixed electricity supply.	Demonstration to mature (>2025)	• Requires high-voltage infrastructure. • Challenged by on-board electric power. • Restricted operational flexibility.	• Safety (high-voltage cables).	Diesel-Kinetic Storage-Electric Loaders, Excavator and/or Shovel Electrification
		Automation.	Demonstration to mature	• Technology development needed. • High CAPEX.	• New worker safety issues. • Elimination of jobs.	-
All vehicles and equipment	Renewable fuels	Switching to renewable diesel.	Demonstration to mature (>2025)	• High OPEX. • Lack of supply, and possible competition from other sectors.	• -	Premium Diesel, Renewable Diesel, Biodiesel
Emerging measures for Scope 1 emissions – fugitive methane (active surface mines)						
Drainage gas	Flaring	Capture of gas through boreholes, followed by combustion in a flare.	Reduce (reduces Global Warming Potential [GWP] through conversion of methane [CH_4] to CO_2)	• Lack of financial incentive. • No regulatory driver. • Decreasing CH_4 output over time.	• Air pollution and noise. • Safety (e.g. air ingress). • Residual CO2 emissions.	Coal Seam Pre-Drainage
	Utilisation (any purpose)	Capture of gas through boreholes, followed by utilisation.	Reduce (reduces GWP through conversion of CH_4 to CO_2)	• Cost to purify gas for utilisation. • Low or variable CH_4 concentrations. • Lack of supporting infrastructure for utilisation.	• Residual CO2 emissions.	
Emerging measures for Scope 1 emissions – other processes						
Petrol combustion	None identified	-	-	-	-	-
ANFO combustion	Waste oils or renewables	Alternative fuels.	Demonstration (>2025)	• Compliance with regulations. • Market availability.	• Blasting safety. • Performance consistency.	Renewable Diesel

Table 15 (Continued)
EMM 2025 – Summary of Emerging Scope 1 and 2 Mitigation Measures at Surface Mines

Greenhouse Gas Source	Mitigation Measure	Notes	Technology Readiness	Potential Barriers	Risks or Disadvantages	Consideration in Greenhouse Gas Assessment
Oils, greases	Alternative lubricants	-	-	-	-	-
Fugitive SF_6	None identified	-	-	-	-	-
Coal oxidation (stockpiles)	None identified	-	-	-	-	-
Vegetation removal	Pyrolysis	Thermal degradation of vegetation using low-oxygen technology to produce biochar.	Demonstration to mature	• Market availability.	• Feedstock variability. • Fire risk.	-
Emerging measures for Scope 2 emissions						
Purchased electricity	On-site renewable electricity generation	Wind, solar or geothermal power.	Demonstration to mature	• High CAPEX. • Regulatory approvals. • Space constraints.	• Reliability (dependency on weather).	Renewable Electricity Supply, Carbon-Neutral Electricity Contract.
	On-site energy storage (batteries)	Facilitates the wider electrification of mining operations.	Demonstration to mature (>2025)	• Battery size and robustness needed for mine sites.	• Replacement potentially every few years leading to more greenhouse gas lifecycle emissions and costs. • Safety (overheating leading to fires or explosions). • Environmental (leaks causing contamination of water/soil).	

Source: EMM (2025).

Recommendation 10

The EPA recommends DPHI request the Applicant to include greenhouse gas reduction goals in the revised GHG assessment.

Response

The Greenhouse Gas Assessment (WCPL, 2025b) outlined that the Safeguard Mechanism provides a framework for the Modification to meaningfully contribute to State-legislated emission reduction targets.

The Safeguard Mechanism decline rates have been structured to accommodate growth at both existing and new facilities, while still being more ambitious than the average annual reduction required between 2005 and 2030 to achieve NSW's interim 50% reduction target (WCPL, 2025b). It is important to note that the Modification is scheduled to cease coal production in 2033, prior to the NSW 2050 net zero target, and as such would not generate material emissions in 2035.

The NSW resources sector has already been tracking in line with the NSW Net Zero trajectory between 2005 and 2022, and the continued application of the Safeguard Mechanism is expected to result in further net emissions reductions across the mining sector, including in NSW (WCPL, 2025b). In this context, Wilpinjong Coal Mine's comparatively low Scope 1 EID of 0.009093 t CO_2-e per t ROM coal reinforces its efficient performance compared to other coal mines in Australia (as described above).

The anticipated impact of the Safeguard Mechanism on NSW coal mining emissions was provided by recent projections prepared by the Climate and Atmospheric Science, Science and Insights Division of the NSW DCCEEW (NSW DCCEEW, 2025b). These projections, which were prepared in 2025, are reproduced on Figure 11.

The NSW DCCEEW (2025b) projections reproduced as Figure 11 below indicate that the introduction of the reformed Safeguard Mechanism would (as a percentage of 2005 emissions) likely result in net NSW coal mine emissions overachieving relative to the 2030 NSW emission reduction target and making very significant progress towards both the 2035 and 2050 NSW net emission reduction targets for coal mining in the State.

NSW DCCEEW projections indicate 2035 outcomes potentially varying between a modest underachievement or overachievement (approximately +/- 4%) of the NSW State targets with the reformed Safeguard Mechanism, depending upon the number of new coal developments that are approved (i.e. SGM 1 represents currently approved operations and Safeguard Mechanism (SGM) 2 and 3 represent additional scenarios with mining proposals currently in the approvals process) (Figure 11). It is important to note that SGM 2 includes emissions from the Modification.

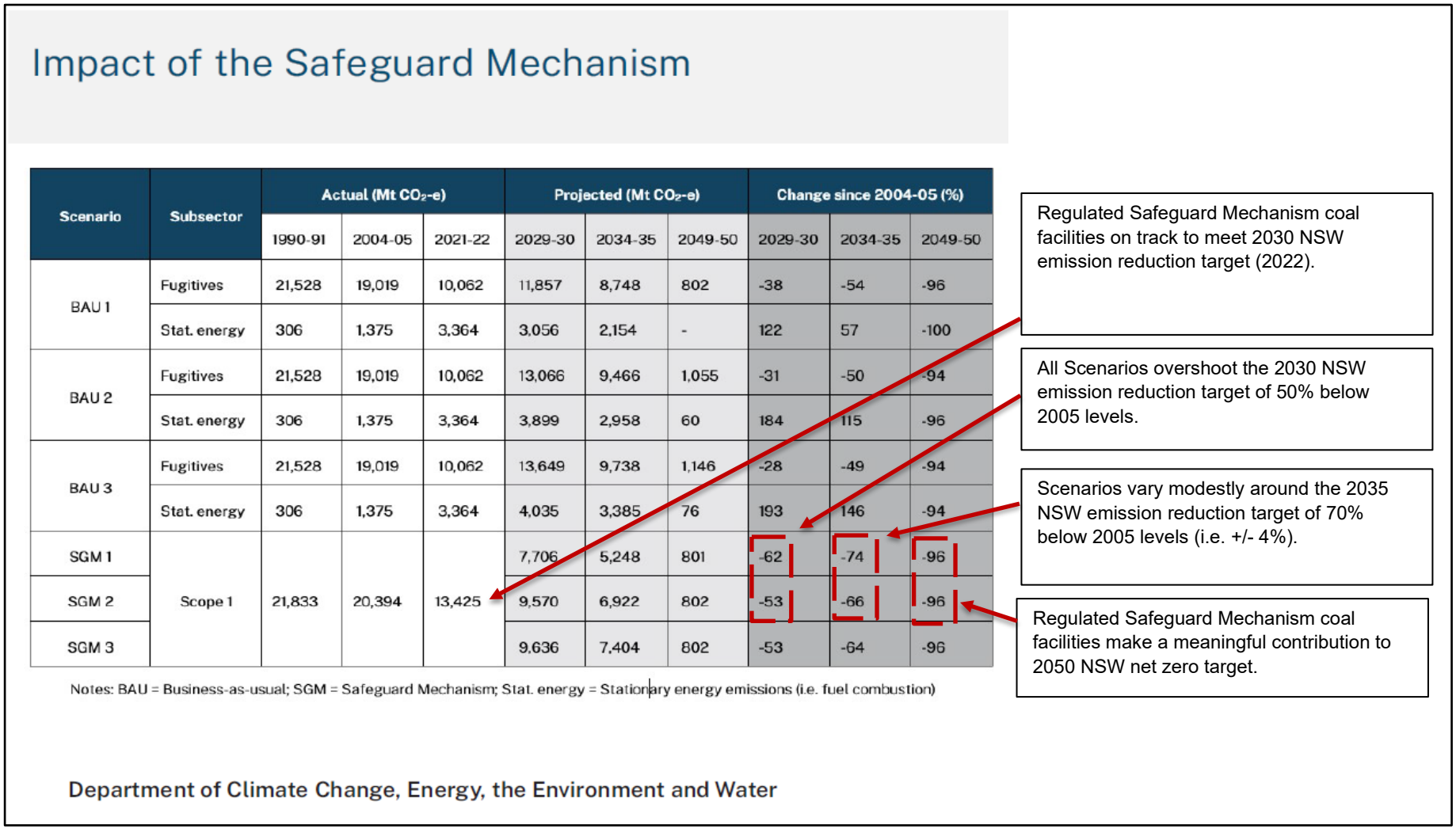
The NSW DCCEEW (2025b) projections for the SGM2 scenario have been reproduced graphically on Figure 12 which shows regulated Safeguard Mechanism coal facilities are projected to largely meet NSW legislated emission reduction targets, unlike various other NSW sectors.

The sectoral pathways illustrated on Figure 12 were derived from the NSW DCCEEW (2025c) emissions inventory and projections published in the *NSW Greenhouse Gas Emissions Projections 2024 methods paper* (Methods Paper). Sector totals for electricity generation, stationary energy (excluding electricity), transport, fugitive emissions, industrial processes and product use, waste and agriculture were taken from Figure 2 of the Methods Paper, which combines historical inventory years and forward projections under NSW economy wide sectors.

To provide an equivalent and relevant basis for coal mining to be compared against NSW economy wide sectors, the coal mining sector series was constructed using the more granular coal mining datasets in the same Methods Paper. Historical NSW Scope 1 coal mining emissions for 2005 to 2022 were taken from Figure 21 ('Actual' data set) of the Methods Paper. From 2023 onward, the coal mining pathway was based on the 'Safeguard facility declining baseline emissions' data set (i.e. SGM2 scenario) from Figure 24 of the Methods Paper, which includes the proposed Modification.

All source data sets associated with the Methods Paper are provided as absolute emissions (t CO_2-e, or Mt CO_2-e), whereas the NSW legislated interim and long term targets are expressed as percentage reductions relative to 2005 levels. To allow comparison on the same basis, each time series in Figure 12 was normalised to its 2005 value. This normalisation preserves the shape and relative ambition of each sector projection while aligning the presentation with the statutory framing of the NSW emission reduction targets.

On this indexed basis, Figure 12 shows that the safeguard regulated coal mining pathway (SGM 2) declines at a rate that is consistent with largely meeting, and in some years exceeding, the required NSW targets. In contrast, the DCCEEW sector level projections for many other parts of the NSW economy remain above the legislated target pathway over the same period. Coal mining (as represented by Safeguard regulated facilities) and electricity generation (relevant as electricity generation shifts from coal fired power plants to renewable sources) are the sectors projected to approximate the net zero target by 2050.



Impact of the Safeguard Mechanism

Scenario	Subsector	Actual (Mt CO_2-e)			Projected (Mt CO_2-e)			Change since 2004-05 (%)		
		1990-91	2004-05	2021-22	2029-30	2034-35	2049-50	2029-30	2034-35	2049-50
BAU 1	Fugitives	21,528	19,019	10,062	11,857	8,748	802	-38	-54	-96
	Stat. energy	306	1,375	3,364	3,056	2,154	-	122	57	-100
BAU 2	Fugitives	21,528	19,019	10,062	13,066	9,466	1,055	-31	-50	-94
	Stat. energy	306	1,375	3,364	3,899	2,958	60	184	115	-96
BAU 3	Fugitives	21,528	19,019	10,062	13,649	9,738	1,146	-28	-49	-94
	Stat. energy	306	1,375	3,364	4,035	3,385	76	193	146	-94
SGM 1	Scope 1	21,833	20,394	13,425	7,706	5,248	801	-62	-74	-96
SGM 2					9,570	6,922	802	-53	-66	-96
SGM 3					9,636	7,404	802	-53	-64	-96

Notes: BAU = Business-as-usual; SGM = Safeguard Mechanism; Stat. energy = Stationary energy emissions (i.e. fuel combustion)

Regulated Safeguard Mechanism coal facilities on track to meet 2030 NSW emission reduction target (2022).

All Scenarios overshoot the 2030 NSW emission reduction target of 50% below 2005 levels.

Scenarios vary modestly around the 2035 NSW emission reduction target of 70% below 2005 levels (i.e. +/- 4%).

Regulated Safeguard Mechanism coal facilities make a meaningful contribution to 2050 NSW net zero target.

Department of Climate Change, Energy, the Environment and Water

Figure 11
Actual Scope 1 Emission Reduction from 2005-2022 and NSW DCCEEW 2030, 2035 and 2050 Projections for Regulated Coal Facilities (NSW DCCEEW, 2025b)

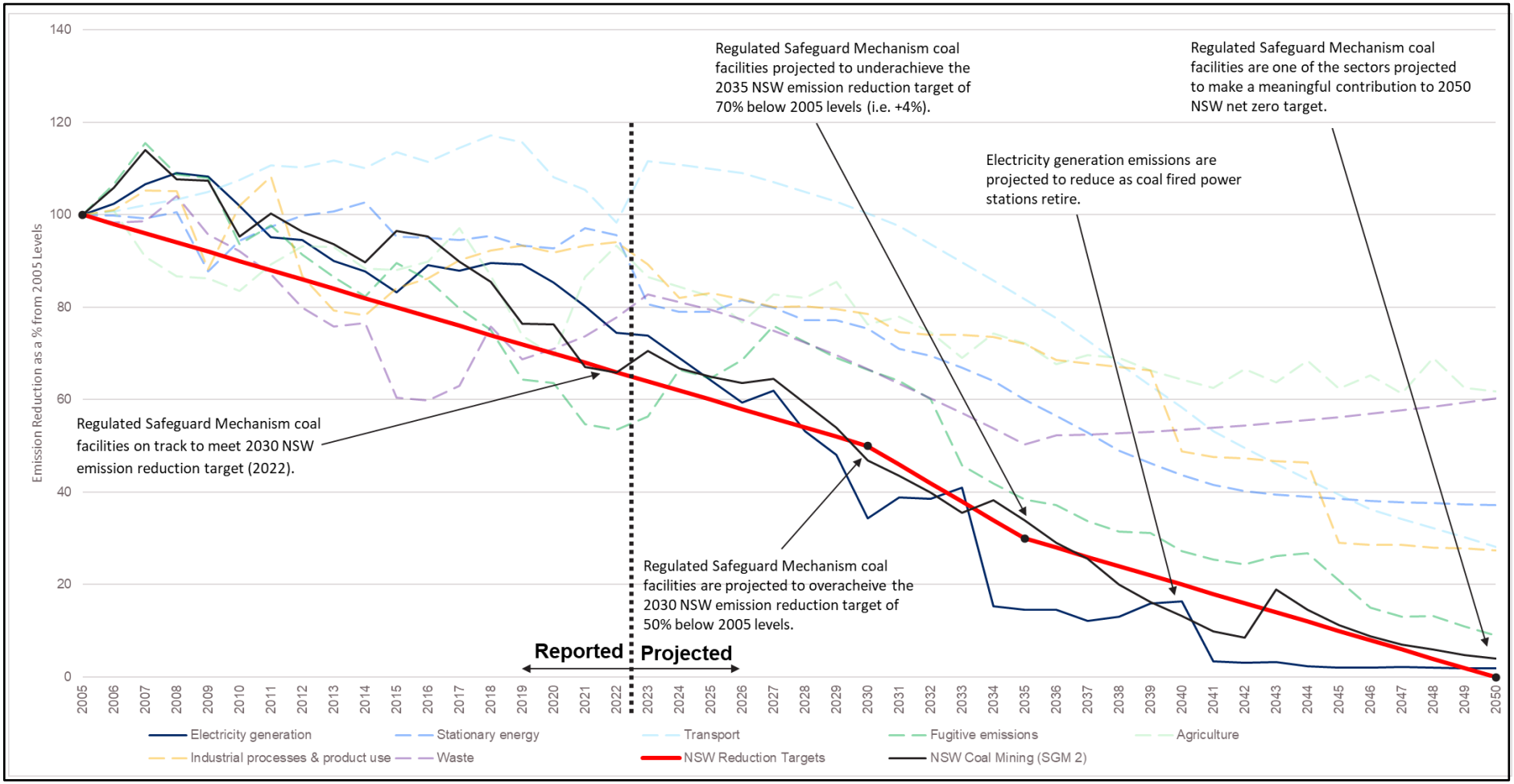


Figure 12
Actual Scope 1 Emission Reduction from 2005-2022 and NSW DCCEEW Projected Emission Reduction from Various Sectors (Including NSW Coal Mining [SGM2])
(After: NSW DCCEEW, 2025c)

In this context, the NSW Resources Industry existing reported emissions reductions since 2005, plus the Commonwealth Safeguard Reforms ratcheting down safeguard facility baselines, is projected by NSW DCCEEW to result in the NSW coal sector largely achieving the NSW legislated economy wide net emissions targets for 2030, 2035 and 2050 in the absence of any additional NSW policy augmentation.

On this basis WCPL's ongoing compliance with the Safeguard Mechanism would result in the Modification making a meaningful contribution towards NSW's legislated emission reduction goals. In October 2024 the Western Australian Government released an updated greenhouse gas emissions policy for major projects assessed by the Western Australian Environmental Protection Authority, effectively removing duplication between state and commonwealth emission reduction obligations for projects addressed by the Safeguard Mechanism (Government of Western Australia, 2024a):

> *… Having considered the recommendation, the Government has determined that where proposals with significant greenhouse gas emissions are adequately dealt with by other regulatory measures such as the strengthened Safeguard Mechanism, those emissions should not be regulated by the State. …*

The Western Australian Government further explained the reforms as follows (Government of Western Australia, 2024b):

> *The Commonwealth Government's reforms to the Safeguard Mechanism, which passed Federal Parliament on 30 March 2023, establish a nationally consistent approach to reducing greenhouse gas emissions for Australia's largest emitters, imposing declining baselines on covered facilities, known as designated large facilities.*
>
> *Setting duplicate greenhouse gas limits at the state level on proposals regulated under the Safeguard Mechanism creates confusion for proponents and administrative burden for regulators without delivering any additional environmental benefit.*
>
> *This policy change is focused on removing duplication and does not change Western Australia's commitment to working with all sectors of the economy to achieve net zero greenhouse gas emissions by 2050.*
>
> *…*

WCPL suggests the NSW DCCEEW (2025b) projections of the impact of the reformed Safeguard Mechanism on NSW coal sector emissions highlights that the conclusions reached by the Western Australian Government for major projects are equally applicable to the NSW coal sector.

Net Scope 1 emission reduction goals for the Modification consistent with the Safeguard Mechanism are shown graphically on Figure 13 and tabulated in Table 16.

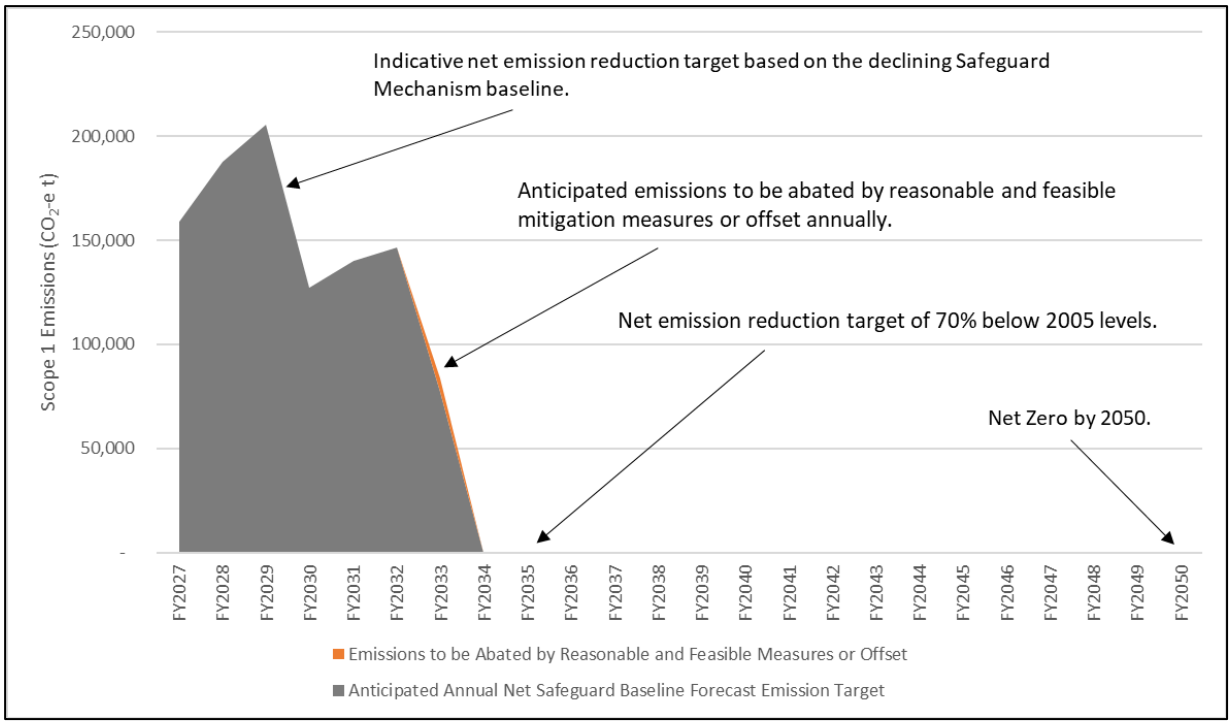


Figure 13
Indicative Wilpinjong Coal Mine Annual Scope 1 Net Emissions Targets

Table 16
Indicative Wilpinjong Coal Mine Annual Scope 1 Net Emissions Targets

Financial Year	ROM Coal (t)	Anticipated Annual Scope 1 Gross Emissions (t CO_2-e)	Anticipated Annual Scope 1 Gross Emission Intensity (t CO_2-e/t ROM)	Annual Net Emission Intensity Safeguard Forecast (t CO_2-e/t ROM)	Anticipated Annual Net Safeguard Baseline Emission Target (t CO_2-e)
FY2027	9,731,136	153,902	0.016	0.016	**159,093**
FY2028	9,570,180	142,055	0.015	0.020	**187,538**
FY2029	9,218,176	134,382	0.015	0.022	**205,496**
FY2030	5,198,711	112,930	0.022	0.024	**127,047**
FY2031	6,037,597	118,855	0.020	0.023	**140,170**
FY2032	6,659,220	105,585	0.016	0.022	**146,465**
FY2033	3,715,466	83,413	0.022	0.021	**77,179**

tCO_2-e/t ROM = tonne of carbon dioxide equivalent per tonne ROM

WCPL's adoption of any reasonable and feasible greenhouse gas abatement measures for the Modification will be undertaken following quantitative marginal cost of abatement evaluation based on sufficient detailed engineering and mine design data once it is approved (noting that Development Consent conditions, detailed feasibility studies, quantitative analysis, and the outcome of draft EPA sectoral guidance on NSW coal mines may all inform what measures are reasonable and feasible to adopt at a given moment in time). WCPL would continue to meet its annual compliance obligations under the Safeguard Mechanism by retiring Australian Carbon Credit Units or Safeguard Mechanism Credits for any exceedances in any given year.

As ROM coal production levels may vary, and the Safeguard Mechanism baseline decline rate may also be varied over the life of the Modification, the indicative targets set out in Table 16 should not be applied as annual limits in Consent Conditions. Rather, greenhouse gas emissions from the Modification would continue to be managed under the Safeguard Mechanism and in accordance with a Wilpinjong Coal Mine Climate Change Mitigation and Adaptation Plan developed in consultation with the NSW EPA.

Recommendation 11

> *The EPA recommends DPHI request the Applicant to update the Greenhouse gas assessment with details consistent with Appendix C of the Large Emitters Guide. Justification should be included if the Applicant considers that some sections of the Large Emitters Guide are not applicable for the Modification.*

Response

WCPL has reviewed the EPA's Recommendations 7 to 10 relating to greenhouse gas emissions and confirms that the clarifications and updates outlined above satisfactorily address the EPA's requests regarding emission factor currency, replication transparency (assumptions, methodologies and input data), definition of the assessment boundary across the Modification life, and supporting mitigation and emissions goal setting content. On this basis, no further updates are required.

4.1.3 Heritage NSW

Archaeological and Environmental Background and Predictive Modelling

Comment #1

> *Please update the archaeological background in Section 6 of the ACHAR to provide further detail suitable to meet the Requirements 1a and 3 of the Code of Practice for Archaeological Investigation of Aboriginal Objects in NSW ('the Code of Practice'; DEECW 2010). The current synthesis does not adequately integrate existing archaeological investigations of predictive models, nor does it reflect recent archaeological work. As outlined in this Attachment, the current lack of detail provided in Section 6 and lack of clear testable predictive statements presented has resulted in a disconnect between the existing work undertaken across the region, the results from the current survey and test excavations, and the conclusions presented for this project.*

Response

WCPL notes that Heritage NSW's comment is general in nature, accordingly, Navin Officer has provided a corresponding response in Attachment 5. Further detail can be provided on any specific aspects if Heritage NSW wishes to provide further clarification of its concerns.

The archaeological background presented in Section 6 of the *Wilpinjong Modification 3 Aboriginal Cultural Heritage Assessment* (ACHA) (Navin Officer, 2025) is considered comprehensive and sufficient to meet the requirements of the *Code of Practice for Archaeological Investigation of Aboriginal Objects in NSW* (NSW Department of Environment, Climate Change and Water [DECCW], 2010) through providing a detailed synthesis of previous archaeological investigations undertaken in the vicinity of the Modification, including past studies conducted in the broader region as well as recent assessments undertaken for the existing Wilpinjong Coal Mine, Ulan Coal Mine and Moolarben Coal Complex.

Navin Officer (2026) provides a reconciliation of how the ACHA complies with Requirement 1a and 3 of the Code of Practice and is presented in Attachment 5.

The ACHA integrates knowledge from previous investigations and uses them to form predictions that were validated by more recent archaeological investigations in the area and the result of the Modification field surveys. The predictive model for the Wilpinjong Coal Mine and the results of the test excavations are consistent (Navin Officer, 2025) as described further in response to Comment #10. Therefore, the level of detail and analysis in Section 6 of the ACHA is considered adequate and appropriate, and contains the necessary predictive context and testable statements (demonstrated through the ACHA survey and test excavation results) without the need for further revision (Navin Officer, 2026).

Further discussion is provided in Attachment 5.

Comment #2

> *The ACHAR presents inconsistent descriptions of landforms within the study area. Section 5.1.2 identifies landforms such as valleys, slopes, escarpments, valley floors, and terraces, whereas Section 7.3.1 refers to plains, slopes, and ridges. To resolve this inconsistency:*
>
> *a. Please clarify and standardise the landform descriptions across all relevant sections of the ACHAR (e.g., environmental context, predictive model, and survey results) referencing landform units as defined in the 'Landform' chapter of the Australian Soil and Land Survey Field Handbook (3rd Edition).*
>
> *b. Provide mapping in accordance with Requirement 2 of the Code of Practice, including soil landscapes, landforms, contours, geology, watercourses, and slope classifications.*

Response

Four simplified landforms were recorded within the Study Area, being Plains, Lower Slopes, Mid-Upper Slopes and Ridges, as presented in Table 7-2 of the ACHA. These broad landform units were used to simplify recording and reporting, however, they also included sub-units (such as terraces or escarpments) as appropriate. For example, terraces are present as a micro-landform within the simplified Plains survey unit but were not present within the Modification disturbance footprint (Navin Officer, 2026; Attachment 5). The survey results were analysed and assessed consistent with these landform types, as described in Section 7.3 of the ACHA.

Regarding mapping, Requirement 2 of the Code of Practice states:

> *Describe, and if relevant, map the natural resources and natural features that will have influenced the use of the landscape in the past.*

Section 5.1.1 of the ACHA provides a description of the regional topography and geological units. Section 5.1.2 of the ACHA provides detail on the natural features within the Study Area that would influence Aboriginal occupation, including hydrology, topography, geological units and soil landscapes. The environmental analysis of the Study Area was used to inform the survey design (Navin Officer, 2026).

Attachment 5 provides diagrams of the regional geology, soil landscapes, landform contours and hydrology that characterise the Study Area and are consistent with the discussion provided in Section 5.1.2 of the ACHA.

Figure 7-1 of the ACHA shows the survey units and landforms (including slope classifications) within the Study Area.

Comment #3

> *The review of land-use history and disturbance within the study area lacks sufficient detail. As per the Advisory Notes for Requirement 2 of the Code of Practice, the nature and frequency of past land-use activities must be quantified to assess their impact on the preservation of Aboriginal cultural material. References to site conditions as "moderately" or "highly disturbed" must be substantiated with supporting evidence, including results from archaeological survey and/or testing. We note that archaeology is known to exist in disturbed contexts, which has been demonstrated is similarly impacted landforms across the Wilpinjong Mine Complex where a range of archaeological resources are present. A detailed analysis of historical aerial imagery would assist in addressing this requirement.*

Response

The Code of Practice describes land use history as below:

> *Land-use history refers to the past land use (e.g. agricultural) of the subject area. The nature and frequency of different land-use activities must be quantified to assess their effect on the survival of the material traces of past Aboriginal land use (e.g. a single ploughing event may have much less impact on any buried archaeological evidence than decades of annual ploughing; land clearing will have had some impact on sub-surface deposits, but may remove culturally modified trees entirely).*

As detailed in Section 5.1.3 of the ACHA, all of the Study Area has been subject to some degree of disturbance by European pastoral and grazing activities. The historical aerial photographs covering the Subject Area and surrounds (reproduced in Attachment 5) illustrate the extensive vegetation clearing and past land use that has occurred in the area (Navin Officer, 2026; Attachment 5). The past land use of the Modification Area is fairly simple (i.e. clearing then grazing with some opportunistic cropping on flats adjacent to higher order creek lines) and continues over the whole of the Modification Area (Navin Officer, 2026).

The ACHA has not implied that the archaeological resource has been removed by these disturbances. In addition, Section 5.1.4 of the ACHA details the use of the Study Area by Aboriginal people in the past, stating:

> *Previous studies have indicated that there are no landscapes in the Wilpinjong area that would not have been visited and occupied by Aboriginal people prior to European settlement. Consequently, it is reasonable to assume that the landscape features that characterise the study area would have been utilised by Aboriginal people.*

Each site recording in the ACHA (see Appendix 4 of the ACHA) includes notes on disturbance indicators (such as erosion exposure, stock trampling, vehicle damage etc.). Thus, references to "moderately" or "highly disturbed" contexts in Table 8.2 of the ACHA are substantiated by field observations (Navin Officer, 2026; Attachment 5).

In summary, the ACHA discusses general historical land use (grazing) and links those to the present condition of soils and sites, supported by both desk-based sources (historical aerials) and on-ground evidence. Every classification of disturbance in the ACHA was referenced based on evidence observed in the field, as well as through previous archaeological investigations in the vicinity of the Study Area (Navin Officer, 2026).

The ACHA notes that even heavily grazed or cropped areas can contain subsurface artefacts, which is why those areas were systematically surveyed and, where appropriate, subject to subsurface testing. The known land use history (more intensive farming on the flats, minimal disturbance on hills) was used to interpret why certain sites had lower integrity (e.g. artefacts widely scattered in ploughed ground) while others had higher integrity.

Comment #4

Please update the regional overview presented in Section 6.3 to include a more detailed analysis of the existing predictive models relevant to the current project and subject area and suitable to meet Requirements 3 of the Code of Practice. The current discussion lacks sufficient detail and analysis particularly considering the extensive amount of archaeological work that has been undertaken in association with Wilpinjong Coal and the wider coalfields region more broadly.

Response

The ACHA's regional overview (Section 6.3) contains a suitable analysis of existing predictive models and regional archaeological knowledge, relevant to the Study Area informed by the work summarised in Section 6.2 of the ACHA (Navin Officer, 2026). Navin Officer draws on the extensive archaeological record of the Wilpinjong/Wollar/Ulan/Moolarben area, which includes over 1,000 recorded Aboriginal sites and numerous excavation studies and summarises the key patterns and expectations that arise from that record. These include, for example, the importance of permanent water sources (like the Goulburn River) in attracting dense, long-term camps, the secondary but still significant role of smaller creeks (like Wilpinjong Creek and Cumbo Creek) in the broader settlement system, the typical site types and frequencies in different landforms, and the raw material distribution influencing site presence (e.g. silcrete gravels in creek beds leading to knapping sites nearby).

Section 6.2 of the ACHA cites earlier investigations that established these patterns by quoting findings from past archaeological investigations conducted in the Wilpinjong area[2]. It then explicitly relates the findings to the current Study Area by applying them to the predictive model and fieldwork methodology for the Study Area.

Overall, the level of detail in the regional overview is sufficient and appropriate to meet Requirement 3 of the Code of Practice, and is considered proportionate to the scale and potential impacts of the proposed Modification (Navin Officer, 2026).

Comment #5

Please update the ACHAR to include a site-specific predictive model or a series of testable statements suitable to meet Requirement 4 of the Code of Practice. The predictive model must address Potential Archaeological Deposits (PADs), including the likelihood of deposits beneath disturbance and the specific criteria used for assessment. It must reflect the statement that surface artefact visibility is not a reliable indicator of sub-surface deposits and consider terrace landforms noted in earlier sections. Sensitivity mapping would help to address this.

Response

As noted in the responses above, no terrace landforms were identified in the Modification disturbance footprint (Navin Officer, 2026).

Section 6.3 of the ACHA presents a predictive model for the Study Area, which is consistent with the predictive model derived by South East Archaeology (2015) (and updated by Navin Officer [2021]) for the Wilpinjong Coal Mine. A separate predictive model specifically for the Study Area was not considered warranted due the consistency in landform features and results of previous archaeological investigations across the Wilpinjong Coal Mine. Navin Officer's position is that the site-wide predictive model can be applied to the Study Area to accurately inform the nature and distribution of evidence of Aboriginal land use within the Study Area and therefore meet Requirement 4 of the Code of Practice.

[2] The ACHA makes reference to the following archaeological investigations:
- **Broader Region**: Pearson (1981); Haglund (1981); Navin Officer (1990); Purcell (2002).
- **Wilpinjong Coal Mine**: NOHC (2005, 2006a, 2006b, 2017, 2018, 2020, 2021 2022a, 2022b, 2023); Kayandel Archaeological Services (2006a, 2006b, 2006c, 2006d, 2007a, 2007b, 2007c, 2008a, 2008b, 2009a, 2009b); Boer-Mah (2006); Kuskie (2013a, 2013b, 2015) South East Archaeology (2013, 2015, 2017).
- **Ulan Coal Mine**: Haglund (1980, 1996, 2001); Kuskie (2009, 2018).
- **Moolarben Coal Complex**: Hamm (2006); Archaeological Risk Assessment Services (2006); Niche (2019).

Section 6.3 of the ACHA states the following which addresses the expectations for PADs and surface artefact visibility as noted by Heritage NSW:

> *However, the results of more recent excavations completed by NOHC (2021) within the Wilpinjong Coal Mine indicate that:*
>
> - *the number of artefacts visible on the ground surface is not necessarily a reliable indicator of the sub-surface archaeological deposit;*
>
> *…*
>
> - *that subsurface sites have been more diverse, more extensive in area, and include greater artefact density than previously modelled; …*

Section 6.3 of the ACHA also states the following which addresses the level very gently inclined ground near watercourses:

> - *Aboriginal people widely used the Wilpinjong area, but generally at a low intensity, apart from around the potential secondary resource zones located closer to a third or higher-order watercourse or other areas of possible water retention (for example, former ponds, swamps, or marshes), where occupation may have occurred at a higher intensity.*
>
> *…*
>
> - *Activities appear to have occurred more frequently on areas of level-very gently inclined ground, compared with gently or moderate to steeply inclined ground.*

Additionally, the archaeological test excavation program was devised with the knowledge that subsurface archaeological deposits are likely to occur within 200 m of creeks and waterways.

Survey and Survey Coverage

Comment #6

> *The survey completed within the Modification Area within the broader Study Area does not provide adequate coverage given the scale of proposed impacts expected from open cut mining activities. Discrepancies between expected and actual findings based on current results indicate a high risk of undiscovered Aboriginal sites in unsurveyed areas. Heritage NSW expects survey coverage comparable to that undertaken by the South East Archaeological in 2015 for the adjacent property (see Figure 12 in Appendix G of the Environmental Impact Statement for the original extension project under SSD-6764 available on the Major Projects Portal). Additional survey is required to ensure comprehensive coverage and thorough assessment of the proposed disturbance area before project approval.*

Response

Navin Officer has prepared a Technical Response to Comment #6 that is provided in Attachment 5 of this Submissions Report. The below summarises Navin Officer's response and provides additional discussion where relevant.

Section 2.2 of the Code of Practice states the following:

> *The purpose of the archaeological survey is to identify and make up-to-date records of known and identified objects (traces of past Aboriginal land use and Aboriginal archaeological sites) within the subject area.*

Requirement 5 of the Code of Practice states (emphasis added):

> ***Purpose:** The purpose of the archaeological survey (sometimes called a field survey) is to record all (or a representative sample of all) the material traces and evidence of Aboriginal land use that are:*
>
> - *visible at or on the ground surface, or*
> - *exposed in sections or visible as features (e.g. rock shelters, rock art, scar trees)*
>
> *and to identify those areas where it can be inferred that, although not visible, material traces or evidence of Aboriginal land use have a likelihood of being present under the ground surface (potential archaeological deposits).*

The archaeological field survey for the Modification was designed to achieve comprehensive pedestrian survey rather than a selective or "targeted" survey design. The objective of the field survey was to record a representative sample of material traces and evidence of Aboriginal land use in accordance with the Code of Practice.

The entire Modification Area was inspected, however, particular focus and additional scrutiny was placed on landforms of higher likelihood for Aboriginal objects based on previous archaeological investigations, predictive modelling, land use history, and advice from Registered Aboriginal Parties (RAPs) on-site. Some RAPs have been involved in heritage works in the region for many years and have longstanding experience and knowledge of the locality. This meant that areas such as creek lines, gentle slopes, and resource-rich zones received more comprehensive investigation and inspection, consistent with Requirement 5 of the Code of Practice.

The outcomes of the field survey allowed Navin Officer to adequately characterise the archaeological record across the Modification Area, and identify material traces and evidence of past Aboriginal land use and where subsurface materials might exist, consistent with the Code of Practice.

In summary, the survey intensity was proportionate to the Modification potential impacts and successfully recorded the cultural materials present in the landscape which informed the significance and impact assessment presented in the ACHA. No gaps in the survey coverage were identified by Navin Officer that would invalidate the survey's findings and overall impact assessment in the ACHA (Attachment 5).

South East Archaeology surveyed areas west of the Modification as part of the Wilpinjong Extension Project ACHA (South East Archaeology, 2015). The findings of that assessment were considered during preparation of both the Proposed ACHA Methodology and the Modification ACHA. As outlined above, Navin Officer considers the survey intensity to be proportionate to the potential impacts of the Modification, based on a review of previous archaeological assessments (Attachment 5).

Comment #7

> *Please update Figures 7-2 and 7-3 or provide additional figures showing the locations of 17 survey units that were assessed across the study area as identified in Table 7-2.*

Response

Attachment 5 provides a plan of the 17 survey units that were assessed across the Study Area.

Comment #8

> *Section 6.3 states that "Ochre was procured from sources within the Modification Area and used for rock art and/or body art, evidence of non-secular activity" (p.36). Please confirm whether the ochre source was inspected during the survey and provide supporting details, including its mapped location and extent, its association with other cultural material such as stone artefacts, confirmation of whether it should be registered on Aboriginal Heritage Information Management System (AHIMS) and photography from the survey.*

Response

Navin Officer has confirmed this statement inadvertently references ochre as present within the Modification Area.

The correct statement should be that "Ochre was procured from sources within the **Wilpinjong** Area…". Navin Officer has confirmed there are no ochre sources within the Modification Area.

Comment #9

> *There is an inconsistency in the reported number of Aboriginal Sites within the Modification Area. Section 7.1 states 15 sites, Table 7-5 lists 16, and Section 7.3.2 refers to "fourteen surface sites." Please clarify and correct this discrepancy.*

Response

During the pedestrian archaeological survey, 14 surface sites were recorded within the Modification Area and one PAD was recorded within the Modification Area during the subsurface testing program. Therefore, there is a total of 15 sites located within the Modification Area.

It is acknowledged there is a discrepancy in Table 7-5, which should reference a total of 15 sites. An updated version of *Table 7-5 Landform Summary – Sampled areas within the Modification area* is provided in Table 17 below.

Table 17
Updated Table 7-5 of the ACHA

Landform	Landform area (m^2)	Effective Coverage Area (m^2) (survey unit area x visibility % x exposure %)	Landform effectively surveyed (%) (effective coverage area/survey unit area x 100)	Number of Sites
Plains	803,647	17,375.41	2.16	4
Lower Slope	298,309	107,390.16	36.00	3
Mid-Upper Slope	693,671	5,299.21	0.76	**6**
Ridges	93,697	2,109.33	2.25	2

Source: Attachment 5

Sampling Strategy and Test Excavations

Comment #10

> *The test excavation program focused on a 200m buffer around waterways; however, results show artefact density did not correlate with proximity to water. For example, Transect 8, outside the buffer, recorded the highest density (47.43 artefacts/m^2), while Transect 4 along Wilpinjong Creek had the lowest (5.33 artefacts/ m^2). This indicates that factors other than water proximity influences Aboriginal occupation. Heritage NSW also notes that, following the November 2024 project design update, only one testing area related to the Modification Area and no test excavations were undertaken within the proposed disturbance footprint. Heritage NSW recommends revising the testing strategy and undertaking additional testing in areas beyond the 200 m buffer in areas proposed for disturbance. The predictive model and discussion must also consider the current mismatch between expectations and findings.*

Response

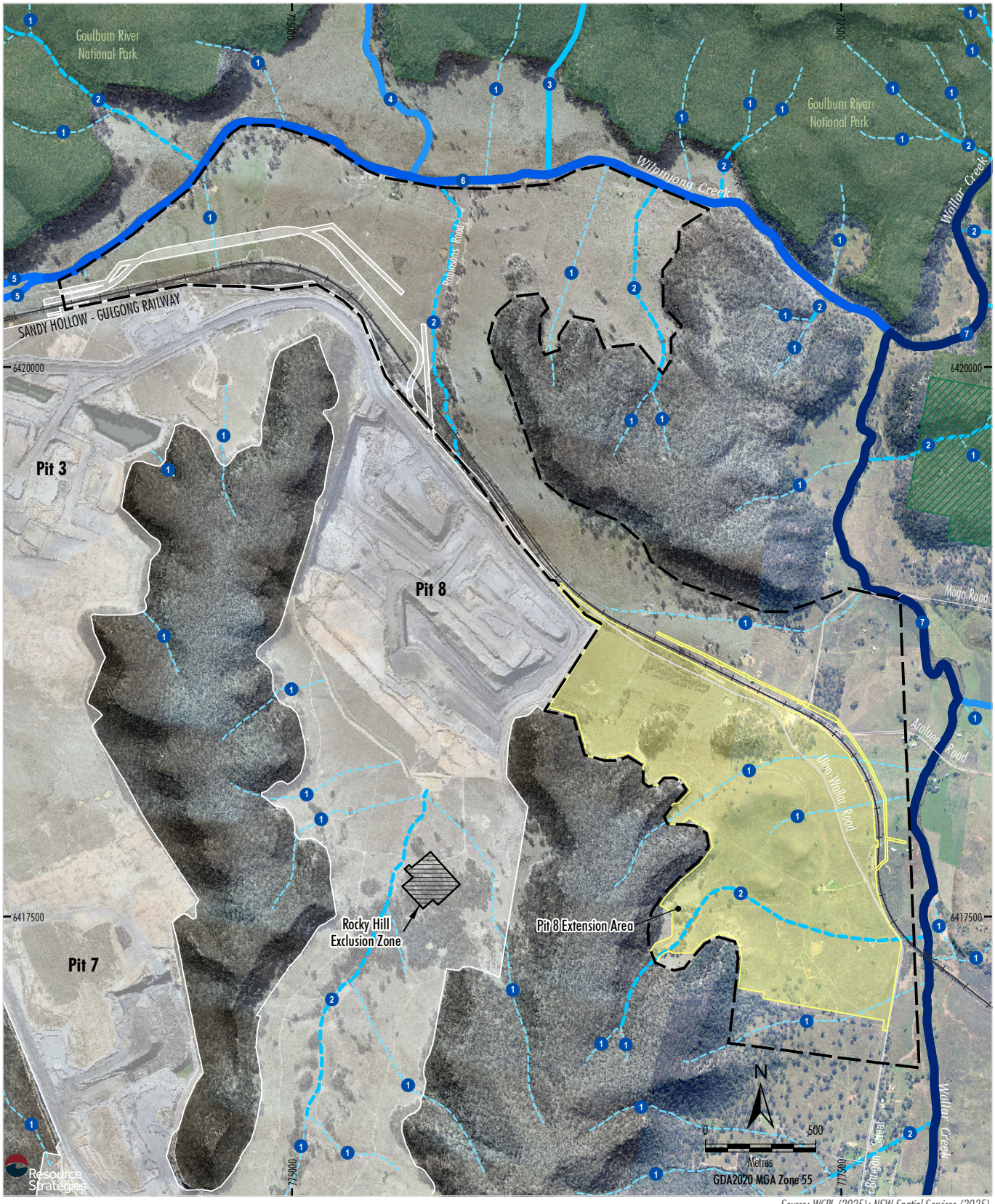
Navin Officer has prepared a Technical Response to Comment #10 that is provided in Attachment 5. The below summarises Navin Officer's response and provides additional discussion where relevant.

The test excavation program was developed using the ACHA predictive model, which identified areas of higher subsurface archaeological potential (often near watercourses) within the Study Area. It is important to clarify that artefact density did in fact correlate with proximity to water sources within the Study Area, consistent with long-term patterns of land use in the region.

For instance, Transect 8, whilst outside the 200 m buffer of a named creek, was located adjacent to an unnamed second-order watercourse (Figure 14). Navin Officer has noted that prior to broadscale European disturbance of the landscape, this watercourse would have provided a water source for Aboriginal activity, primarily camping and food gathering, which explains why Transect 8 yielded the highest artefact density (47 artefacts per square metre [artefacts/m²]) despite not being adjacent to a named creek (Attachment 5).

In contrast, Transect 4 along Wilpinjong Creek had much lower artefact densities, suggesting that factors like local geomorphology (e.g. soil deposition or erosion on the creek flat) may have limited the preservation or accumulation of artefacts (Navin Officer, 2026).

These results do not contradict the model, rather, they refine it (Attachment 5). The results indicate that water availability was a key driver of site presence, but other micro-environmental factors (like shelter, resource distribution, or soil stability) also played a role. As noted in Section 6.3 of the ACHA, Navin Officer (2021) provided updates to the Wilpinjong Coal Mine predictive model derived by South East Archaeology (2015) to acknowledge recent test excavations and salvage programs conducted at the Wilpinjong Coal Mine, and noted that while proximity to third-order or higher waterways generally predicts higher site occurrence, secondary resources zones i.e. watercourses and swamps away from higher order watercourses could also support concentrated Aboriginal activity. The type of watercourse that Transect 8 is associated with is the type of watercourse that Navin Officer has found to contain high numbers of artefacts and therefore were the focus of past use by Aboriginal people, thereby, aligning well with the predictive model.



Source: WCPL (2025); NSW Spatial Services (2025)
Orthophoto Mosaic: WCPL (July 2024 - Oct 2022)

LEGEND

- National Park
- Existing Biodiversity Offset Transferred to the National Parks and Wildlife Service (NPWS) Estate

Strahler Stream Order

- 1st Order (Riparian Corridor Width 10 m)
- 2nd Order (Riparian Corridor Width 20 m)
- 3rd Order (Riparian Corridor Width 30 m)
- 4th Order (Riparian Corridor Width 40 m)
- 5th Order (Riparian Corridor Width 40 m)
- 6th Order (Riparian Corridor Width 50 m)
- 7th Order (Riparian Corridor Width 50 m)

- Approved/Existing Surface Development Area
- Mine Exclusion Area
- Modification Indicative Development Footprint
- ACHA Study Area

Peabody

WILPINJONG COAL MINE

Watercourses within the ACHA Study Area

Figure 14

Given the correlation between expectations and results, Navin Officer has advised that further test excavations in other portions of the Modification Area that have low predicted potential for Aboriginal occupation are not considered warranted (Navin Officer, 2026).

WCPL also notes that it altered the proposed Modification disturbance footprint and pit extents to specifically avoid two sites that were subject to test excavations as part of the ACHA. To subsequently be criticised that no excavations were undertaken within the disturbance footprint would therefore appear to be a perverse outcome in this case.

Comment #11

> *The ACHAR states that the disturbance footprint was reduced to avoid two sites of moderate-high significance: WCP1129 and WCP1143 (p.47). Table 7-11 indicates that site boundaries were defined through field discussions with RAPs and reference to landform; however, testing results show high artefact potential across landforms, suggesting landform alone may not reliably predict site extent. Given the high artefact density (10+ artefacts per test pit) and limited testing (only seven test pits), it is unclear how it was determined that these sites do not extend into the disturbance area. Heritage NSW requires additional testing within the adjacent disturbance area to confirm site boundaries and ensure effective avoidance and conservation.*

Response

Navin Officer has prepared a Technical Response to Comment #11 that is provided in Attachment 5. The below summarises Navin Officer's response and provides additional discussion where relevant.

Navin Officer delineated the site extents for WCP1129 and WCP1143 based on the landform context and subsurface testing, as described below.

WCP1129 is a rock shelter site located on a slight rise at the base of an escarpment just above the valley floor. It yielded surface artefacts and was assessed as having moderate to high significance. To investigate its possible extent downslope, Navin Officer excavated a series of test pits along the four spurline crests running eastward from the escarpment. An observed drop-off in artefact density away from the shelter strongly suggests that the significant deposit is confined to the shelter and its immediate vicinity on the spur crests. Navin Officer (2026) is confident that the defined site boundary as shown in the ACHA captures the full extent of WCP1129 (Plate 1), which is ultimately being avoided by the Modification as WCPL has amended its mine design.

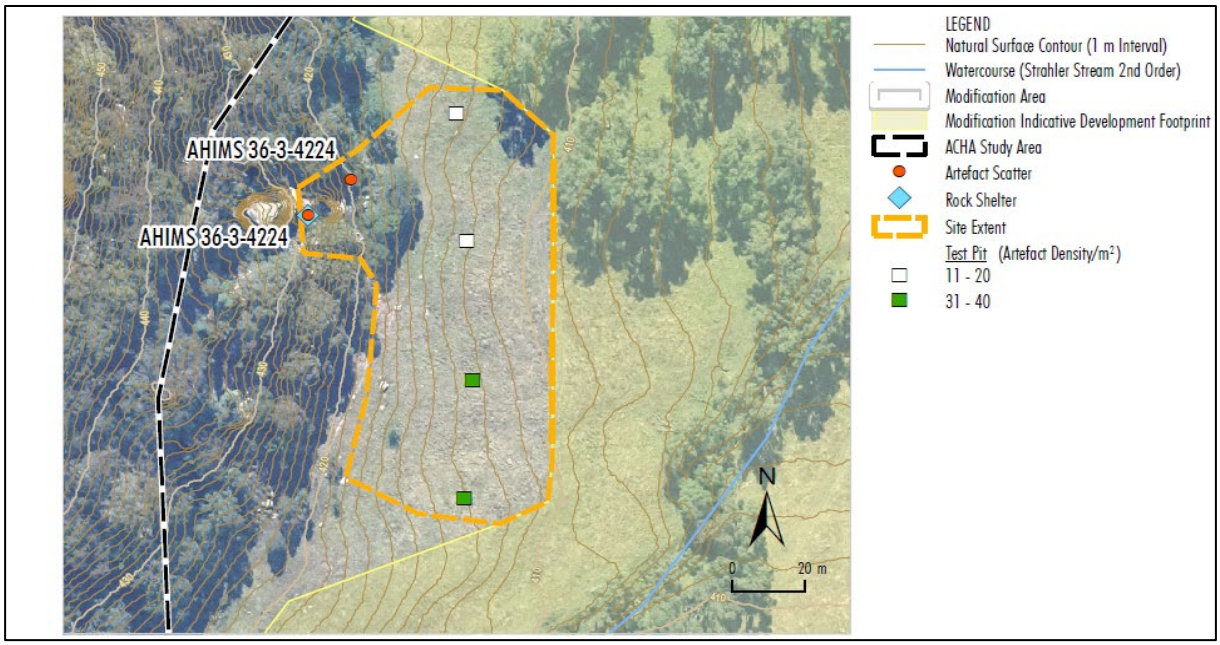


Plate 1 – WCP1129 Site Extent (Source: Navin Officer, 2026)

WCP1143 is another site of moderate-high significance, located on a gently sloping spurline crest that is naturally bounded by steep terrain. WCP1143 sits on a spur that drops off sharply to an unnamed creek on the north, has steep slopes to the east and south, and gentle gradient slope to the west. Test excavation results correlated to the geography, whereby, artefacts would more likely remain on the flat or gently sloping ground than on a steep incline, and any material closer to the creek may have been washed away or never deposited there in the first place. As a result, Navin Officer delineated WCP1143's boundary as the area of the spur where artefact density remained higher, stopping short of the steep creek bed drop-off (Plate 2). Given these results, Navin Officer is confident that the defined site boundary as shown in the ACHA captures the full extent of WCP1143 (Navin Officer, 2026), which is ultimately being avoided by the Modification as WCPL has amended its mine design.

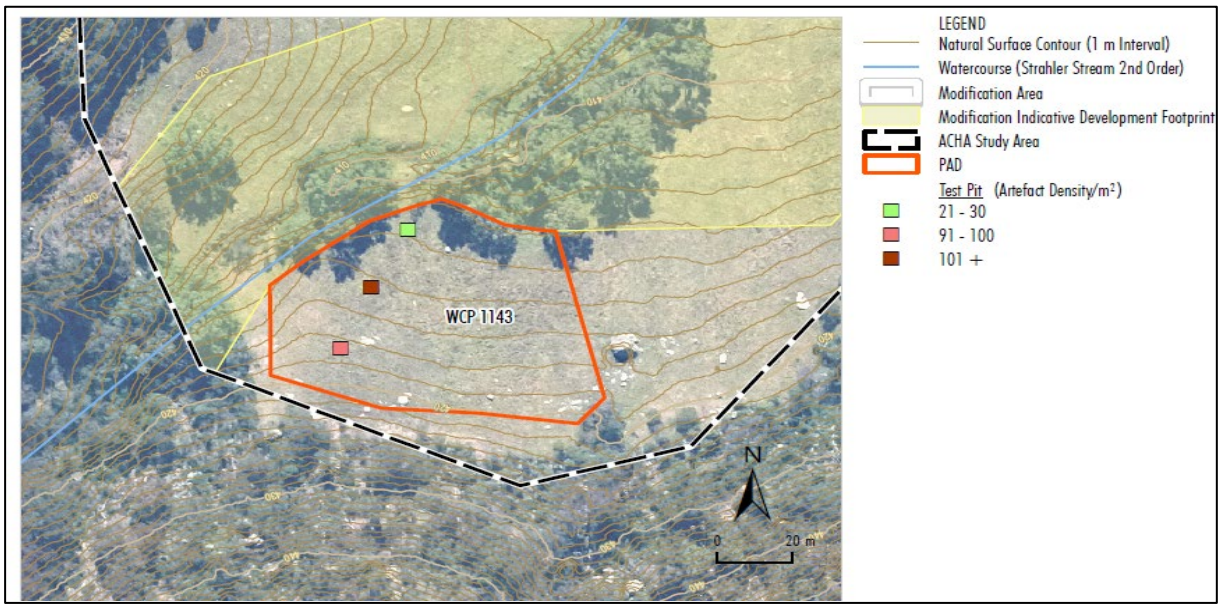


Plate 2 – WCP1143 Site Extent (Source: Navin Officer, 2026)

In both cases, landform and test pit data provided a consistent understanding of site extent (Navin Officer, 2026). Navin Officer has advised that additional testing of WCP1143 or WCP1129 is not required and that the subsurface testing does not demonstrate high artefact potential across landforms and rather confirms the predictive model that areas of archaeological potential are likely to be found within 200 m of water and in elevated areas of gentle slope (Navin Officer, 2026).

WCPL would be happy to coordinate a site visit with DPHI and Heritage NSW following lodgement of the Submissions Report to examine these two sites and the local landform and hydrological context in person, as necessary.

Comment #12

> *Three rockshelter sites with PAD (WCP1123, WCP1124, WCP1125) are proposed for impact but were not tested due to restrictions around testing rockshelter sites under the Code of Practice. It is Heritage NSW's preference, however, that all sites with PAD proposed for impact be subject to test excavation prior to project approval to fully understand their nature and significance and allow for the development of appropriate management measures (e.g. avoidance/ conservation or salvage). For SSD projects requiring testing of site types that generally fall outside of the Code of Practice allowances, Heritage NSW requests a sampling strategy/ methodology be developed in consultation with RAPs and submitted for review/approval prior to fieldwork. Heritage NSW recommends that these sites be tested prior to any project approval, and the ACHAR updated.*

Response

Navin Officer has prepared a Technical Response to Comment #12 that is provided in Attachment 5. The below summarises Navin Officers' response and provides additional discussion where relevant.

Test excavations of the three rock shelters (WCP1123, WCP1124 and WCP1125) were not conducted as part of the ACHA subsurface test excavation program, consistent with Requirement 14 of the Code of Practice, which states:

> ***Requirement 14 – Test excavation which is not excluded from the definition of harm***
>
> *Acts carried out in the course of sub-surface investigation will not be excluded from harm where they are carried out in the following areas:*
>
> *…*
>
> *3. in or within 50 m of a rock shelter, shell midden or earth mound*
>
> *…*
>
> *In these circumstances it will be necessary to apply for an AHIP.*

During the pedestrian archaeological survey, each of the three shelters were recorded in detail, and their archaeological potential was assessed based on size, context, and comparisons to previously excavated shelters in the Wilpinjong area. The three shelters are relatively small shelters on a rocky hill slope, not in a valley floor or extensive cave context. Navin Officer notes that based on previous rock shelter excavations conducted at the Wilpinjong Coal Mine, rock shelters that are on the valley floor or low in the landscape (closer to water and with deeper soil accumulation) often contain substantial subsurface deposits. For example, shelters WCP45 and WCP118/119 (previously excavated) had stratified cultural material. In contrast, shelters situated on higher rocky hills or ridgelines, such as WCP1123, WCP1124 and WCP1125 (as well as WCP475, WCP476, WCP308, WCP953 which were also subject to past excavation), have typically shown very shallow or no deposit and few artefacts.

Due to the limited subsurface potential at WCP1123, WCP1124, WCP1125, Navin Officer considers it unlikely that these sites would yield stratified cultural deposits and high number of artefacts. Therefore, test excavations are not considered necessary prior to approval. Navin Officer recommends that a salvage excavation program is conducted for the sites post-approval of the Modification, and would be managed under the approved Wilpinjong Coal Mine Aboriginal Cultural Heritage Management Plan (ACHMP) (WCPL, 2022).

When reference is made to Requirement 14 of the Code of Practice and the extensive conduct of heritage survey and salvage works undertaken for more than 20 years at the Wilpinjong Coal Mine, WCPL considers the nature, significance and appropriate management of such small rock shelter sites is well understood.

WCPL acknowledges that previous feedback from Wilpinjong RAPs has typically been that cultural sites should not be disturbed (including by test excavation) unless such disturbance is imminent, that is, only when a site's impact is approved and about to occur (i.e. test excavations involve disturbance, which some RAPs regard as destruction of the relevant site).

WCPL notes that Navin Officer sought feedback from RAPs on Heritage NSW's suggestion that the shelters be excavated pre-approval. Feedback was received from the following RAPs:

- Thomas Dahlstrom.
- Wellington Valley Wiradjuri Aboriginal Corporation.
- Booral Maliyan.
- Warrabinga Native Title Claimants Aboriginal Corporation.
- Paul Brydon.
- Virginia Doig.

WCPL acknowledges and appreciates the feedback provided by all RAPs and recognises the importance of RAP knowledge, experience and advice in the assessment and management of Aboriginal cultural heritage at Wilpinjong. Some of the RAPs that provided feedback have been involved in Aboriginal cultural heritage matters at Wilpinjong for an extended period, including during the Wilpinjong Coal Project approval and the Wilpinjong Extension Project. WCPL acknowledges the value of this longstanding involvement and the continuity of cultural knowledge it provides.

Three out of the six RAPs listed above indicated a preference for test excavations to be undertaken post-approval of the Modification, representing an even distribution of views amongst RAPs who responded to Navin Officer in writing or by phone message. Copies of correspondence from RAPs is provided in Attachment 5.

Following the additional consultation with RAPs, Navin Officer maintains its original recommendation that test excavations be undertaken post approval, when impacts have been approved by the NSW Government and confirmed, in consideration of the nature of the feedback received.

Analysis and Discussion

Comment #13

> *The current lack of detail in the archaeological and environmental review has led to a disconnect between the background information, predictive statements, and assessment conclusions. Notably, the survey and excavation results contradict the general predictive expectations, and such discrepancies are not adequately addressed in the ACHAR. To address this, please revise Section 7.5 to include a more detailed and analytical discussion. In line with Requirement 11 of the Code of Practice, the assessment results must be interpreted within an archaeological framework that reconstructs Aboriginal settlement history and is contextualised locally and regionally. This discussion must also address any discrepancies between current understandings and predictive statements and the actual findings from the survey and testing undertaken for the modification (e.g., the test excavation sampling strategy focused on areas within 200m of water, however, the highest density of artefacts was recovered from Transect 8 which falls outside of this area of expected sensitivity. This and other discrepancies are not adequately considered and discussed).*

Response

Section 6 of the ACHA provides a comprehensive archaeological background and predictive model for the Wilpinjong area, drawing directly on the extensive body of previous research from this region. Findings for the Modification do in fact align well with the established regional patterns that have emerged from decades of work at Wilpinjong and surrounding coal mines.

The ACHA explicitly discusses how earlier models, such as those developed during the Wilpinjong Extension Project and neighbouring Ulan/Moolarben mines, anticipated that major watercourses (like the Goulburn River) would be focal points of past Aboriginal occupation, while smaller valleys would see comparatively lower-intensity use. A comparison was then made with those expectations to more recent evidence from salvage excavations conducted at the Wilpinjong Coal Mine and other recent regional projects, which show that even “secondary” resource zones (such as minor watercourses) were used more than previously assumed. Section 6.3 of the ACHA notes that previous assumptions of only sporadic use of secondary resource zones have been overturned by recent excavations:

> *The occupation of ‘secondary resource zones’… has not been shown to be merely sporadic as previously assumed. The results of recent excavations show that areas within the broader Wilpinjong region were occupied on a more than sporadic basis and probably resulted from a diverse range of cultural activities rather than occasional hunting forays.*

This statement in the ACHA directly integrates the findings of recent archaeological work (including salvage excavations from 2021–2024 at Wilpinjong and Moolarben) into the predictive model for the Modification. In other words, the ACHA does reflect current knowledge by acknowledging the earlier model and then updates it with new data, forming a clear, testable hypothesis that some of Wilpinjong’s smaller creek corridors could contain substantial archaeological evidence of sustained use (albeit at generally lower densities than along major rivers) (Navin Officer, 2026).

The predictive model was used as the basis for the fieldwork and targeted intensity. For example, the model predicted that highest artefact densities would occur near water sources on gently-sloping landforms, and that more marginal landforms (far from water or very steep) would have little to no archaeological traces. The results of the field surveys validated the predictive model and there was no observed “disconnect” between the background research, survey/testing results, and conclusions of the ACHA. Notably, the one apparent anomaly that Heritage NSW has highlighted in its comments (Transect 8 yielding high artefact density outside the 200 m creek buffer) is actually consistent with the predictive model. It was anticipated that smaller watercourses could also attract intensive use. Transect 8 was placed within 200 m of an unnamed second-order tributary of Wollar Creek (Figure 14), in alignment with the predictive model (further discussed in the response to Comment #10).

Meanwhile, Transect 4 along the main creek yielded lower densities, which is likely as a result of local geomorphic factors rather than a disconnect with the model (Navin Officer, 2026). In summary, the results confirm the predictive statements e.g. areas within approximately 200 m of any reliable water (creek or gully) on stable soils have high archaeological potential, whereas areas beyond that or on unstable/steep ground have low potential, and this mirrors the regional settlement pattern already documented by previous investigations.

Ultimately, the findings of the ACHA validate the predictive modelling in a regional context and updated modelling completed for the Wilpinjong Coal Mine. The Study Area fits the broader pattern of Aboriginal land use in the central NSW region, which was heavily focused on water-rich zones, with continuity of occupation over time, and the proposed management recommendations (avoidance of key sites, surface collection and post approval salvage) are consistent with the significance that pattern implies. In light of this, it is understood that the archaeological background as presented is sufficiently detailed and effective, meeting the requirements of the Code of Practice by outlining the known regional patterns and making testable predictions (all of which were addressed by the survey and excavation program) (Navin Officer, 2026).

Consideration of Ecologically Sustainable Development and Cumulative Impacts

Comment #14

> *Section 9.3.3 (Justifying Harm and Mitigating Harm) states that "The proposed works associated with the Modification are considered to be minor additions to the existing operations at the Wilpinjong Coal Mine" (p.110). Heritage NSW does not agree with this statement, as direct harm to twelve (12) know Aboriginal sites, including three of moderate-high significance, cannot be considered a minor addition and is inconsistent with the ESD principles. Heritage NSW requests that the ACHAR be updated to include a revised assessment of ESD and cumulative impacts, noting the extensive and ongoing impact of mining on Aboriginal cultural heritage in the region. Updates to these sections will likely be required following the additional archaeological assessments required to address the above comments.*

Response

The characterisation of the Modification as a "minor addition" refers to its scale and cumulative contribution relative to the existing mining operations and potential loss of research potential, as described below.

Consideration of Cumulative Impacts

In context, as noted in the ACHA, to date there have been 1,096 Aboriginal sites recorded within the Wilpinjong Coal Mine and surrounds. 81 Aboriginal sites were located within the Study Area (72 sites newly recorded). Of the 81 sites, 15 sites were located within the Modification Area, 12 of which would be subject to direct disturbance. Therefore, the Modification would impact approximately 1% of the known heritage sites within the Wilpinjong Coal Mine and surrounds (Navin Officer, 2026). Potential impacts from operations at the Wilpinjong Coal Mine are currently being managed with a known and consistent framework through formalised policies and procedures contained within the approved ACHMP (WCPL, 2022). Therefore, with the mitigatory and salvage measures in place, the Modification is considered to have a minor incremental impact compared to the cumulative footprint of the Wilpinjong Coal Mine, and is not considered to have potential to significantly contribute to cumulative impacts on Aboriginal heritage in the region (Navin Officer, 2025; 2026).

The Modification also includes the proposed avoidance of direct disturbance of the existing Rocky Hill complex which is currently approved to be mined in Pit 8, under Development Consent (SSD-6764). The Rocky Hill complex as a whole has previously been identified by the RAPs as being of high cultural significance and includes three rock shelters with PADs, two natural waterhole features, a possible Aboriginal scarred tree and possible ochre quarry. The existing ACHMP would be reviewed and updated to capture the formal avoidance of the Rocky Hill Complex.

WCPL also notes that the Modification open cut extent and associated disturbance footprint was amended to avoid sites WCP1129 and WCP1143 which were both considered to have moderate-high significance (refer Comment #11).

Research Potential

Nine sites within the Modification area represent low archaeological (scientific) significance, which consist of either isolated finds or artefact scatters that possess minimal to no subsurface potential, and are typical of the Wilpinjong region based on the predictive modelling. These sites, while culturally significant, have limited research potential for understanding past Aboriginal occupation. The consequence of harm for these sites is the total loss of value, which would be mitigated through surface artefact salvage, as recommended within the ACHA.

Three sites are assigned moderate-high archaeological (scientific) (rock shelters with PAD) and have the potential to contribute to the understanding of past Aboriginal activity within the Wilpinjong area. For this reason, Navin Officer recommends that these sites are subject to archaeological test and salvage excavations post-approval to identify the nature of the deposits and salvage available archaeological material consistent with the approved ACHMP (Navin Officer, 2025).

Aboriginal Community Consultation

Comment #15

To support Heritage NSW's assessment of the adequacy and completeness of the Aboriginal community consultation process undertaken for the project, additional documentation is required. Specifically, the consultation records must demonstrate that all Agencies, Registered Aboriginal Parties (RAPs) and/or potential stakeholders (in the case of Stage 1 notifications) were contacted at each stage of the process, in accordance with the Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010 (DECCW 2010). The material provided in Appendix 1, however, is incomplete, redacted and includes only sample correspondence and only some responses from RAPs. To address this, please provide the follow:

a) Copies of Stage 1 agency notification and all responses received.

b) Evidence that the Stage 1 registration of interest letter was sent to all identified potential Aboriginal cultural heritage knowledge holders, along with copies of all responses

c) Copies of the Section 4.1.6 notification of Heritage NSW and Local Aboriginal Land Council.

d) Evidence that Stage 2/3 project information and assessment methodology were provided to all RAPs.

e) Evidence that the Stage 4 draft ACHAR was distributed to all RAPs.

Acceptable evidence may include dated email records showing all relevant email addresses. These documents may be submitted separately for Heritage NSW's review and records.

Response

Copies of all consultation records have been separately provided to Heritage NSW as requested.

AHIMS and Administrative Comments

Comment #16

Heritage NSW notes that the AHIMS search is greater than 12 months old at the time of submissions. As per Requirement 1b of the Code of Practice, please update the AHIMS search and review for currency.

Response

An updated AHIMS Search has been completed for the Study Area and is provided in Attachment 5. Navin Officer confirmed there is no change to the results or conclusions of the ACHA arising from the new search.

Comment #17

Section 6.2.6.1 of the ACHAR notes that Yawanna No. 3 was incorrectly georeferenced on the AHIMS site card and is actually located 200m west within Wilpinjong Creek, outside the study area. Please confirm whether AHIMS has been updated to correct this location error.

Response

Navin Officer has advised that an exact new location for this site unknown; however, the site card description differs from the current location and places it outside of the Study Area in the bed of Wilpinjong Creek:

…the site is in the bed of Wilpinjong Creek on both sides of a connecting track approximately 400 m west of homestead…

Comment #18

Please update the ACHAR and figures to include AHIMS identifiers for all newly identifies and previously recorded Aboriginal Sites. For completeness, and due to the need to consider the potential for sites to extend into the study area, Aboriginal site mapping should also show the location and boundary of AHIMS sites located outside of but within the proximity to the study area as per the search results. Note that the multiple maps may be required to convey this information at an appropriate scale.

Response

Attachment 5 provides figures illustrating AHIMS labels for previously recorded sites within the Study Area, and provides site name labels and site extents for newly recorded sites within the Study Area.

4.1.4 NSW Department of Climate Change, Energy, the Environment and Water – Water

Aquifer Interference Impacts and Management

Recommendation 1.1 – Prior to Determination

> *The Department of Planning, Housing and Infrastructure (DPHI) requests the proponent to amend the mining layout to provide a 150-metre buffer between the expanded pit 8 and the highly productive alluvium of Wollar Creek.*

Response

The NSW Aquifer Interference Policy (Department of Primary Industries Water, 2012) was released after, and supersedes, the *Management of stream/aquifer systems in coal mining developments* guidelines (Department of Infrastructure, Planning and Natural Resource [DIPHNR], 2005). Relevant to DCCEEW – Water's concerns, the NSW Aquifer Interference Policy includes 'minimal impact considerations' for aquifer interference activities including the setting of water quality criteria for Highly Productive Groundwater Sources, as below (from Table 1 of the NSW Aquifer Interference Policy):

> *1. (a) …*
>
> *…*
>
> *(c) No mining activity to be below the natural ground surface within 200m laterally from the top of high bank or 100m vertically beneath (or the three dimensional extent of the alluvial water source - whichever is the lesser distance) of a highly connected surface water source that is defined as a "reliable water supply".*
>
> *(d) Not more than 10% cumulatively of the three dimensional extent of the alluvial material in this water source to be excavated by mining activities beyond 200m laterally from the top of high bank and 100m vertically beneath a highly connected surface water source that is defined as a "reliable water supply".*

The Pit 8 Extension pit crest is more than 200 m laterally from the top of high bank of Wollar Creek and does not excavate any alluvial material. Accordingly, the Modification meets the Level 1 Minimal Impact Considerations for parts 1.(c) and 1.(d) of the NSW Aquifer Interference Policy.

It is noted that DCCEEW – Water states the proposed 150 m "…buffer is intended to allow zero mining induced ground movements or fracturing". This is based on DIPHNR (2005) (superseded by the NSW Aquifer Interference Policy), which describes for Schedule 3 streams (emphasis added):

> *DIPNR is adopting a precautionary approach to mining in the vicinity of important water resources. A notification area is defined between underground and open cut mines and Schedule 3 rivers and their associated alluvial groundwater systems. The aim of the area is to provide zero mining induced ground movements or fracturing, with an additional factor of safety for risk management.*

However, Wollar Creek meets the definition of a Schedule 2 stream as defined in DIPHNR (2005):

> ***Schedule 2** streams comprise primarily third order and higher streams, which drain into primary catchment rivers systems.*
>
> ***Schedule 3** streams comprise major rivers and connected alluvial groundwaters. The stream including the major river systems of the Hunter River, Goulburn River and catchment tributaries flowing into it; Dart Brook, Glennies Creek, Pages River, Paterson River, Rouchel Brook, Williams River, Wollombi Brook and Wybong Creek and associated alluvial groundwater zones*

Therefore, the zero mining induced groundwater movements or fracturing was not relevant to Wollar Creek, even under the now superseded 2005 guideline.

Notwithstanding, WCPL would also establish an additional groundwater monitoring site within the State-mapped alluvium along Wollar Creek (and the underlying coal measures) as a component of updating the Water Management Plan for the Modification.

Recommendation 1.2 – Post Determination

DPHI requests the proponent to expand the monitoring network to include:

- *An additional upstream stream gauge that measures total flow.*
- *Additional nested monitoring bores within the highly productive alluvium.*

Response

As described in response to NSW EPA's Recommendation 4, WCPL proposes to establish a new surface water flow gauging station on Wollar Creek, upstream of the confluence of Wollar Creek and Wilpinjong Creek, which would provide additional flow data for analysis of the mine's contribution to surface water flows in the locality.

The Modification proposes discharges of clean water, captured by the upslope clean water infrastructure to Wollar Creek. As the size of the clean water catchments are small relative to the total Wollar Creek catchment area (approximately 0.2%) and the dams would be operated as dry detention basins, WCPL does not propose to establish a second gauging station upstream of the Modification.

WCPL agrees to establish an additional groundwater monitoring site within the State-mapped alluvium along Wollar Creek (and the underlying coal measures) as a component of updating the Water Management Plan for the Modification. WCPL will also progressively expand the existing groundwater monitoring network to the east of Wollar Creek as a component of environmental baseline data collection in EL 9399.

Recommendation 1.3 – Post Determination

DPHI requests the proponent to:

- *Review the water quality performance targets for consistency and errors.*
- *Add key trace metals (eg. arsenic, bismith, selenium and molybdenum) to the performance target parameters.*

Response

The groundwater quality trigger levels presented in Table 10.1 of the Groundwater Assessment included maximum electrical conductivity (EC) values for the baseline period rather than the intended 80th percentile. The correct 80th percentile groundwater quality triggers are outlined in Table 13 of the Groundwater Management Plan (WCPL, 2017a).

Arsenic, selenium and molybdenum concentrations are recorded at groundwater bores under the existing Groundwater Management Plan. The results of these samples as analysed and reported in the Wilpinjong Coal Mine Annual Reviews.

WCPL accepts this recommendation and will incorporate monitoring of bismuth concentrations at select groundwater bores as part of the revision of the Water Management Plan to incorporate the Modification.

Water Take and Licensing

Recommendation 2.1 - Prior to Determination

That DPHI requests the proponent to review the proposed and existing surface water management system against water legislation and provide a table that confirms with a justification the following for each water storage (dam/pit):

- *Consistency with Maximum Harvestable Rights Dam Capacity of the property.*
- *Satisfies an exclusion in Schedule 4, Part 7 of the Water Management (General) Regulation 2025.*
- *Requirement water licensing and demonstrate the ability to obtain entitlement.*

Response

WCPL currently holds water access licence (WAL) 19426 with 40 units of Unregulated category entitlement in the Wollar Creek Water Source. A summary of the water storages and licensing requirements is provided in Table 18.

The maximum harvestable rights dam capacity for the Wilpinjong Coal Mine is 1,241 megalitres (ML) based on WCPL's (and its related entities) landholdings of approximately 17,733 ha (WaterNSW, 2026). As shown in Table 18, the total water captured under harvestable rights (i.e. approximately 270 ML) would be significantly less than the harvestable rights capacity available.

WCPL does not require any additional entitlements to account for surface water captured by the approved Wilpinjong Coal Mine or proposed Modification (Table 18).

Recommendation 2.2 – Prior to Determination

DPHI requests the proponent to summarise in a table the maximum annual water take from each impacted water source and compare this to water entitlement held to demonstrate sufficient entitlement or the need for further acquisition.

Response

As outlined in response to DCCEEW – Water's Recommendation 2.1, WCPL does not require any WALs to account for surface water captured by the approved Wilpinjong Coal Mine or proposed Modification as surface water would be captured by relevant stages under harvestable rights or excluded works.

A summary of the groundwater take and applicable licences is provided in Table 19. As shown in the table, WCPL currently holds, and will continue to hold, WALs with sufficient entitlements for the predicted groundwater take due to the approved the approved Wilpinjong Coal Mine inclusive of the proposed Modification.

Table 18
Surface Water Licensing Summary

Storage	Storage Status	Full Supply Volume (ML)	Licence Status	Applicable WAL
Ed's Lake	Existing	110	Excluded works [e]	N/A
Clean Water Dam (supplies CHPP)	Existing	51	Excluded works [e]	N/A
RWD	Existing	314	Excluded works [e]	N/A
Pit 2W	Existing	4,088	Excluded works [e]	N/A
Pit 5 FP Dam	Existing	8.5	Excluded works [e]	N/A
Pit 1	Existing	Varies [c]	Excluded works [e]	N/A
Pit 2 East	Existing	Varies [c]	Excluded works [e]	N/A
Pit 2 South	Existing	Varies [c]	Excluded works [e]	N/A
Pit 3	Existing	Varies [c]	Excluded works [e]	N/A
Pit 4	Existing	Varies [c]	Excluded works [e]	N/A
Pit 5 North	Existing	Varies [c]	Excluded works [e]	N/A
Pit 5 South	Existing	Varies [c]	Excluded works [e]	N/A
Pit 6	Existing	Varies [c]	Excluded works [e]	N/A
Pit 7	Existing	Varies [c]	Excluded works [e]	N/A
Pit 8 (North)	Existing	Varies [c]	Excluded works [e]	N/A
TD6	Existing	Varies [d]	Excluded works [e]	N/A
TD7	Existing	Varies [d]	Excluded works [e]	N/A
TD8 [a]	Future Infrastructure	Varies [d]	Excluded works [e]	N/A
Pit 8 South [a]	Future Infrastructure	Varies [c]	Excluded works [e]	N/A
Sediment Dams	Existing	Varies [f]	Excluded works [e]	N/A
Pit 8 Extension	Proposed	Varies [c]	Excluded works [e]	N/A
Pit 8 CWD [b]	Existing	25	Harvestable rights	N/A
Pit 8Ext CWD1 [b]	Proposed	0.3	Harvestable rights	N/A
Pit 8Ext CWD2 [b]	Proposed	0.3	Harvestable rights	N/A
Pit 8Ext CWD3 [b]	Proposed	0.5	Harvestable rights	N/A
Pit 8Ext CWD4 [b]	Proposed	1.2	Harvestable rights	N/A
Farm Dams (423 in total) [b]	Existing	242	Harvestable rights	N/A

Source: SLR (2025) and WRM (2025).

[a] Future infrastructure (approved – not part of the Modification).

[b] Stores clean water only.

[c] Mining pit capacity varies over time with active mining progression and backfill progression.

[d] Tailings dam capacity varies over time with tailings deposition.

[e] Excluded works pursuant to clause 70, Schedule 4, Part 7 of the *Water Management (General) Regulation 2025*.

[f] Capacity varies over time based on sediment deposition.

Table 19
Groundwater Water Take and Licensing Summary for the Modification

Water Sharing Plan	Water Source	Entitlement Unit shares	Estimated Take During Wilpinjong Coal Mine Mining Including the Modification (ML/year)		Estimated Take Post-mining (ML/year)	
			Average	Max	Average	Max
Water Sharing Plan for the North Coast Fractured and Porous Rock Groundwater Sources 2016	Sydney Basin North Coast Groundwater	3,121 [WAL 41862]	533	831	402	620
Water Sharing Plan for the Hunter Unregulated and Alluvial Water Sources 2022	Wollar Creek	474 [WAL 21499]	183.4	216	0[1]	384.5
	Upper Goulburn River	511 [WALs 19045, 19055, 19057, 19058]	32.3	47.1	0[1]	30.5

Source: SLR (2025).

[1] A net gain is predicted post-mining due to the hydraulic properties of the waste rock material placed in the backfilled pits permitting an increase in rainfall recharge with subsequent groundwater flow to the alluvium.

ML/year = megalitres per year

Recommendation 2.3 – Prior to Determination

The DPHI requests the proponent to:

- *Clarify the proposed catchment area for Pit 2 and Pit 6 final voids, and the size of the Pit 6 final void in the proposed final landform.*
- *Confirm the maximum annual surface water take and groundwater take from the proposed final landform and the ability to hold sufficient water entitlement.*

Response

Figure 7.1 of the Surface Water Assessment shows the proposed final voids and perimeter bunding, which define the catchment areas of the final voids. These catchment areas are consistent with those stated in Table 7.1 of the Surface Water Assessment (i.e. 31.6 ha for Pit 2 and 81.8 ha for Pit 6) and shown in the main text of the Modification Report (WCPL, 2025a).

The post-mining groundwater take is presented in Table 9.1 of the Groundwater Assessment using the same final void catchment areas. As shown in Table 9.1 of the Groundwater Assessment, WCPL currently holds WALs with sufficient entitlements for the predicted water take from each water source.

It is noted that the Modification does not involve any proposed changes to the approved Wilpinjong Coal Mine final voids.

Recommendation 2.4- Post Determination

The DPHI requests the proponent to:

- *Ensure sufficient water entitlement is held in a water access license/s (WAL) to account for the maximum predicted take from each water source prior to take occurring unless and exemption applies.*
- *Ensure the WALs proposed to account for water take by the project nominate the relevant extraction point and that any required dealing applications are completed prior to water take occurring.*
- *Update the Water Management Plan (WMP) to include changes to water take, water licensing and water management.*

Response

WCPL concurs with this DCCEEW – Water recommendation.

4.1.5 Mid-Western Regional Council

Modification Report

Comment

6.6.2 Air Quality Environmental Review

Construction activities associated with the Ulan-Wollar Road realignment is expected to generate dust emissions. The 2.4 km section of the road realignment should be included in the modelling assessment to accurately reflect the cumulative impacts of the project.

Response

Dust emissions from the Modification's construction activities, such as relocation of Ulan-Wollar Road, are expected to be temporary, limited in scale, and largely confined to 2027. These emissions would arise from a relatively small construction area along Ulan-Wollar Road and can be effectively managed using standard mitigation measures such as water sprays and progressive rehabilitation (Airen Consulting, 2025a).

Given the limited scope and short-term nature of construction activities associated with realigning Ulan-Wollar Road relative to broader mining operations, the associated dust emissions are unlikely to be significant and were therefore not considered necessary to model as part of the AQIA. These emissions would be managed adaptively on a day-to-day basis, based on the specific activities underway (Airen Consulting, 2025a).

Relevant dust controls for road construction projects that would be applicable to the Ulan-Wollar Road realignment, include:

- minimising disturbance of land to only what is required for construction;
- minimising distance travelled by hauling material the shortest distances possible;
- watering of unsealed routes used for vehicle movements if/as required;
- use of water sprays on stockpile areas if/as required; and
- visual monitoring to identify excessive dust generation.

WCPL also notes that it would continue to undertake real-time dust monitoring in Wollar during public road construction activities and would notify MWRC should elevated dust levels be observed in Wollar during construction activities.

Comment

6.8.2 Surface Water Environmental Review, Water Balance and Final Voids

The outflow assessment does not account for the potential operation of a throughflow system in the event of groundwater sink failure. If the evaporative systems fail, groundwater seepage could transport contaminants to environmental receptors. Proposed monitoring and mitigation measures to address potential final void failure should be outlined.

Response

The final landform after mining would include residual voids at Pit 6 and Pit 2. Water levels in the voids would fluctuate based on climate conditions, evaporation, and inflows from rainfall, runoff, and groundwater. The final voids have not changed as part of the Modification (WRM, 2025).

The voids would function as groundwater sinks with a long-term water level determined by the balance between groundwater inflow, rainfall, catchment runoff and evaporation. Long-term water balance modelling of the final voids shows that they would not overflow and salinity levels would slowly increase over time due to evapoconcentration (WRM, 2025).

As long-term final void modelling has shown that the final voids would remain as permanent and localised groundwater sinks, the migration of final void water through groundwater is unlikely (SLR, 2025). Further, HydroSimulations (2015) concluded that given the absence of expected changes to groundwater quality and the limited connectivity to Wilpinjong and Wollar Creeks, seepage is unlikely to impact surface water quality and thereby environmental receptors.

Notwithstanding, WCPL would continue to conduct extensive water quality monitoring over the life of the Modification in accordance with the approved Water Management Plan.

WCPL implements a Rehabilitation Management Plan and Forward Program under the rehabilitation requirements in the conditions of Development Consent (SSD-6764) and the Wilpinjong Coal Mine's mining leases. The Rehabilitation Management Plan include rehabilitation objectives and completion criteria for the final voids including objectives for the final voids to perform as groundwater sinks and to minimise long term groundwater seepage from the site to ensure negligible environmental consequences beyond those predicted for the mine.

The Rehabilitation Management Plan and Forward Program would be reviewed and where necessary updated to incorporate the Modification.

Initial Assessment of Geological Features Study

Comment

> *As noted in the PSM report, blasting predictions were not provided, and the limited available literature prevented PSM from assessing potential impacts on sensitive geological features. Additional geotechnical and blasting studies for site-specific data should be requested, including but not limited to recommendations listed on Page 31 of the report.*

Response

WCPL previously adopted a damage criteria of 250 mm/s and performance criteria of 80mm/s for geological features adjacent to the Wilpinjong Coal Mine that contain rock shelters with art in the approved Blast Management Plan. In the vicinity of the Modification there are various geological features that may be sensitive to indirect blast vibration effects on adjoining ridgelines (largely on Crown Land).

An initial geotechnical assessment of the potential sensitivity of nearby geological features to vibration-related damage from blasting activities associated with the Modification was undertaken by PSM (2025). The geotechnical assessment nominates provisional conservative ground vibration criteria for the Modification (Table 20). PSM (2025) has recommended further work is undertaken to identify site-specific criteria.

Table 20
Provisional PPV Limits for Sensitive Geological Features

Rock Mass Classification	PPV Threshold Criteria (mm/s)	PPV Upper Limit (mm/s)
Poor Quality Rock (RMR < 45)	15	25
Better than Poor Quality Rock (RMR > 45)	40	50

Source: PSM (2025).
PPV = Ground vibration as vector Peak Particle Velocity (mm/s).
RMR = Rock Mass Rating.

The threshold criteria presented in Table 20 represent blast vibration levels where geotechnical performance of the caves and cliff lines should be monitored before and after blasting to confirm no damage of geological features occur. The upper limit represents blast vibration levels where it is expected that the likelihood of damage is greater than acceptable in the absence of further analysis to establish site-specific criteria.

It is noted that the provisional ground vibration criteria nominated by PSM (2025) as shown in Table 20 are considerably more stringent that the performance criteria of 80 mm/s and damage criteria of 250 mm/s currently used at Wilpinjong Coal Mine for archaeological rock art sites (WCPL, 2024a).

As indicated by PSM (2025), only "Good Quality Rock" was found in the areas near the Pit 8 Extension areas. As such, RWDI Australia Pty Ltd (RWDI) (2025) completed blasting predictions based on the 50 mm/s provisional upper limit and the existing 80 mm/s performance criteria currently utilised for rock art sites.

WCPL has adopted a blast performance criteria for sensitive geological features (i.e. rocky habitat for threatened species and Aboriginal rock shelters sites) of 'no damage that is distinguishable from natural processes'.

To manage blasting at the Wilpinjong Coal Mine, such that the Modification does not damage any sensitive geological features, WCPL would undertake the following (RWDI, 2025):

- pre-assessment of the condition and baseline assessment of nearby representative sensitive geological features undertaken by a qualified geotechnical specialist prior to blasting;
- ground vibration monitoring to review impacts to representative sensitive geological features;
- ongoing inspections of sensitive geological features and adjustment of relevant criteria if necessary; and
- implementation of response protocol in the event Blast Management Plan ground vibration criteria are exceeded.

Groundwater Impact Assessment

Comment

> *Given the significant reduction in groundwater levels in Wollar Creek during both operation and recovery, and SLR's acknowledgment of limited data for this area, further explanation should be provided on what basis a conclusion of 'negligible impacts' was reached.*

Response

The groundwater model and impact assessment conclusions were peer reviewed by Dr Noel Merrick of HydroAlgorithmics Pty Ltd (2025), who concluded the model is fit for purpose:

> *In our view, the modelling process has no inherent bias that would prejudice the reliability of predicted impacts of importance. Model outcomes are consistent with knowledge of the groundwater system in the district, based on decades of study associated with three major coal mines.*
>
> *…*
>
> *In our view, the developed model provides a sufficient and best practice approximation to reality subject to computational constraints and data limitations. No model will ever be perfect, but the current model is considered to have established the level of impact risk as well as can reasonably be expected.*
>
> *Overall, we regard the model as fit for purpose, where 'purpose' is defined by the modelling objectives referenced above in Question 1, and we endorse the groundwater impact conclusions reached by SLR on the basis of numerical model outputs and hydrogeological interpretation.*

Groundwater modelling undertaken by SLR (2025) assessed the maximum incremental drawdown (extent of reduced groundwater level) attributable to the Modification. The results indicate that the maximum incremental drawdown in the water table is spatially limited, only extending outside of the pit in some areas along Wollar Creek.

Wollar Creek may experience drawdown impacts as the watercourse lies within the radius of the drawdown during mining activities. SLR (2025) considered this a minor impact as the maximum water table drawdown in the vicinity of Wollar Creek is approximately 1 m.

Drawdown impacts from the Modification are expected to be negligible at Wilpinjong Creek (SLR, 2025).

Surface Water Assessment

Comment

Tables 3.7-9

Yearly surface water monitoring results are presented in Tables 3.7-3.9, while Table 3.10 sets water quality impact assessment criteria based on three consecutive readings. Due to different units applied in each table, this approach limits the ability to interpret data and determine the effectiveness of WMP strategies and mitigation measures. Furthermore, many results exceed EPL 12425 conditions, with pH being the only parameter consistently within acceptable limits.

Response

Tables 3.7 to 3.9 of the Surface Water Assessment present the yearly surface water monitoring results from three surface water monitoring locations (WIL-D, WOL 2 and WOL 1) relevant to the Modification. WIL-D is located on Wilpinjong Creek, upstream of the Wollar Creek confluence. Sites WOL 1 and WOL 2 are located on Wollar Creek, where WOL 1 is downstream of Wilpinjong Creek confluence and WOL 2 is upstream of the Wilpinjong Creek confluence.

Table 3.10 of the Surface Water Assessment presents the adopted site specific trigger levels for monitoring sites WIL_NC, WIL_D2, WIL_D, WIL_2 and CC1, which have developed in consultation with NSW DCCEEW-Water as part of the approved Wilpinjong Coal Mine Water Management Plan (WCPL, 2017b).

Given the high variability of background water quality, exceedances of trigger values do not necessarily indicate a mining-related impact. Exceedance of trigger values would initiate investigations into surface water quality to determine whether the exceedance is a result of natural water quality variations, other upstream influences and/or a mining-related impact.

The existing Water Management Plan would be reviewed and revised to incorporate the Modification, subject to the conditions of any modified Development Consent. This would include a review of and, where necessary, updates to the trigger levels and sites.

Comment

Table 5.4 Salinity Parameters

Salinity data rely on a study from 2015, which is outdated given the potential for significant changes over a decade within a mine landscape. Current, site-specific data should be provided to ensure that best management practices in the WMP are appropriate and effective.

Response

As described in Section 5.5 of the Surface Water Assessment, salinity parameters adopted in the water balance model were based on those in the Wilpinjong Extension Project Surface Water Assessment (WRM, 2015). WRM (2025) reviewed and validated the salinity parameters as being appropriate, or in some cases conservative, for the Modification water balance model.

WCPL monitors electrical conductivity in on-site water storages and along Wilpinjong, Cumbo and Wollar Creeks as part of the Surface Water Management Plan. This would continue for the Modification.

Comment

5.6 Site Water Demands

The 2.4 km Ulan-Wollar Road realignment, a component of this Modification, is not included in the assessment of dust suppression or construction water requirements. Regardless of the party performing the works, water extraction or external supply will be necessary and must be explicitly addressed in the Modification.

Response

The largest mine water demands at the Wilpinjong Coal Mine are coal processing at the CHPP and dust suppression on haul roads.

Dust suppression water demand associated with the construction of the Ulan-Wollar Road realignment would be modest relative to the modelled mining and coal processing demand in 2027, as such WCPL does not foresee any difficulties in supplying this demand given current water inventory levels.

Biodiversity Development Assessment Report

Comment

Council identified a numerical inconsistency between the Executive Summary – Biodiversity Offset Requirements and Table ES-1 regarding ecosystem credits. Amended reports should be provided.

Response

The Executive Summary of the BDAR has been updated to clarify that 3,091 ecosystem credits are required for the Modification (Attachment 3).

Comment

2.4 Habitat Connectivity

- *"There are no recognised biodiversity corridors identifies by NSW DCCEEW, flyways for migratory species, or a local corridor identified by a local council in the assessment area". Wollar area is known breeding habitat for the Regent Honeyeater. This is evident as the vegetation within the project area is assessed as Regent Honeyeater habitat throughout the report. Amended reports should be provided.*

Response

Section 2.4 of the BDAR has been amended to refer to the Regent Honeyeater habitat discussed in Section 9.1.2 of the BDAR (Attachment 3).

Comment

4.2.4 Determining Presence of Absence of a Candidate Species Credit Species

- *"Targeted rock-turning surveys for reptiles were undertaken within the subject land by suitable qualified and experienced ecologists. 25 over six weeks in the spring of 2022 and spring of 2023". Council questions the validity of the data provided, due to the time between the assessment and the review of the report. Further evidence should be required.*
- *"No species credits are required for the South-eastern Glossy Black-Cockatoo." As the surveys are over 12 months old as of reviewing this report, Council believes they may not provide accurate data for the presence of threatened, vulnerable or endangered species that may be impact by the proposal. Further evidence should be required.*
- *"There are no caves, tunnels, mine, culvert or other structure known or suspected to be used for breeding in the Subject land. However, this species is known to occur in the locality so was not removed based on habitat constraint." It is noted in the report that caves and rock structures occur directly adjacent to areas that are currently and will be actively mined. It would be appropriate to provide context as to how active mining will not negatively impact roosting areas of bats in these areas.*

Response

Targeted Rock-turning Surveys

As noted within the BDAR, as of October 2024, NSW DCCEEW no longer recommends that *Aprasia parapulchella* (*A. parapulchella*) (Pink-tailed Legless Lizard) is assessed via targeted survey due to difficulty in detecting the species with confidence using this method.

Alternatively, NSW DCCEEW recommends that the *A. parapulchella* is assessed by an expert report and this was updated in the *BioNet Threatened Biodiversity Data Collection* (TBDC) (NSW DCCEEW, 2025e).

Accordingly, to comply with the TBDC, WCPL engaged Robert Spiers (Capital Ecology Pty Ltd [Capital Ecology]) (2025) to prepare a Species Expert Report for the Pink-tailed Legless Lizard. Robert Spiers concluded the following:

> *With consideration of the above, despite substantial survey effort for A. parapulchella having been undertaken within the subject land by BMS in 2022/2023 yielding no detection of the species, I cannot confidently conclude that the species is absent from the subject land.*
>
> *…*
>
> *Following the seven-element assessment process detailed in Section 6.4 and Section 6.5, and with strong consideration of the additional factors discussed in Section 7, I have determined that A. parapulchella is likely to present on or use habitat in the subject land. The subject land support a total area of 0.34 ha of likely habitat for A. parapulchella.*

Therefore, due to this conclusion, species credits have been generated for the Pink Tailed Legless Lizard.

South-Eastern Glossy Black Cockatoo

Field surveys remain valid for a 5-year period in accordance with the *Biodiversity Assessment Method Operational Manual – Stage 1* (Department of Planning and Environment [DPE], 2022a). As the surveys conducted for the *Calyptorhynchus lathami lathami* (South-eastern Glossy Black Cockatoo) are less than 5 years old, the survey data is considered current and no further surveys are required. There is no evidence of South-eastern Glossy Black Cockatoo breeding within the development footprint. No changes are required to the BDAR.

Little Bent-winged Bat and Large Bent-winged Bat

The habitat constraint is structures *known or suspected to be used for breeding* by the *Miniopterus australis* (Little Bent-winged Bat) and *Miniopterus orianae oceanensis* (Large Bent-winged Bat). There are no cave, tunnel, mine, culvert or other structure known or suspected to be used for breeding associated with the proposed Pit 8 Extension. No changes are required to the BDAR.

Section 7.2.4 of the BDAR discusses the potential indirect impacts to rocky bat habitat adjacent to the Subject Area, as stated below:

> *In regard to vibrations from blasting and stability of the bat rocky habitat, PSM (2025) has undertaken an initial assessment of the sensitivity of the geological features adjacent to the Modification with the aim of evaluating how impacts from blast vibrations may impact features and recommend how the blast vibrations can be managed to minimise the risk of damage. To avoid physical damage to mapped rocky bat habitat from indirect impacts, WCPL would undertake blasting in a controlled manner consistent with the recommendations from PSM (2025), by:*
>
> - *conducting inspections of caves and cliff lines as mining advances to assess the rock mass strength;*
> - *establishing an upper vibration blasting limit based on site specific evaluation of local rock mass strength;*
> - *maintaining a performance measure of 'no damage that is distinguishable from natural processes'; and*
> - *monitoring to confirm compliance with the performance measure for rocky habitat.*
>
> *PSM (2025) describe various different blast management techniques that may be used such as optimising the blast design or changing the blast technique.*

Comment

7.3.5 Fauna Vehicle Strike

The report addresses the potential of vehicle strikes on Ulan-Wollar Road only, Further assessments should be required to understand the full impact of vehicle strikes on all roads that are utilised by staff when travelling to and from work.

Response

The primary route from Mudgee to the Wilpinjong Coal Mine is via Ulan Road and Ulan-Wollar Road. Vehicular access to the mine is provided by three private roads connected to Ulan-Wollar Road. As a result, the BDAR identifies Ulan-Wollar Road as having the highest potential for vehicle-related fauna strikes compared to other roads in vicinity to the Wilpinjong Coal Mine.

The Modification involves realignment of approximately 2.4 km of Ulan-Wollar Road. The Ulan-Wollar Road realignment would pose less risk of fauna vehicle strike than the existing Ulan-Wollar Road because the road would be built between the proposed open cut pit and the existing Sandy Hollow-Gulgong Railway. The Ulan-Wollar Road realignment does not traverse a patch of woodland/forest. However, following construction there may be a period of higher risk as new growth along a road edge may be a food source for fauna which may make them susceptible to vehicle strike.

The Modification would involve use of vehicles for construction and operation within the Development Footprint. The use of internal mine roads poses a low risk of vehicle strike to any threatened birds or bats flying in the area (Resource Strategies, 2026). The on-site speed limit is 60 km per hour.

As described in the BDAR, vehicle strike of animals is possible, however, it is not expected to be of a magnitude that would result in the loss of any threatened species from the local area. The consequences of the impacts from vehicle strike are predicted to be negligible as the threatened fauna species are more widespread in adjacent connected habitat (Resource Strategies, 2026).

Comment

Table 8-1 Mitigation and Management Measures

Screening along the Ulan-Wollar Road has not been considered under this table. Council requests that this is implemented at the completion of the realignment of Ulan-Wollar Road to preserve the outlook of the site for other road users.

Response

Existing topography and remnant vegetation along Ulan-Wollar Road already provide partial screening of mining operations. WCPL would maintain current mitigation measures, including visual bunds along selected pit boundaries, established tree screens along Wollar Road and the mine access road, and progressive rehabilitation of disturbed areas and temporary waste rock emplacements. Additional mitigation would involve progressive rehabilitation of Modification landforms with native tree and shrub species to reduce visual contrast over time. Remnant vegetation along Ulan-Wollar Road and Wollar Road would also continue to be maintained, where practicable.

A description of the proposed visual mitigation measures, including establishment of visual bunds up to 3 m in height along select pit boundary locations is provided in Section 6.15.3 of the Modification Report.

Comment

Section 8.5 Box-Gum Woodland CEEC Revegetation Areas

It is requested that an appropriate management plan with replacement plantings and ongoing maintenance be provided.

Response

In light of the CPO recommendation, WCPL would secure the revegetation area for the Box Gum Woodland CEEC (as described in Section 8.5 of the BDAR) under a BSA. The BSA application would have a management plan which meets the requirements for the BSA. ABS would assess the BSA application as part of a separate approval process.

If this revegetation area is secured in a BSS, ongoing management of the revegetation areas and associated maintenance activities would be described in the BSS Management Plan.

Aquatic Ecology Assessment

Comment

Sampling Dates

Sampling occurred during the wettest October on record in BOM history, with temperatures approximately 3°C below average. These seasonal and hydrological anomalies may have significantly influenced the results. Given these conditions, a supplementary late-summer sampling round should be conducted to ensure accuracy.

Response

Bio-Analysis Pty Ltd [Bio-Analysis] acknowledges there are factors such as season, time of day and varying stream depths (for example), as well as sampling effort that may have influenced any spatial variability observed, thereby reducing the likelihood of identifying a range of potentially occurring species which may only use habitats of the Study Area periodically or seasonally.

However, Bio-Analysis concluded the following:

However, the results from previous surveys of aquatic plants and fauna undertaken for WCPL in different seasons and across several years have been incorporated into this report to address this limitation (BA, 2005, 2015; Landline Consulting, 2011, 2012, 2013; Barnson, 2014; Eco Logical Australia, 2018 – 2022). The combined data from the current and previous surveys is considered sufficient for the purpose of this aquatic ecology assessment.

Therefore, no further sampling is deemed necessary, and the conclusions of the Aquatic Ecology Assessment remain valid.

Stream health, including assessment of habitat, water quality, aquatic macroinvertebrates and fish, would continue to be monitored regularly as part of the existing Stream Health Monitoring Program for the Wilpinjong Coal Mine (Bio-Analysis, 2025). Any significant change in stream health as determined by stream health trigger levels at or immediately downstream of the Modification would be investigated to determine the source of the change.

Comment

3.2.2 Aquatic Ecology Survey Sites and 5.2 Surface Water Flow and Aquatic Biota

Cumbo Creek, the largest tributary crossing the existing/ approved site, was included in the baseflow predictions in Section 5.2 but omitted from sites listed in Table 2 (Section 3.2.2). It may be appropriate to amend report to include Cumbo Creek in the aquatic habitat and biota assessment to inform appropriate mitigation measures (TARPs) in relation to the Modification.

Response

The Wilpinjong Coal Mine is currently approved to mine the Cumbo Creek alignment and establish an alternative alignment. However, as a component of the Modification, WCPL is proposing to relinquish its approval to mine through the creek and the Cumbo Creek corridor would become a mine exclusion area. On this basis, no specific assessment of Cumbo Creek is required in the Aquatic Ecology Assessment (Bio-Analysis, 2025). Notwithstanding, WCPL already conducts regular aquatic ecology monitoring, including monitoring of the following elements (WCPL, 2018):

- water usage, pumped water transfer volumes and volumes of water stored on site;
- surface water quality in Wilpinjong Creek, Cumbo Creek, Wollar Creek and Slate Gully flow line;
- surface water flows in Wilpinjong Creek and Cumbo Creek;
- channel stability in Wilpinjong Creek and Cumbo Creek;
- stream health conditions in Wilpinjong Creek and Cumbo Creek, comprising:
  - survey of aquatic macroinvertebrate assemblages in spring if streamflow or ponded water is present and access to the creeks is safe;
  - in-situ surface water quality sampling and analysis (pH, EC, temperature, dissolved oxygen, salinity and turbidity) at each macroinvertebrate sampling site at the time of the survey to identify and characterise the possible stressors upon macroinvertebrate assemblages;
  - compilation of a variety of interpretive indices using the survey data to evaluate environmental quality at the survey sites; and
  - comparing the site indices against indices compiled for other sites within each survey and assessing changes in the indices for each site over time, including assessment against a trigger level for further investigation;
- water quality and volume monitoring for licensed discharges; and
- water quality of stored mine water.

Comment

4.2 Surface Water Quality

Data confirms non-compliance with applicable standards and aligns with findings in the Surface Water Assessment. The assessment identified that much of the offset areas exhibit degraded vegetation dominated by pollutant-tolerant species. The current approach does not appear to be sufficient. Under the Rehabilitation Strategy, sensitive areas, particularly waterways, may require a rigorous and adaptive restoration program.

Response

Given the high variability of background water quality and extensive historical land disturbance associated with agriculture, exceedances of trigger values presented in Table 5 of the Aquatic Ecology Assessment do not necessarily indicate a mining-related impact (for example, WOL 1, WOL 2 and WOL 3 are upstream of the mine on Wollar Creek).

The Aquatic Ecology Assessment states that there is no visible evidence that mining within the vicinity of the creeks or discharge of water from the mine has resulted in degradation of surrounding creeks (Bio-Analysis, 2025).

Aboriginal Cultural Heritage Assessment

Comment

7.3.1.1 The Study Area

The Effective Survey Coverage (ESC) represented only 7.27% of the total survey area due to dense grass cover, which likely restricted site visibility and detection. This limitation should be addressed to ensure the survey results are representative.

Response

As described in response to Heritage NSW Comment #6 in Section 4.1.3, the entire Modification Area was inspected, however, particular focus and additional scrutiny was placed on landforms of higher likelihood for Aboriginal objects based on previous archaeological investigations, predictive modelling, land use history, and advice from RAPs on-site. This meant that areas such as creek lines, gentle slopes, and resource-rich zones received more comprehensive investigation and inspection.

The outcomes of the field survey allowed Navin Officer to adequately characterise the archaeological record across the Modification Area, and identify material traces and evidence of past Aboriginal land use and where subsurface materials might exist, consistent with the Code of Practice.

In summary, the survey intensity was proportionate to the Modification potential impacts and successfully recorded the cultural materials present in the landscape which informed the significance and impact assessment presented in the ACHA. No gaps in the survey coverage were identified by Navin Officer that would invalidate the survey's findings and overall impact assessment in the ACHA (Navin Officer 2026).

Comment

8.2.3 PAD Scientific (Archaeological) Value

The significance of the PAD is described as provisional, pending subsurface salvage. This uncertainty has implications for the adequacy of proposed mitigation measures and should be clarified through further investigation.

Response

As described in response to Heritage NSW Comment #11 in Section 4.1.3, WCP1129 (rock shelter with PAD) and WCP1143 (subsurface artefact scatter and PAD) were both assessed as moderate to high scientific significance, with targeted subsurface testing undertaken as part of the ACHA to confirm their spatial extent and inform boundary delineation.

In both cases, the results indicate that artefact distribution is spatially constrained, supporting the defined site boundaries presented in the ACHA, and also shown on Plates 1 and 2 in Section 4.1.3. Navin Officer is, therefore, confident that the ACHA accurately captures the full extent of both sites, and that WCP1129 and WCP1143 (Attachment 5), both of which are being avoided by the Modification as WCPL has amended its mine design.

With respect to the three rock shelter sites proposed to be excavated post-approval (WCP1123, WCP1124 and WCP1125), Navin Officer has consulted with RAPs and responded to Heritage NSW's feedback (refer to Attachment 5 and Section 4.1.3).

Comment

It is also noted that Mudgee LALC is not listed among the Registered Aboriginal Parties. As the Modification area lies within Mudgee LALC Country, Wilpinjong should confirm whether engagement with Mudgee LALC has occurred and, if not, explain why they were excluded from consultation.

Response

MLALC is a RAP for the Modification (as described in Section 3 of the ACHA) and was consulted in preparation of the ACHA.

Geochemistry Assessment

Comment

Section 8 - Conclusions and Recommendations
The current recommendations are limited to monitoring molybdenum (Mo) and selenium (Se) and do not include corresponding mitigation measures. Action thresholds and management responses should be established.

Response

Section 8 of the Geochemistry Assessment provides a range of operational management strategies to manage the handling, storage and disposal of waste rock material and coal and coal rejects. The existing approved Wilpinjong Coal Mine Water Management Plan and associated sub-plans specify relevant water quality monitoring triggers and responses, which would continue under the Modification.

Comment

No provision has been made for predicting long-term leachate behaviour where water extracts exhibit acidic pH. Kinetic leach testing on representative samples should be required to assess ongoing acidic generation potential and to inform the design of leachate control systems.

Response

As described in Section 8.3 of the Geochemistry Assessment, Geo-Environmental Management Pty Ltd (Geo-Environmental Management) (2025) recommended ongoing site surface water quality monitoring, with addition of total alkalinity/acidity, arsenic and molybdenum monitoring on a monthly basis.

It is noted that the Wilpinjong Coal Mine has been operating since 2006 and the on-site water quality monitoring indicates that contained water is typically slightly alkaline.

The data generated from the surface water quality monitoring program would be periodically reviewed, typically on a 12 month basis. The review would determine if exposure of sodic or potentially acid-forming (PAF) materials within the waste rock emplacement or pit walls is impacting water quality and assess if there are any adverse impacts on the water quality in the receiving environment (Geo-Environmental, 2025).

WCPL also undertakes groundwater monitoring within the backfilled open cut pits (i.e. GWf series bores within the spoil) under the approved Water Management Plan. Groundwater levels, pH, EC and a suite of metal concentrations are recorded at the GWf series bores.

Groundwater quality results are analysed and reported in the Wilpinjong Coal Mine Annual Reviews. To date, there has been no adverse effects or trends noted in the spoil monitoring bores.

It is anticipated that this network of spoil monitoring bores would be expanded as mining progresses to include the Pit 8 Extension area.

Comment

Bypass coal is subject to general testing; however, no requirement exists for immediate classification prior to stockpiling. Implementation of real-time geochemical screening for bypass coal should be considered to prevent inadvertent exposure of potentially acidic-forming (PAF) or low-capacity (LC) material prior to stockpiling or disposal.

Response

It is noted that bypass coal would not be washed in the CHPP and therefore would not generate any material volume of coal rejects requiring on-site disposal. The Wilpinjong Coal Mine has been producing bypass coal since 2006 and existing handling and stockpile management measures would continue to be employed over the life of the Modification. Geo-Environmental (2025) concluded that the coal and coal rejects from the Pit 8 Extension area are generally consistent with previous investigations and recommended management measures remain unchanged.

Notwithstanding, ongoing regular reviews of water quality would continue to occur over the life of the Modification, consistent with an approved Water Management Plan (as discussed above).

4.2 PUBLIC AND ORGANISATION SUBMISSIONS

Responses to comments from both organisations and the public are provided below. Out of 919 public and organisation submissions, there were 610 (approximately 66%) of public and organisation submissions which expressed support for the Modification.

A summary of the key reasons given in the more than 600 positive submissions were as follows:

- The Modification would maintain job security (e.g. for the existing Wilpinjong Coal Mine workforce), enabling families to remain in the region and contribute to community stability. Many submitters linked the continuation of mining operations to population retention, community infrastructure provision and future planning for families and businesses.
- Many supporting submissions view the Wilpinjong Coal Mine as a major contributor to the regional economy through the support of local contractors, suppliers, trades and service providers, with these benefits to continue with the proposed Modification. Many submissions also reference the flow-on economic benefits of the Wilpinjong Coal Mine operations to surrounding towns such as Mudgee and Gulgong.
- Many submitters highlighted WCPL's commitment to training, apprenticeships and career development and financial support of organisations, sporting clubs and charities in the community that would continue with the Modification.
- The Modification's expected contribution to royalties, taxes (and export revenues) would contribute to the broader NSW and Australian economy, including providing funds that can be invested in public services and infrastructure[3].

Supporting submissions have not been documented, nor have responses been prepared by WCPL. Comments and objections raised in the remaining 309 submissions are addressed below. WCPL appreciates the time and effort of all community members who made a submission.

4.2.1 Modification Description, Justification and Documentation

Comments made in public and organisation submissions relevant to the Modification description, justification and/or documentation process include clarification of or concerns relating to:

1. Proximity to Wollar.
2. Mine exclusion areas.
3. Modification approval pathway.
4. Staged project approach.
5. Environmental impact vs economic benefits.
6. Satellite ROM pads.
7. Cumulative impacts and assessment.
8. Independence of environmental consultants.
9. Regional planning objectives.
10. Ecologically sustainable development.
11. Legislative compliance.
12. Use of Wilpinjong Coal.

Responses to these comments are provided below.

[3] It is noted that as of 31 December 2025, the Wilpinjong Coal Mine has contributed more than $934 million in royalty payments to the NSW Government since it commenced in 2006.

1. Proximity to Wollar

Issue

Concerns were raised that the Modification would bring open cut mining operations in closer proximity to Wollar and associated key community facilities such as the Wollar community hall, recreation ground, public playground and rural fire station.

Response

Since the Wilpinjong Extension Project was approved in 2017, WCPL has continued to purchase nearby private land in Wollar when it has come up for sale. WCPL now owns all private landholdings in Wollar, with the exception of one private dwelling, and three vacant blocks of land recently granted by the Crown to the MLALC.

WCPL has developed negotiated agreements with the three nearest private dwelling owners (i.e. within approximately 6 km of the Pit 8 Extension area), including the one private dwelling owner remaining in Wollar.

At its nearest point, the Modification would bring open cut mining operations approximately 0.8-1.5 km from the Wollar community hall and adjacent facilities including the Wollar recreation ground, Wollar rural waste transfer station and rural fire station (associated with the Cooks Gap rural fire brigade) (Figure 15).

With the implementation of WCPL's existing Noise Management Plan and noise management measures (including real-time monitoring and application of operational controls under adverse meteorological conditions), no noise exceedances are predicted at any private residences without existing negotiated noise agreements, or at community facilities including the Wollar community hall.

Air quality modelling indicates that no exceedances of applicable Development Consent (SSD-6764) air quality criteria are predicted to arise at any privately owned residences or community facilities as a result of the Modification. The real-time air quality monitoring system and response protocols detailed in the Air Quality Management Plan would continue to be implemented, including proactive and reactive management measures.

Considerations of air quality and operational noise predictions for the three vacant blocks of land recently granted to the MLALC is provided in Sections 4.2.10 and 4.2.11.

2. Mine Exclusion Areas

Issue

Concerns were raised that while the proposed Rocky Hill and the Cumbo Creek corridor mine exclusion areas were considered to be environmentally positive decisions by WCPL, these did not need to be included in the Modification, and the mine exclusion areas would not offset other potential environmental impacts associated with the Pit 8 Extension.

Response

The Modification would include the proposed avoidance of open cut mining of the existing Cumbo Creek corridor and the Rocky Hill complex which are currently approved to be mined in Pit 4 and Pit 8, respectively, under Development Consent (SSD-6764) (Figure 3). WCPL formally relinquishing its ability to mine these areas facilitates protection of the Rocky Hill complex and provides an opportunity for WCPL to commence native vegetation regeneration works in the Cumbo Creek corridor (i.e. these areas could not be mined in the future should WCPL's circumstances or decision-making change). The Modification Report and associated specialist appendices clearly articulate assessment findings with and without consideration of these proposed mine exclusion areas.

LEGEND

- Existing Railway
- Cadastral Boundary
- Crown Land
- Mudgee Local Aboriginal Land Council
- Exploration Licence Boundary (EL)
- Mining Lease Boundary (ML)
- Proposed Mining Lease Application Boundary (MLA)

Proposed Modification

- Modification Indicative Development Footprint
- Conceptual Pit Boundary
- Indicative Public Road Realignment (approx 2370 m)
- Indicative Local Electricity Transmission Line Realignment
- Indicative Communications Realignment

Source: WCPL (2025); NSW Spatial Services (2025); Phronis (2025)
Orthophoto Mosaic: WCPL (July 2024 - Oct 2022)

Peabody

WILPINJONG COAL MINE

Distances to Pit 8 Extension Area

Figure 15

3. Modification Approval Pathway

Issue

Submitters suggested that the Modification should be subject to a separate SSD application as it is not considered substantially the same development.

Response

The proposed Modification is modest relative to the approved Wilpinjong Coal Mine. The Modification would not substantially change the scale or nature of the approved Wilpinjong Coal Mine, which would continue to align with the objectives of the NSW Government's *Strategic Statement on Coal Exploration and Mining in NSW* (Department of Regional NSW, 2020).

The Modification would:

- not alter the purpose for which the development is carried out, nor the general scale and nature of the mining operations;
- not require any material alteration to the current mining fleet, operational workforce or period of ROM coal extraction;
- alter the approved general arrangement to remove the Rocky Hill and Cumbo Creek mine exclusion areas and correspondingly include the Pit 8 Extension (noting the general arrangement of the Wilpinjong Extension Project has also been varied via Modifications 2 and 4, but remains similar in extent);
- result in modest additions to the Development Application area for inclusion of the Pit 8 Extension (noting that some land in Pit 8 has previously been removed from the Development Application area via Modification 2);
- result in additional relocations of local public infrastructure (i.e. to the east of the currently approved Pits 1-8 public infrastructure relocations);
- allow for an extra six months of mining for backfilling operations;
- extract approximately 6 Mt of additional ROM coal;
- remain below the originally assessed maximum annual waste rock production rate of approximately 43 Mbcm;
- remain below the originally assessed maximum ROM coal production rate of 16 Mtpa;
- continue to make use of existing coal processing, handling, train loading and rail transport infrastructure without further material augmentation; and
- result in a residual final landform that avoids mining of the approved Rocky Hill and Cumbo Creek exclusion areas and includes the Pit 8 Extension, but is similar in landform design and approach to post-mining revegetation.

It is also important to note that the Wilpinjong Coal Mine, with the proposed Modification, would not involve any material changes to several aspects of the existing Wilpinjong Coal Mine, including the following:

- mining methods;
- primary site access;
- site electricity supply and distribution;
- mine infrastructure areas;
- CHPP, coal stockpile and rail loading facilities;
- duration of ROM coal extraction; and
- the existing hours of operation and key activities.

Taking the above and other similarities into account, WCPL sought legal advice to confirm the most appropriate approval pathway for the proposed Modification. This advice concluded that the proposed Modification would be considered 'substantially the same' as the currently approved Wilpinjong Coal Mine and could therefore be pursued under section 4.55(2) of the EP&A Act.

4. Staged Project Approach

Issue

Concerns were raised that the Modification is the first stage of a larger development and would facilitate extension of open cut mining operations further east, potentially surrounding Wollar.

Response

It is acknowledged that a key theme raised during the consultation for the Modification SIA (Square Peg, 2025) were concerns that a NSW Government approval of the Modification may facilitate a subsequent SSD application for further open cut extensions east of Wollar.

WCPL is currently investigating opportunities to potentially extend mining operations further east of Pit 8 within EL 9399. If deemed feasible and pursued by WCPL, this extension would be subject to a separate SSD application approval process under the EP&A Act, and therefore does not form part of the Modification.

Further discussion of these concerns and WCPL's response is provided in Section 4.2.6.

5. Environmental Impact vs Economic Benefits

Issue

Concerns were raised that the potential environmental impacts of the Modification (e.g. Scope 3 greenhouse gas emissions, loss of biodiversity) outweigh its potential economic benefits, and therefore there is no economic justification for the Modification.

Response

The technical environmental assessments prepared for the Modification conclude that environmental management and monitoring measures currently implemented by WCPL at the existing Wilpinjong Coal Mine could continue to be effectively applied to minimise the potential impacts on existing environmental values and the nearest private residences. The Modification would not result in a significant increase in potential environmental impacts compared to the approved Wilpinjong Coal Mine. It is considered that the consent authority can be satisfied that the environmental impacts of the proposed Modification are acceptable, subject to compliance with the environmental performance conditions of Development Consent (SSD-6764) and recommended mitigation, management and offset measures.

Overall, the Economic Assessment (AnalytEcon Pty Ltd [AnalytEcon], 2025) concluded a net benefit to the NSW community would arise from the Modification, meaning the quantified socio-economic benefits outweigh the quantified costs (including greenhouse gas costs).

It is noted that a number of submitters argued that the Economic Assessment should also have costed greenhouse gas emissions associated with the combustion of Modification product coal by third parties. This argument is not consistent with the NSW Government guidance for economic assessment of coal mines (*Guidelines for economic assessment of mining and coal seam gas proposals* [NSW Government, 2015] and the *Technical Notes supporting the Guidelines for the Economic Assessment of Mining and Coal Seam Gas Proposals* [NSW Government, 2018a]). Nor is it consistent with general economic principals where both the economic costs and benefits of an activity are analysed together in a cost benefit analysis. For example, the substantial economic benefits of the provision of electricity to consumers and manufacturers in NSW and in Asian countries that may combust Modification coal to produce electricity would also need to be quantified in this scenario.

6. Satellite ROM Pads

Issue

A concern was raised that the consolidated project description refers to satellite ROM pads, but these were not specifically considered in assessment of the Modification.

Response

Satellite ROM pads are part of the approved Wilpinjong Coal Mine under the WEP, and have been retained in the consolidated project description as they could be developed by WCPL at some later time, should the need arise.

7. Cumulative Impacts and Assessment

Issue

Some submitters suggested that the Modification Application does not suitably consider cumulative impacts in conjunction with other nearby mining operations (i.e. existing approved Wilpinjong Coal Mine, Moolarben Coal Complex and Ulan Coal Mine).

Response

Potential cumulative impacts associated with the existing Wilpinjong Coal Mine, the Moolarben Coal Complex, Ulan Coal Mine, Bowdens Silver Project, the Central-West Orana Renewable Energy Zone (CWOREZ) Transmission Project and other solar and renewable energy projects in the region associated with the CWOREZ have been considered in Section 6 of the Modification Report and associated technical assessments, consistent with the *Cumulative Impact Assessment Guideline for State Significant Development Projects* (DPE, 2022b).

8. Independence of Environmental Consultants

Issue

Some submitters raised concerns that the consultants commissioned by Peabody were not sufficiently independent.

Response

The consultants for the Modification Report, comprising industry and technical representatives, are engaged by WCPL. The consultants were selected based on their technical expertise to assess environmental impacts relevant to the Modification.

WCPL also engaged independent reviews of the AQIA and Greenhouse Gas Calculations (TAS), Groundwater Impact Assessment (HydroAlgorithmics [Dr Noel Merrick]), BDAR (Hunter Eco [Dr Colin Driscoll]) and Bat Habitat Creation Programme for Large-eared Pied Bat and Eastern Cave Bat (Balance! Environmental [Greg Ford]).

The conclusion of TAS' review of the AQIA (Airen Consulting, 2025a) and Greenhouse Gas Calculation (Airen Consulting, 2025b) is as follows:

> *Overall, our review finds that the current AQIA and Greenhouse Gas Calculations prepared for the Wilpinjong Extension Project generally meet the expectations for this type of assessment and have addressed the key initial issues that were identified in our previous reviews.*

The conclusion of Dr Noel Merrick's review of the Groundwater Impact Assessment (SLR, 2025) is as follows:

> *Overall, we regard the model as fit for purpose, where 'purpose' is defined by the modelling objectives referenced above in Question 1, and we endorse the groundwater impact conclusions reached by SLR on the basis of numerical model outputs and hydrogeological interpretation.*

The conclusion of Dr Colin Driscoll's review of the BDAR (Resource Strategies, 2026) is as follows:

> *Corrections and suggestions were made over three drafts, these comments/corrections have been incorporated to my satisfaction and I consider that the BDAR comprehensively addresses the requirement of the BAM.*

The conclusion of Greg Ford's review of the Bat Habitat Creation Programme for Large-eared Pied Bat and Eastern Cave Bat (Attachment G of the BDAR) is as follows:

> *Overall, I believe the Bat Habitat Creation Programme presents a well-considered approach, based on thorough background research, and will likely provide valuable additional roosting habitats for Large-eared Pied Bat and Eastern Cave Bat populations in the Wilpinjong Coal Mine area. With the implementation of a detailed monitoring program following installation, WCPL will be able to refine roost design features, demonstrate the significant positive impact of providing artificial roosting habitat for these species, and encourage future adoption of such programmes by other operators.*

9. Regional Planning Objectives

Issue

One submitter suggested that the Modification documentation does not adequately address relevant regional planning objectives and environmental planning instruments (EPIs), for example, goals around sustainable land use, water resource protection, and maintaining rural amenity.

Response

Consideration of regional planning objectives, including the *Central West and Orana Regional Plan 2041* (DPE, 2022), *Mid-Western Region Community Plan – Towards 2040* (MWRC, 2022) and *Mid-Western Regional Local Strategic Planning Statement – Our Place 2040* (MWRC, 2020), is provided in Section 2.2 of the Modification Report. Consideration of EPIs, particularly the *Mid-Western Regional Local Environmental Plan 2012* is provided in Section 4.3 of the Modification Report.

Consideration of potential impacts on water resources and rural amenity (including operational noise, blasting and air quality) is also provided in Appendices A, B, D and E of the Modification Report, respectively.

10. Ecologically Sustainable Development

Issue

Some submitters suggested that the principles of ecologically sustainable development including the precautionary principle should be applied in assessing the Modification, which would result in environmental protection rather than approval of the Modification.

Response

Environmental assessment involves predicting the likely environmental outcomes of a development. The precautionary principal reinforces the need to account for risk and uncertainty, especially in relation to threats of irreversible environmental damage.

In the Groundwater, Surface Water and Economic Assessments (Appendices D, E and L), risk and uncertainty have also been taken into account through sensitivity and/or uncertainty analysis. Other specialist studies have accounted for uncertainty by adopting conservative assumptions and/or prediction methodologies, such as the Noise and Blasting Assessment, AQIA and Greenhouse Gas Assessment (Appendices A, B and C).

Findings of these specialist assessments are presented in the Modification Report and relevant appendices. Measures designed to avoid, mitigate and offset potential environmental impacts arising from the Modification are also described in the Modification Report and summarised in Attachment 10.

A range of measures have been adopted as components of the Modification design to minimise the potential for serious and/or irreversible damage to the environment. These include operational controls, physical controls and the continuation or extension of existing environmental management and monitoring programmes. Where residual risks are identified, contingency controls were also considered.

Section 7.5.1 of the Modification Report describes how the Modification would meet the principles of ecologically sustainable development.

In weighing up the main environmental impacts (costs and benefits) associated with the proposal, as assessed and described in the Modification Report, the Modification, on balance, is considered to have significant merit and be in the public interest.

This is consistent with the key conclusions reached by the then NSW Planning Assessment Commission in approving the Wilpinjong Coal Mine incorporating the Wilpinjong Extension Project in 2017.

11. Legislative Compliance

Issue

Some submitters suggested that Peabody had not demonstrated compliance with key legislative and policy requirements in preparation of the Modification Report.

Response

The EP&A Act and EP&A Regulation sets the framework for planning and environmental assessment in NSW. Sections 4.1 and 4.2 of the Modification Report outline the statutory provisions relevant to the Modification, as outlined in the *State Significant Development Guidelines* (DPHI, 2024a). Attachment 2 of the Modification Report provides a detailed statutory compliance table for the approved Wilpinjong Coal Mine and identifies relevant statutory requirements and the relevant sections in the Modification Report that address these requirements.

12. Use of Wilpinjong Coal

Issue

Some submitters suggested the Wilpinjong Coal Mine supplies a large proportion of its coal to the Bayswater Power Station that is planned to be closed between 2030 and 2033, so the Modification is not needed for NSW electricity supply.

Response

AGL Energy Limited (AGL), which owns and operates the Bayswater Power Station, provided a supporting submission on the Modification and stated the following:

> *According to the Australian Energy Market Operator's (AEMO) 2024 Integrated System Plan (ISP) for the National Electricity Market (NEM), under the "Step Change" scenario that is considered most likely, approximately 10 per cent of current coal generation will still be in operation by 2034-35. This remaining coal generation capacity will require access to reliable and affordable coal until the end of the operational life to maintain electricity system reliability in NSW and ensure an orderly transition. The extension of Wilpinjong mine will directly support this objective by securing ongoing coal supply to generators that underpin grid reliability and affordability for consumers.*
>
> *As a purchaser of coal from the Wilpinjong mine, we recognise the importance of transitional fuel security. While we are committed to accelerating the shift to renewable energy sources as outlined in our CTAP, the continued availability of competitively priced coal is essential to avoid premature capacity withdrawal, price volatility, and reliability risks. Supporting this mine extension is therefore a pragmatic and necessary step to ensure NSW's energy transition is orderly, affordable and secure.*
>
> *…*
>
> *As we head towards the targeted closure of our Bayswater Power Station by the end of 2033, AGL will require reliable access to thermal coal. The additional coal from the extension of Wilpinjong mine will increase the availability and diversity of coal available to the NSW power generation market until 2033, thereby supporting affordable and reliable energy into the NSW market as the transition to net zero continues.*

It is noted that the Wilpinjong Coal Mine also supplies coal to a range of international customers and is not reliant on NSW coal generators for electricity demand to continue operations.

4.2.2 Biodiversity

Comments made in submissions relevant to biodiversity issues include clarification of concerns relating to:

1. General comments on the BDAR methodology and assessment of potential impacts.
2. Areas of Outstanding Biodiversity Value.
3. Indirect Impacts to Box Gum Woodland CEEC.
4. Box Gum Woodland revegetation.
5. Vegetation connectivity.
6. Indirect impact to microbat breeding habitat.
7. Effectiveness of artificial bat habitat.
8. SAII assessment of Regent Honeyeater.
9. Assessment of Pink-Tailed Legless Lizard.
10. Assessment of *Ninox strenua* (Powerful Owl).
11. Assessment of GDE impacts.
12. Assessment of the *Mixophyes iteratus* (Giant Barred Frog).

Responses to these comments are provided below.

1. General Comments on the BDAR Methodology and Assessment of Potential Impacts

Issue

A number of submissions raise general objections to coal mining and objected to the disturbance of vegetation and potential impacts on flora and fauna species more broadly.

Response

While these perspectives are acknowledged, the BDAR has been prepared to assess biodiversity impacts and determine appropriate biodiversity offsets, in accordance with the relevant statutory framework.

The BDAR was prepared in accordance with the *Biodiversity Conservation Act 2016* (BC Act) and the NSW BAM, which establish the legislative and technical requirements for assessing biodiversity impacts of SSD and modifications. The assessment applies the prescribed BAM-C, survey requirements, impact assessment pathways and avoidance and minimisation principles to identify and quantify potential impacts on biodiversity values.

The BDAR identifies potential impacts associated with the Modification and documents reasonable measures to avoid and minimise impacts, consistent with the avoid, minimise and offset hierarchy under Section 6.3A of the BC Act. Where residual impacts remain, the assessment identifies the requirement for biodiversity offsets in accordance with the BAM. In addition, the Modification includes additional compensatory and mitigation measures, as described in Section 4.1.1 of this Submissions Report, which are intended to further reduce potential impacts and improve biodiversity outcomes beyond the minimum statutory requirements.

If the Modification were approved, the Wilpinjong Coal Mine, including the Modification, would continue to operate in accordance with an approved Biodiversity Management Plan, which would provide the framework for the implementation of avoidance, mitigation, offset and monitoring measures, ensuring ongoing management of biodiversity impacts in accordance with statutory requirements and conditions of Development Consent (SSD-6764).

Responses to specific comments made by organisations and members of the public on the BDAR are provided in the following subsections.

2. Areas of Outstanding Biodiversity Value

Issue

One submitter raised that the BDAR does not acknowledge areas of 'Outstanding Biodiversity Value' as listed under the BC Act.

Response

Section 2.6 of the BDAR (*Areas of Outstanding Biodiversity Value)* identifies:

> *There are no Areas of Outstanding Biodiversity Value listed under the BC Regulation associated with the Subject land or assessment area.*

3. Indirect Impacts to Box Gum Woodland CEEC

Issue

Some submitters questioned whether the BDAR adequately evaluated indirect impacts on the Box Gum Woodland community, including potential impacts of groundwater drawdown.

Response

The potential for indirect impacts on Box-Gum Woodand CEEC have been assessed as required by the BAM (DPIE, 2020). Measures to avoid and minimise impacts are provided in Section 6 of the BDAR and measures to mitigate and manage impacts are provided in Section 8 of the BDAR. The BAM (DPIE, 2020) does not require the calculation of biodiversity credits for potential indirect impacts.

Notwithstanding, in regard to groundwater drawdown, Section 7.3.4 of the BDAR considered the potential for indirect impacts on four possible facultative groundwater dependent vegetation communities:

- Vegetation Community 4 Western Grey Box Woodland.
- Vegetation Community 6/6d Box-Gum Grassy Woodland on Valley Floors and Regeneration.
- Vegetation Community 8 Fuzzy Box Woodland.
- Vegetation Community 9 Rough-barked Apple Woodland.

SLR (2026) describes the indicative predicted depth to groundwater under Vegetation Community 6/6d to be between approximately 16 to 20 mbgl. The predicted groundwater drawdown due to the Modification is not expected to affect these GDEs and predicted groundwater levels would remain below the assumed rooting depth of 9 m (SLR, 2026). The assessment of groundwater effects to terrestrial GDEs is provided in Attachment 6.

4. Box Gum Woodland Revegetation

Issue

There were concerns regarding the effectiveness of Box-Gum Woodland restoration measures, suggesting uncertainty about whether the approaches outlined in the BDAR would enable successful restoration of this community within a reasonable timeframe.

Response

As described in Section 4.1.1, in response to CPO's Recommendations 5 and 6 regarding Box Gum Woodland CEEC, WCPL will secure the proposed revegetation area for Box Gum Woodland CEEC (as described in Section 8.5 of the BDAR) under a BSA. Section 8.5 of the BDAR has been updated as follows:

> *WCPL originally proposed to forfeit only additional biodiversity credits for the Active Restoration Management Action (above the standard credits for Required Management Actions). However, WCPL's revised commitment is to forfeit all Box Gum Woodland CEEC ecosystem credits generated by the Revegetation Area (Figure 7-1).*
>
> *The proposal would result in re-establishment of woodland in approximately 50 ha of current derived native grassland conforming to be Box-Gum Woodland CEEC (PCT 3396) conserved in perpetuity. This would result in a net increase in woodland in the future considering that only 3.3 ha of woodland form of Box-Gum Woodland CEEC listed under the BC Act would be cleared (the remaining is 2.3 ha of regeneration and 108.7 ha of derived native grassland). This is in addition to the biodiversity credit requirement for the Modification (as outlined in Section 9.2) being retired (based on an offset multiplier that is set by CPHR).*

The BSA application would include a management plan which meets the requirements for the BSA, and would be assessed by the ABS as part of a separate approval process.

5. Vegetation Connectivity

Issue

Some submitters raised concerns regarding impacts on vegetation connectivity associated with the Modification.

Response

As described in Section 7.3.2 of the BDAR, intact native forest vegetation is present on the slopes and ridges to the west and east mostly outside of the Development Footprint, but the native vegetation within the Development Footprint is fragmented. The native vegetation within the Development Footprint is associated with two rocky knolls, as well as various smaller patches of disturbed woodland. Noting, however, that the connection between the ridgeline to the south-west of the Development Footprint and the ridgeline to the north-east are interrupted by cleared farmland, the existing Ulan-Wollar Road and the existing Sandy Hollow Gulgong Railway.

All threatened species and communities known to occur in the Development Footprint are likely to benefit from the current level of connectivity. The Modification would not interfere with corridors physically connecting different areas of habitat to important habitat or local movement pathways. 6-foot-high security fencing would be installed during operation, which is appropriate to exclude ground-dwelling animals traversing internal roads.

Further, the Modification proposes a revised final landform configuration based on the exclusion of mining from Rocky Hill and Cumbo Creek. The proposed reduction in the approved disturbance area would reduce the area available for Rehabilitation Areas in Condition 32 Schedule 3 of Development Consent (SSD-6764) from 2,856 ha to 2,821.6 ha (Section 8.2 of the BDAR).

The post-mining land use would continue to largely comprise nature conservation (woodland) land uses. The final landform associated with the Development Footprint (for the Modification) includes the backfilling of residual voids at the cessation of mining. Revegetation of rehabilitation areas would include the use of plant species characteristic of the surrounding vegetation to produce a net increase in woodland vegetation (Biodiversity Measure 4). Approximately 135 ha of woodland rehabilitation would be established (a net increase of 111.4 ha of woodland compared to the current amount of woodland in the Development Footprint [19.6 ha]) (Section 8.2 of the BDAR). Revegetation would aim to increase the continuity of woodland vegetation by establishing links between extant woodland vegetation.

The Modification would not create a barrier between Munghorn Gap Nature Reserve and Goulburn River National Park as the Munghorn Gap Nature Reserve is located approximately 7 km west of the Development Footprint (Section 7.5 of the BDAR).

In regard to vehicle strike potential, Section 6.3.4 of the BDAR states:

> *6-foot-high security fencing is installed during operation, leading to fewer animals traversing internal roads.*

It is noted that security fencing is a requirement of the NSW *Mining Act 1992* during operations, but would be removed at the cessation of mining.

6. Indirect Impact to Microbat Breeding Habitat

Issue

There were concerns that indirect impacts on breeding habitat for the Eastern Cave Bat and Large-eared Pied Bat could be underestimated, given uncertainty about whether bats would continue using nearby roosts during mining.

Response

Section 9.1.4.3 of the BDAR has been updated to state:

> *Land adjacent to the Development Footprint would be subject to temporary artificial lighting, dust, noise during operations.*

In regard to potential noise and vibration in direct impacts, Section 7.2.4 of the BDAR has been updated to state:

> *WCPL would undertake blasting in a controlled manner consistent with the recommendations of PSM (2025) with the intent that physical damage to mapped rocky bat habitat from indirect impacts is avoided (Section 7.2.4). PSM (2025) describe various different blast management techniques that may be used such as optimising the blast design or changing the blast technique. PSM (2025) state that 'blasts should be designed such that the PV at sensitive geological features (features with RMR greater than 45) does not exceed 50mm/s, unless a higher limit is justified following review of blast monitoring results in consultation with a geotechnical engineer'.*
>
> *Although surveys suggest the Large-eared Pied Bat and Eastern Cave Bat may be using the mapped rocky bat habitat associated with the slopes of the ridgeline to the south-west for breeding, no specific breeding roost has been actually located on the slopes of the ridgeline (BMS, 2025a) (Attachment C). Assuming a breeding roost is present, blasting and vibration during progressive mining (7 years) has the potential to indirectly impact individual bats in the mapped rocky bat habitat. The potential for these indirect impacts cannot be completely avoided but there are measures to minimise and mitigate (Section 6 and 8).*
>
> *The residual potential indirect impacts on the Large-eared Pied Bat and Eastern Cave Bat is unlikely to decrease the availability or quality of habitat to the extent that the species is likely to decline given the species can persist in close proximity to mining (BMS, 2025b [Attachment E]), breeding is recorded often in the wider locality (Figure 8-2), and suitable rocky habitat is abundant in the local geology. A total of 94.56 % of the mapped rocky bat habitat associated with the slopes of the ridgeline to the south-west is over 100 m from the proposed Pit 8 Extension open cut pit extents.*
>
> *This modification is for continuation of the mining operations. The previous biodiversity assessment for the Wilpinjong Extension Project concluded that it was unlikely to disrupt the lifecycle of either bat such that a local viable population would be placed at risk of extinction given the localised nature of the foraging habitat in the footprint compared to the wider distribution of the species; absence of breeding habitat in the footprint; records from in and near the footprint are not at the limits of the species' range; and the greater extent of habitat in the locality known to be used by the species (these cave-dwelling bats are unlikely to be dependent on the structures within or near the footprint, since the local and regional geology lends itself to a wide variety of alternative natural caves and associated structures along the escarpments of the sandstone country) (Hunter Eco, 2017). The change in cumulative impact on these species as a result of the Wilpinjong Extension Project (considering impacts from other surrounding developments is considered to be minimal because of the localised nature of the disturbance compared to the wider distribution of the species, especially when considering the offsets which have been (or would be) provided (Hunter Eco, 2017).*

Some submitters also referred to a historical oil shale adit at Slate Gully adjacent to the approved Pit 8. It is noted that the audit is man-made and used by two different bat species, the Large Bent-winged Bat and *Rhinolophus megaphyllus* (Eastern Horseshoe-bat), and not as a maternity site.

7. Effectiveness of Artificial Bat Habitat

Issue

Queries were raised about the effectiveness and timing of installing artificial bat roosts.

Response

The Bat Habitat Creation Programme was prepared in consultation with Greg Ford (Balance! Environmental) (Attachment G of the BDAR) and Andrew Lothian (BMS). Greg Ford has over 30 years' experience and has been approved by the Secretary of the Department (or their delegate) to prepare expert reports for the Large-eared Pied Bat and Eastern Cave Bat. His peer review letter is provided in Attachment G of the BDAR. Andrew Lothian has over 16 years' experience and has worked extensively with microbats, including at Wilpinjong, Moolarben and Ulan operations and in the locality so has local knowledge on the Large-eared Pied Bat and Eastern Cave Bat.

The BDAR is transparent in regard to the potential effectiveness of the Bat Habitat Creation Programme. Section 8.6 of the BDAR states:

> *Novel mitigation measures are needed to advance our understanding on how to provide additional habitat for threatened species. In regard to Biodiversity Measure 11 (Bat Habitat Creation Programme), is has not been implemented elsewhere in NSW and so the outcome is uncertain. However, the prospects that the programme will provide bat habitat are improved by:*
>
> - *adopting designs that based on available literature on the target species (Section 8.4.2) and characteristics of local maternity caves (Sections 8.4.3 and 8.4.4);*
> - *consultation with leading bat specialists (Greg Ford and Andrew Lothian) (Section 8.4.1 and Attachment G);*
> - *both bats are known to breed in artificial structures (e.g. man-made adits); and*
> - *both bats are present around the mine in existing roosts and across the mine rehabilitation.*

In light of the CPO recommendation (Section 4.1.1), WCPL would prepare a monitoring plan for artificial microbat roosts in consultation with CPO, however, this would occur independent of construction so establishment of the habitat is not unnecessarily delayed. Section 8.4.6 of the BDAR has been updated accordingly. Two artificial roosts would be installed within 12 months of approval, with the remaining four installed within 24 months.

The potential for SAII impacts on the species has been considered without the Bat Habitat Creation Programme. The *Wilpinjong Coal Mine – Pit 8 Extension Modification Assessment for Serious and Irreversible Impacts on the Large-Eared Pied Bat and Eastern Cave Bat* states:

> *The residual impact is unlikely to contribute significantly to the risk of the Large-eared Pied Bat becoming extinct because:*
>
> - *There are records of the Large-eared Pied Bat in 65 National Parks, Nature Reserves and Conservation Areas as well as 13 State Forests in NSW (Table 1) (NSW DCCEEW 2025c).*
> - *The Modification would not reduce the EOO or AOO of the species.*
> - *Habitat in surrounds is not limited – though maternity roost habitat only forms a subset of cliffline habitat available, the number of bat records around the local area (Figure 7), and amount of cliffline habitat available in the surrounding landscape (Figure 13) suggests potential habitat (roosting and breeding) is abundant in the local area. This assumption is supported by an approved species expert from the NSW north west region (Balance! Environmental 2023).*
> - *Other breeding sites confirmed – the author has confirmed three other maternity roosts for Large-eared Pied bat in the local area (including the one at Ulan, one at Rocky Hill, and one south of Wilpinjong Coal Mine (Figure 13). The author has also confirmed breeding activity on no less than 14 cliff lines outside of the Modification study area (including three at Ulan, and 11 in the Wilpinjong area; Figure 13).*
>
> *The residual impact is unlikely to contribute significantly to the risk of the Eastern Cave Bat becoming extinct because:*
>
> - *There are records of the Eastern Cave Bat in 35 National Parks, Nature Reserves and Conservation Areas as well as 12 State Forests in NSW (Table 2) (NSW DCCEEW 2025c).*
> - *As Eastern Cave Bats often move around from night to night, and utilise a matrix of roost structures through the year depending on seasonal requirements, the location of threatened bats in one location does not preclude them from being present or utilising other locations.*

- *The Modification would not reduce the EOO or AOO of the species.*
- *Habitat in surrounds is not limited – though maternity roost habitat only forms a subset of cliffline habitat available, the number of bat records around the local area (Figure 9), and amount of cliffline habitat available in the surrounding landscape (Figure 13) suggests potential habitat (roosting and breeding) is abundant in the local area. This assumption is supported by an approved species expert from the NSW north west region (Balance! Environmental 2023).*
- *Other breeding sites confirmed – the author has confirmed at least two (possibly three) maternity roosts for Eastern Cave Bat in the local area (Figure 13). The author has also confirmed breeding activity on no less than 12 cliff lines outside of the Modification study area (Figure 13).*

On this basis, WCPL is satisfied that artificial bat roosts represent an innovative, scientifically founded, mitigation measure for the Modification.

8. SAII Assessment of Regent Honeyeater

Issue

Some submitters expressed concern that direct, indirect and cumulative impacts on the Regent Honeyeater was not adequately addressed, suggesting certain local sightings were overlooked and questioning if proposed management measures (such as controlling *Manorina melanocephala* [Noisy Miners] or habitat restoration) would effectively protect this species.

Response

Section 9.1.2.3 of the BDAR states:

> *Within the Development Footprint, approximately 7 ha of the potential habitat mapped by NSW DCCEEW as Important Habitat consists of derived grassland, exotic pine trees, dead grapevines and a farm dam (which is not habitat for the species). For the purpose of the species polygon, these areas have been retained to comply with the BAM (DPIE, 2020a). There is 4.63 ha of woodland in the Development Footprint that is potential habitat for the species but is not mapped by NSW DCCEEW as Important Habitat (NSW DCCEEW, 2025e). This woodland has been included in the species polygon for the species, bringing the total species polygon to 28.81 ha (Figure 4-14).*
>
> *…*
>
> *There is approximately 556,841 ha of NSW DCCEEW mapped Important Habitat (NSW DCCEEW, 2025e) for the Regent Honeyeater in NSW (Figure 9-1). Based on the NSW DCCEEW mapping, there is 326,394 ha of mapped Important Habitat within National Parks and Nature Reserves, 417,668 ha in the Sydney Basin Bioregion and 397,239 ha in the Kerrabee Sub-region.*
>
> *Cumulative impacts and offsets on the species habitat are described in Section 7.1.4. This species is not known to have been recorded with the footprints of any of the developments listed in Section 7.1.4.*

The potential for indirect impacts on Regent Honeyeater has been assessed as required by the BAM (DPIE, 2020). Measures to avoid and minimise impacts are provided in Section 6 and measures to mitigate and manage impacts are provided in Section 8 of the BDAR. The BAM (DPIE, 2020) does not require the calculation of biodiversity credits for potential indirect impacts.

Section 9.1.2.3 of the BDAR states:

> *The Regent Honeyeater has not been recorded in the Development Footprint (or previously during surveys at the Wilpinjong Coal Mine [Section 4.2.1.1]).*
>
> *…*
>
> *The known Regent Honeyeater breeding events in the Goulburn River area between 2015-2023 are shown on Figure 9-2, the closest of which is located approximately 13 km north (Crates, 2023). No known breeding areas would be disturbed by the Modification.*

9. Assessment of Pink-tailed Legless Lizard

Issue

Some submitters suggested that the Pink-tailed Legless Lizard should be considered significant.

Response

Robert Spiers (Capital Ecology) prepared an Expert Report for the Pink-tailed Legless Lizard (Attachment F of the BDAR) in accordance with the BAM (DPIE, 2020).

Section 10.2.4 of the BDAR states:

> *The Action would result in the clearance of approximately 0.34 ha of Pink-tailed Legless Lizard potential habitat. The potential habitat has been searched. No Pink-tailed Legless Lizard individuals were recorded within the areas of potential habitat. Species credits would be provided for clearance of the potential habitat to address significant impacts (where the species is assessed as present).*

10. Assessment of the Powerful Owl

Issue

Submitters noted concern that the potential impacts on the Powerful Owl had not been assessed thoroughly, and did not consider the potential for the species to be located within the Modification area.

Response

Powerful Owls are 'dual credit species' under the BAM as their breeding habitat is a species credit and their foraging habitat is an ecosystem credit. Therefore, breeding and foraging habitat are both required to be offset, however, under different credit requirements (DPIE, 2021).

Section 4.2.4.4 of the BDAR describes the potential occurrence of the Powerful Owl based on previous database records and surveys conducted in the area:

> *During the surveys by BMS (2025a) (Attachment C), Powerful Owl were recorded on 11 occasions between July 2023 and June 2024. On each occasion, one bird was heard calling in response to call playbacks. The estimated location of the triangulated calls is shown on Figure 4-10. The 800 m buffer from the estimated location of the bird does not intercept the Development Footprint and therefore no species credits are required for the Powerful Owl. There are two Powerful Owl records within the BioNet Atlas that were submitted by BMS (2025a) (Attachment C). These two records are the location of the call playback site and not the location of the individual.*

Further, the *Wilpinjong Modification 3 Baseline Fauna Survey Report* (BMS, 2025) states the following:

> *Powerful Owl were recorded on two occasions from the 60 call playback nights conducted in 2024 to the current guidelines. They were recorded another nine times (five if you take away the triangulation points) from another 21 location nights in 2023 (17 if you remove the four roving team locations). No Powerful Owl were heard during the 14 location nights of call playbacks conducted in 2022. All call playback locations were within the Study Area, except the roving team triangulations which were located to the east of the Study Area. No Powerful Owl were observed within the Study Area during the 2022-2025 survey period.*

Based on the above, there are no active Powerful Owl roosts within the Modification Area and therefore no species credits are required to be offset. However, ecosystem credits (foraging habitat) would be offset as part of the Modification.

11. Assessment of GDE Impacts

Issue

Submitters noted general concerns regarding potential impacts to groundwater-dependent ecosystems, particularly potential groundwater related impacts on Box-Gum Woodland CEEC.

Response

Vegetation Community 6 (Box-Gum Grassy Woodland on Valley Floors) and Vegetation Community 6d (Regeneration) are equivalent to the Box-Gum Woodland CEEC. Section 5.5.3 of the BDAR states:

> *Figure 5.1a shows regionally mapped groundwater dependent ecosystems by the Bureau of Meteorology (2025). Hunter Eco (2025a) (Attachment B) undertook a review of groundwater dependent vegetation and identified the following possible facultative groundwater dependent vegetation communities within the groundwater drawdown extent modelled by SLR Consulting Australia (2025) (Figure 5.1b):*
>
> - …
> - *Vegetation Community 6 Box-Gum Grassy Woodland on Valley Floors;*
> - *Vegetation Community 6d Regeneration;*
>
> …

As described in response to Issue #3, the predicted groundwater drawdown due to the Modification is not expected to affect these GDEs and predicted groundwater levels would remain below the assumed rooting depth of 9 m (SLR, 2026).

12. Assessment of the Giant Barred Frog

Issue

Submitters queried why the Aquatic Ecology Assessment did not consider the Giant Barred Frog as a relevant aquatic species recorded in Wollar Creek.

Response

The aquatic ecology assessment, authored by Bio-Analysis (2025), focusses on threatened entities that are considered aquatic under the *Fisheries Management Act 1994*, BC Act and EPBC Act, whereas the Giant Barred Frog is considered a terrestrial species under the relevant acts. The BDAR has been prepared in accordance with BAM (DPIE, 2020) wherein the Giant Barred Frog was not identified as a candidate species requiring assessment. Furthermore, the Giant Barred Frog's mapped distribution does not intersect with the area assessed in the BDAR. The Giant Barred Frog was not recorded during Modification biodiversity surveys.

4.2.3 Groundwater

Comments made in public and organisation submissions relevant to groundwater include concerns relating to:

1. Groundwater drawdown in Wollar Creek.
2. Groundwater drawdown – Goulburn River National Park.
3. Groundwater baseflow.
4. Groundwater take.
5. Alluvial groundwater sources.
6. Groundwater quality.
7. Groundwater model.
8. Groundwater monitoring data.
9. Interpretation of groundwater trends.
10. Long-term management of final voids.
11. Consideration of water trigger under the EPBC Act.
12. Assessment of water take.
13. Groundwater interaction with backfilled overburden.

Responses to these comments are provided below.

1. Groundwater Drawdown in Wollar Creek

Issue

A number of submitters raised concerns about the potential impacts of the Modification on the State-mapped highly productive alluvial aquifer along Wollar Creek and potential reduction of groundwater availability in the Wollar Creek catchment.

Response

Figure 8-2 of Appendix D of the Modification Report (WCPL, 2025a) shows the predicted maximum incremental drawdown due to the Modification in the regolith and alluvium (i.e. Layer 1 of the groundwater model). There are no private bores in the State mapped alluvium. The nearest private or public bore to the Modification is the former Wollar Public School bore, located approximately 900 m south of the proposed Pit 8 Extension and screened within the Shoalhaven Group (underlying the Ulan Coal Seam). The former Wollar Public School bore falls within the area predicted to experience up to 2 m of drawdown as a result of the Modification (SLR, 2025).

No other privately-owned bores installed in the porous/fractured rock or in alluvial deposits (excluding those on land already owned by Peabody) are predicted to experience incremental drawdowns exceeding 2 m (SLR, 2025).

The Modification complies with Level 1 minimal impact considerations as defined under the NSW Aquifer Interference Policy for the Wollar Creek Water Source (SLR, 2025).

WCPL currently holds, and will continue to hold, WALs with sufficient entitlements for the predicted take from the Wollar Creek Groundwater Source.

During the post-mining period, predicted drawdown in the alluvium would reduce as groundwater levels and pressure recover over time. The Wollar Creek alluvium is not predicted to be affected by residual drawdown by the end of the recovery period (to 2300) (SLR, 2025).

As per Table 8.4 of the Groundwater Assessment, baseflow contribution to Wollar Creek (i.e. groundwater discharge to Wollar Creek) are modelled to decrease by an additional 0.023 ML/day (8.4 ML/year) during mining activities and by an additional 0.038 ML/day (13.9 ML/year) during the first five years of the post-mining recovery period (SLR, 2025). Approximately 30 years after mining is completed, a net gain of baseflow contribution is modelled for Wollar Creek (SLR, 2025).

2. Groundwater Drawdown – Goulburn River National Park

Issue

A submitter raised concerns about potential groundwater impacts due to predicted groundwater depressurisation beneath the Goulburn River National Park.

Response

Triassic-aged rocks (predominantly sandstone) of the Narrabeen Group form the elevated ridges and plateaus of the Goulburn River National Park to the north of Wilpinjong Creek.

Perched groundwater systems are present in the Triassic-aged Narrabeen Group sandstone escarpment present in the Goulburn River National Park (Mackie Environmental Research Pty Ltd [MER], 2011). As described in Section 8.3 of the Modification Groundwater Assessment, drawdown in the perched groundwater systems in the Narrabeen Group sandstone [model layers 2 to 4] is not expected as there is no direct hydraulic connection between Narrabeen Group sandstone and the Illawarra Coal Measures regional water table under normal conditions (SLR, 2025). As a result, depressurisation of the underlying coal seams associated with mining does not result in groundwater drawdown in these perched systems. As shown on Figure 8-3 of Appendix D of the Modification Report, the predicted 1 m water table drawdown contour does not extend near to the Goulburn River National Park. Accordingly, the drawdown related impacts to GDEs or water resources in the Goulburn River National Park are expected to be negligible.

There are no registered groundwater bores in the Goulburn River National Park.

3. Groundwater Baseflow

Issue

Some submitters raised concerns that baseflow to Wollar Creek would be reduced as a result of the Modification and this would impact on Wollar Creek flows and the hydrological regime.

Response

As outlined in response to Issue #1, a temporary decrease in baseflow contribution to Wollar Creek is predicted and followed by a net gain of baseflow contribution in the long-term.

There are no known private surface water users on Wilpinjong Creek or Wollar Creek downstream of the Wilpinjong Coal Mine. The effect of the Modification is predicted to be localised with the peak change in baseflow loss due to the Modification dissipating as you travel further downstream from Wilpinjong Coal Mine (WRM, 2025). The increase in surface catchment as you travel further downstream also means the potential impacts of the Modification on flow frequency further dissipates and are expected to be negligible (WRM, 2025).

WCPL currently holds 474 ML of entitlements under WAL 21499 which is greater than the maximum predicted mining and post-mining baseflow losses from the Wollar Creek Water Source.

4. Groundwater Take

Issue

Some submitters raised concerns regarding quantification of Pit 8 Extension groundwater take.

Response

Figure 8-1 and Table 8.2 of the Groundwater Assessment present the predicted total and incremental (i.e. Modification only) groundwater inflows for the Wilpinjong Coal Mine. Figure 8-1 also provides a comparison of predicated inflows between the approved Wilpinjong Coal Mine only and cumulatively with the Modification.

WCPL currently holds 3,121 ML of entitlements under WAL 41862 which is greater than the maximum predicted mining and post-mining groundwater take from the Sydney Basin North Coast Groundwater Source.

WCPL currently holds 474 ML of entitlements under WAL 21499 which is greater than the maximum predicted mining and post-mining baseflow losses from the Wollar Creek Water Source.

5. Alluvial Groundwater Sources

Issue

Some submitters raised a concern that there could be a 20 m drawdown in the Wollar Creek alluvium due to the Modification.

Response

As shown on Figure 8-2 of the Groundwater Assessment, the maximum predicted incremental water table drawdown in the State-mapped highly productive alluvial aquifer along Wollar Creek is approximately 2 m. The Modification complies with Level 1 minimal impact considerations as defined under the NSW Aquifer Interference Policy for the Wollar Creek Water Source (SLR, 2025).

As shown on Figure 8-4 of the Groundwater Assessment, the predicted maximum incremental drawdown in the Ulan Seam (Layer 7 of the model) is 20 m due to the Modification (i.e. not in the alluvium layer).

6. Groundwater Quality

Issue

A submitter raised concerns that the salinity in Pit 2 and Pit 6 voids would increase over time and could adversely impact surrounding groundwater aquifers.

Response

The Modification does not propose any change to the currently approved Pit 2 and Pit 6 final voids.

As outlined in Section 10.1.1 of the Groundwater Assessment, water within the residual voids is predicted to remain below pre-mining groundwater levels. Therefore, it is anticipated the residual voids would act as groundwater sinks.

As per the findings of HydroSimulations (2015), no groundwater quality impacts are expected from groundwater interaction with the approved final void pit lakes in Pits 2 and 6, as the final voids would remain as permanent and localised groundwater sinks.

The Modification does not result in any new or increased mechanism for water quality impacts relative to the approved Wilpinjong Coal Mine (SLR, 2025). SLR has considered the potential for the Modification to adversely impact groundwater quality and concluded there would be no significant incremental impacts to groundwater quality due to the Modification.

7. Groundwater Model

Issue

Some submitters questioned the groundwater model calibration and the model's suitability to predict future groundwater impacts, particularly in the Wollar Creek area.

Response

Calibration of the groundwater model was undertaken by SLR Consulting (2025) in accordance with Australian Groundwater Modelling Guidelines (Barnett *et al*., 2012). The groundwater model calibration was reviewed by Dr Noel Merrick and Dr Damian Merrick of HydroAlgorithmics (Attachment 6 of the Modification Report). Dr Noel Merrick is regarded as a leading groundwater modelling expert in Australia, with over 40 years of experience in groundwater modelling and assessment.

Dr Noel provided the following consideration as it relates to the groundwater model calibration (Attachment 6 of the Modification Report):

> *The numerical model has undergone complete re-calibration for the period January 2006 to December 2023, using water level data at 197 sites, guided by an initial model that had been optimised (using PEST software) in past model versions. The model parameterisation in the HydroSimulations 2015 model was validated by SLR in 2020 by achieving similar but better performance statistics (i.e. lower mRMS and SRMS is better) without changing the hydraulic and storage parameters*
>
> *…*
>
> *The MLE* [Most Likely Estimate] *model has RMS-type statistics that lie close to the minimum values, but is selected from four different performance statistics.*
>
> *…*
>
> *Apart from global and layer-by-layer statistics, calibration performance is demonstrated by comparison of measured and simulated hydrographs [Appendix A, Document #2], a scatter plot [Figure 4-1, Document #2], a residuals histogram [Figure 4-2, Document #2], and a map of spatial residuals [Figure 4-3, Document #2]. All display methods show strong calibration performance focused on the WCM, with some poorer performance beyond the WCM leases.*
>
> *The agreement between 55 measured and simulated hydrographs in Appendix A [Document #2] is very good on the whole. In these plots, the simulations for all 400 models are shown, with the MLE highlighted.*

Overall, HydroAlgorithmics (2025) concludes:

> *Overall, we regard the model as fit for purpose, where 'purpose' is defined by the modelling objectives referenced above in Question 1, and we endorse the groundwater impact conclusions reached by SLR on the basis of numerical model outputs and hydrogeological interpretation.*

Further details on the peer review of the groundwater model calibration and Groundwater Assessment are provided in Attachment 6 of the Modification Report.

8. Groundwater Monitoring Data

Issue

Some submitters raised concerns about availability of groundwater monitoring data from the State-mapped highly productive alluvial aquifer along Wollar Creek and within the proposed development footprint.

Response

Groundwater monitoring is currently undertaken in accordance with the approved Water Management Plan within the State-mapped highly productive alluvial aquifer along Wollar Creek at GWa8 and GWa32, which are located southeast and east of the Pit 8 Extension, respectively. Monitoring bore GWc32 is screened in the Illawarra Coal Measures at the same location as GWa32 to enable analysis of potential vertical hydraulic gradients between the alluvium and Illawarra Coal Measures.

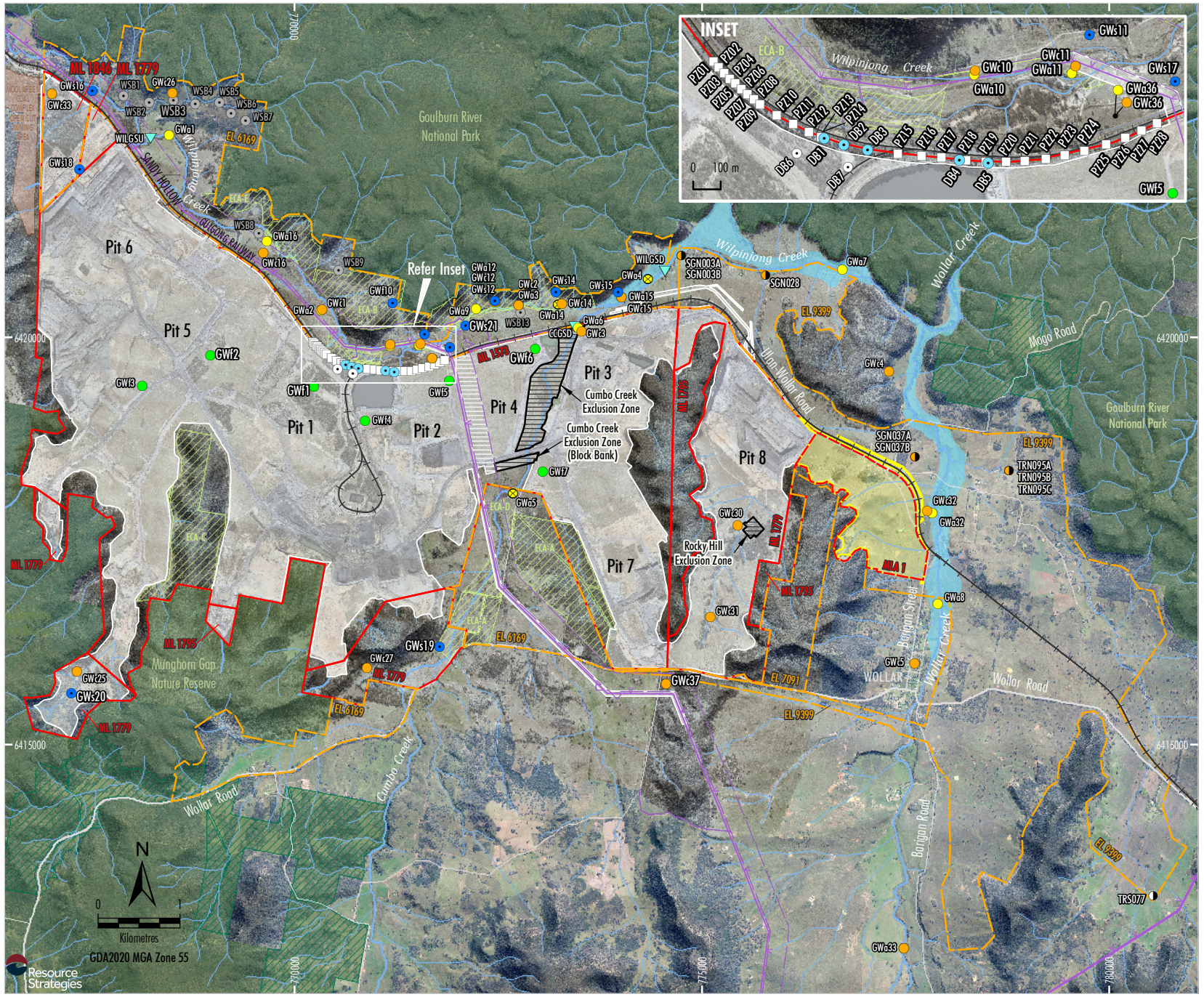
As outlined in Appendix A of the Groundwater Assessment, a hydrogeological investigation was undertaken in 2024 and 2025 to support updates to the numerical groundwater model as part of the Groundwater Assessment (SLR, 2025). As shown on Figure 16, nine new groundwater bores were drilled to improve hydrogeological understanding within the groundwater model domain near the Modification and to expand the groundwater monitoring network. All bores were subject to hydraulic testing including slug tests, packer test, falling head tests and constant head tests. This additional data was used to update the hydrogeological conceptualisation and calibration of the groundwater model.

As shown on Figure 16, groundwater monitoring has also been undertaken at three locations within the Pit 8 extent. The northernmost site GWc29 is located approximately 400 m north-west of the proposed Pit 8 Extension. Groundwater level data obtained from these three bores have been used to calibrate the groundwater model as outlined in Groundwater Model Technical Report (Appendix C of the Groundwater Assessment).

In addition, over 40 exploration boreholes have been drilled within or adjacent to the Pit 8 Extension area. Relevant data from these exploration boreholes have been considered in the groundwater model conceptualisation.

The data used in the model update and calibration is considered to be fit for purpose by peer reviewer Dr Noel Merrick (HydroAlgorithmics, 2025).

WCPL would also establish an additional groundwater monitoring site within the State-mapped alluvium along Wollar Creek (and the underlying coal measures) as a component of updating the Water Management Plan for the Modification. WCPL will also progressively expand the existing groundwater monitoring network to the east of Wollar Creek as a component of environmental baseline data collection in EL 9399.



LEGEND

- Existing TransGrid Electricity Transmission Line
- EnergyCo Transmission Project (SSI-48323210)
- National Park or Nature Reserve
- Existing Biodiversity Offset Transferred to the National Parks and Wildlife Service (NPWS) Estate
- Enhancement and Conservation Area
- Exploration Licence Boundary (EL)
- Mining Lease Boundary (ML)
- Proposed Mining Lease Application Boundary (MLA)
- Approved/Existing Surface Development Area
- EnergyCo Construction Easement (CWOREZ)
- Mine Exclusion Area
- Modification Indicative Development Footprint

DPI Water

- Mapped Highly Productive Alluvial Aquifer

Surface Water Monitoring Sites

- Surface Water Gauging Station

Groundwater Monitoring Sites

- Bore Identified for Replacement
- Alluvial Groundwater Monitoring
- Hard Rock Groundwater Monitoring
- Spoil Monitoring
- Water Supply Bore
- Dewatering Bore
- Dewatering Bore - Never used, now a Monitoring Bore
- Water Supply Bore - Never used
- Piezometer

Additional Groundwater Monitoring Sites

- Hard Rock Groundwater Monitoring
- Regolith Monitoring

Source: WCPL (2025); DPI Water (2015); NSW Spatial Services (2025)
Orthophoto Mosaic: WCPL (July 2024 - Nov 2022)

Peabody

WILPINJONG COAL MINE

Groundwater Monitoring Locations

Figure 16

9. Interpretation of Groundwater Trends

Issue

Some submitters raised concerns about how instances of monitoring bores running dry were not considered in the Groundwater Assessment.

Response

The groundwater model was calibrated using 7,916 groundwater level target data points over the period January 2006 to December 2023 across 197 sites.

Available groundwater data was considered in the groundwater calibration for the period up to the end of 2023. The calibration hydrographs are presented in Appendix A of the Groundwater Assessment (SLR, 2025). Peer reviewer, HydroAlgorithmics (2025) concludes the groundwater model is fit for purpose.

Physical investigation of a number of monitoring sites including downhole camera inspections of GWa3, GWa12, GWa14 and GWa15 were undertaken in 2024. These four sites did not meet contemporary construction requirements and SLR recommended that these bores should be considered for replacement and/or decommissioning.

WCPL has a programme to progressively replace these monitoring sites due to sediments or tree roots adversely affecting data reliability. This programme is scheduled to be completed by the end of 2026.

10. Long Term Management of Final Voids

Issue

Concerns were raised regarding the proposed management of the two approved final voids, which are predicted to become more saline post-mining.

Response

The Modification does not propose any change to the currently approved Pit 2 and Pit 6 final voids.

As described in response to MWRC's comments on the Modification, the Rehabilitation Management Plan and Forward Program would include rehabilitation objectives and completion criteria relating to the performance of the final voids. The Rehabilitation Management Plan and Forward Program would be reviewed and where necessary updated to incorporate the Modification.

11. Consideration of the Water Trigger under the EPBC Act

Issue

Some submitters raised concern regarding assessment of the Modification against the 'water trigger' under the EPBC Act.

Response

In January 2025, an action associated with the Modification was referred to the Commonwealth Minister (EPBC 2025/10105). On 1 May 2025, a delegate of the Commonwealth Minister determined that the proposed action is a 'controlled action' for the purposes of the EPBC Act. The action is to be assessed under the bilateral agreement between the Commonwealth and NSW.

Assessment requirements for Matters of National Environmental Significance matters (including water resources) under the Bilateral Agreement were issued by the DPHI on 29 May 2025.

The water resources component of the assessment requirements are addressed in the Modification Groundwater Assessment and Surface Water Assessment.

12. Assessment of Water Take

Issue

Some submitters raised concerns about a lack of assessment of predicted water take, particular in the Wollar Creek catchment.

Response

The predicted water take due to the Wilpinjong Coal Mine incorporating the Modification is provided in Table 9.1 of the Groundwater Assessment. This includes predicted groundwater take from the Wollar Creek Water Source.

WCPL currently holds WALs with sufficient entitlements for the predicted water take from each water source. Approximately 30 years after mining is completed, a net gain of baseflow contribution is modelled for Wollar Creek (SLR, 2025).

Refer also to responses to Issues #3 and #4 above.

13. Groundwater Interaction with Backfilled Overburden

Issue

One submitter raised concerns about the potential decline in groundwater quality from contact with backfilled overburden material.

Response

As outlined in response to MWRC, WCPL undertakes groundwater monitoring within the backfilled open cut pits (i.e. within the spoil). It is anticipated that this network of spoil monitoring bores would be expanded as mining progresses to include the Pit 8 Extension area.

4.2.4 Surface Water

Comments made in public and organisation submissions relevant to surface water include concerns relating to:

1. Wollar Creek catchment.
2. Surface water quality.
3. Site water balance.
4. Surface water monitoring.
5. Surface water flow monitoring data.
6. Salinity in downstream surface water.
7. Mining in Wollar Creek catchment.
8. Flood modelling.
9. Influence of existing discharges on water resources.
10. Future requirements for water discharges.
11. Water management infrastructure.
12. Influence of Wilpinjong Coal Mine on invasive aquatic species distribution.
13. Consideration of *Water Management Act 2000*.

Responses to these comments are provided below.

1. Wollar Creek Catchment

Issue

Some submitters raised concerns about potential harm to the Wollar Creek catchment, including to downstream users, due to potential changes in surface water flow and quality.

Response

WCPL owns all property along Wilpinjong Creek downstream of the Wilpinjong Coal Mine and there is no privately owned land on the reach of Wollar Creek downstream of the Pit 8 Extension. There are no known private water users on Wilpinjong Creek or Wollar Creek downstream of the Wilpinjong Coal Mine, incorporating the Modification.

The Modification includes the establishment of clean water infrastructure to maximise the diversion of water draining from the ridgeline area to the south-east of the Pit 8 Extension around disturbed areas of the Modification. Clean water that has not been in contact with mining areas would be diverted around the operations and would report to Wollar Creek via pipelines and overland flow, subject to meeting quality limits in EPL 12425, consistent with the clean water system for Pit 8 (i.e. EPL 12425 monitoring and discharge point 30).

The Modification would result in a slight decrease in catchment area reporting to Wollar Creek (a maximum of approximately 0.7% of catchment area is excised) during operations. However, following backfilling and rehabilitation of the Pit 8 Extension area, the topography of the Modification final landform area would approximate the forms of pre-mining topography with surface water draining off-site. As such, the rehabilitated Modification landform would result in no excision of the Wollar Creek catchment (WRM, 2025).

The water balance for the Modification predicts no spills of mine water to the receiving environment throughout the life of the modified Wilpinjong Coal Mine (WRM, 2025).

Discharges from sediment dams, when rainfall exceeds sediment dam design criteria, would continue to be directed to the internal water management system as per approved operations, unless there is a revision of EPL 12425 (WRM, 2025).

With the implementation of the proposed surface water management system, the Modification would not adversely affect surface water quality in receiving waters (WRM, 2025).

The Modification would have no adverse impact on flooding in Wilpinjong and Wollar Creeks, and would not result in any flooding impacts to private land holdings downstream of the Wilpinjong Coal Mine.

Refer to response to Issue #3 in Section 4.2.3 regarding licensing of predicted baseflow losses associated with the Modification. In summary, WCPL currently holds WALs with sufficient entitlements for the predicted water take from each water source.

2. Surface Water Quality

Issue

Some submitters raised concerns that the Modification could degrade surface water quality by increasing sedimentation and salinity, and potentially causing acid mine drainage, thereby harming downstream water users and aquatic life.

Response

Licensed Discharges

WCPL would seek a variation to EPL 12425 to authorise the release of water off-site from the planned new clean water diversion dams and pipelines to be constructed around the Pit 8 Extension. It is anticipated that the varied EPL would require discharges to meet certain sedimentation and salinity related water quality criteria, consistent with the existing conditions of EPL 12425.

The available surface water quality data shows the licensing requirement for EC for Reverse Osmosis Plant discharges at Wilpinjong Coal Mine is well below average recorded levels in Wilpinjong Creek and Wollar Creek. Further details on the proposed upslope clean water discharge points are provided in response to NSW EPA Recommendation 3 (Section 4.1.2).

Consideration of Acid Mine Drainage

There are no known acid mine drainage (AMD) issues associated with bulk waste rock emplacements at Wilpinjong Coal Mine. Notwithstanding, WCPL implements management strategies for potentially acid forming low capacity (PAF/LC) and PAF materials at the Wilpinjong Coal Mine in accordance with its Rehabilitation Management Plan, including:

- Operational sampling and geochemical testing of mine materials and water quality monitoring to identify any potential emerging risks of elevated PAF material presence. WCPL undertakes a testing program to confirm that the final outer surface of the back-filled mine voids and elevated waste rock emplacements is non acid-forming (NAF).
- Waste rock materials encountered from the floor rock of the G seam are managed so that no zones of PAF or PAF/LC material are exposed near the surface and the materials blended well with NAF producing an overall NAF material or encapsulated with NAF material.
- Inert cover will be placed on top of the rehabilitation final landform surface to provide a benign barrier between any overburden that has not completely equilibrated with the surface geochemical conditions.
- PAF tailings are managed in such a way as to minimise potential oxidation during disposal, including lime dosing if required when disposal occurs to dedicated tailings storage facilities. The tailings dams are progressively capped with inert overburden material.
- Appropriate ameliorates (e.g. lime, gypsum and/or fertiliser) are used to improve the chemical and/or nutrient properties of the soil.
- Geochemical monitoring program of rehabilitated areas for pH, EC and major cations to determine whether the vegetation substrate is approaching conditions similar to those found in the reference sites.
- Coarse reject material are dispersed throughout the overburden within the mine waste rock emplacements with the aim of producing a mix with a sulfur content that has an acid producing potential less than the acid neutralising capacity of the overburden.

Further details of the management strategies for PAF/LC and PAF materials are provided in the Rehabilitation Management Plan (WCPL, 2025c).

The Modification Geochemistry Assessment found that the geochemical characteristics of the overburden and interburden, and the coal and coal rejects in the Pit 8 Extension area would be generally consistent with the approved mine.

It is anticipated that the abovementioned management strategies and measures would continue under a revised Rehabilitation Management Plan which would be reviewed and revised to reflect any changes to Development Consent (SSD-6764) that arise from the Modification.

WCPL also undertakes groundwater monitoring within the backfilled open cut pits (i.e. GWf series bores within the spoil) under the approved Water Management Plan. Groundwater quality results are analysed and reported in the Wilpinjong Coal Mine Annual Reviews. To date, there has been no adverse effects or trends noted in the spoil monitoring bores.

It is anticipated that this network of spoil monitoring would be expanded as mining progresses to include the Pit 8 Extension area.

3. Site Water Balance Model

Issue

Some submitters raised concerns regarding the site water balance model calibration and reliability for assessing the Modification.

Response

Figure 9.1 of the Surface Water Assessment shows the flow-duration curve for Wilpinjong Creek immediately upstream of the Cumbo Creek confluence. Figure 9.2 of the Surface Water Assessment shows the flow-duration curve for Wollar Creek immediately upstream of its confluence with Wilpinjong Creek.

Wilpinjong Creek at the upstream gauging station receives diverted clean water from the Moolarben Coal Mine. The downstream Wilpinjong Creek gauging station receives treated mine water discharges under approved operations for Wilpinjong Coal Mine, which would increase the duration of flow in Wilpinjong Creek.

Cumbo Creek at the Cumbo Creek Gauging Station (upstream) does not receive any discharges of mine water and therefore represents the natural variability of flow from the Cumbo Creek catchment. The Modification is also outside the Cumbo Creek catchment and would have no effect on flow in Cumbo Creek. The representation of natural (clean water) catchment areas in the Australian Water Balance Model runoff model used in the Surface Water Assessment has been calibrated to recorded data in Cumbo Creek. The model provides a reasonable representation of the frequency of flow across different flow magnitudes.

This response has been prepared with input from WRM.

4. Surface Water Monitoring

Issue

A submitter raised a concern that insufficient surface water monitoring is located on Wollar Creek to determine potential impacts downstream.

Response

WCPL undertakes surface water monitoring in accordance with the approved Water Management Plan, which includes the Surface Water Management Plan.

Surface water quality monitoring is undertaken at site WOL1, which is located downstream of the confluence of Wilpinjong and Wollar Creeks (Figure 3.3 of the Surface Water Assessment). WOL1 is located downstream of all surface disturbing activities related to the Wilpinjong Coal Mine (and Modification), approximately 500 m upstream of where Wollar Creek enters the Royal Goulburn National Park. The comprehensive surface water monitoring network (including sites upstream, adjacent to and downstream of the mine) is used to identify the potential effects of the Wilpinjong Coal Mine on downstream water quality in Wollar Creek.

There has been no exceedance of the Water Management Performance Measures in Table 6 of Development Consent (SSD-6764) due to the existing Wilpinjong Coal Mine including:

Wilpinjong, Cumbo and Wollar Creeks	*No greater impact than predicted for the development for water flow and quality.*
Aquatic, riparian and groundwater dependent ecosystems	*Negligible environmental consequences beyond those predicted for the development.*

WRM (2025) predicts that with the implementation of the proposed surface water management system, the Modification would not adversely affect surface water quality in receiving waters and would have a negligible impacts on flow frequency in the Goulburn River post mining (compared to approved conditions).

As described in response to NSW EPA's Recommendation 4, WCPL proposes to establish a new surface water flow gauging station on Wollar Creek, upstream of the confluence of Wollar Creek and Wilpinjong Creek, which would provide additional flow data for analysis of the mine's contribution to surface water flows in the locality.

5. Surface Water Flow Monitoring Data

Issue

Some submitters noted that the lack of surface water flow data on Wollar Creek near the Pit 8 Extension area reduces the confidence in the predicted changes to flow and water quality.

Response

Wollar Creek streamflow was recorded at the Wollar Creek gauging station (GS210082) between 1969 and 1997 (i.e. approximately 28 years). As described in response to NSW EPA's Recommendation 4, WCPL proposes to establish a new surface water flow gauge on Wollar Creek, upstream of the confluence of Wollar Creek and Wilpinjong Creek.

As described in response to Groundwater Issue #3, the potential impacts of the Modification on Wollar Creek is expected to be negligible.

The collection of additional streamflow data for Wollar Creek would not change any conclusions made in the Modification Surface Water Assessment because the Pit 8 Extension area represents a very small fraction (less than 1%) of the Wollar Creek catchment area. The impacts of any change in surface runoff of this order of magnitude would not be detectable from stream gauging.

6. Salinity in Downstream Surface Water

Issue

Some submitters suggested that the Modification would result in increased salinity loads of up to 3.5 tonnes of salt per day in mine discharges.

Response

As outlined in response to NSW EPA Recommendation 1, the Modification does not include any change to the current EPL 12425 discharge limit of 6.5 ML/day.

The Modification proposes an additional six months of mining operations to backfill final voids and shape the final landform (e.g. mining operations until 30 June 2034).

The available surface water quality data shows the licensing requirement for EC for Reverse Osmosis plant discharges at Wilpinjong Coal Mine is well below average recorded levels in Wilpinjong Creek and background levels in Wollar Creek (WRM, 2025). As a result, approved releases from the discharge point tend to significantly reduce salinity in Wilpinjong Creek downstream of the Cumbo Creek confluence, compared to what they would be without controlled discharges (WRM, 2025).

EPL 12425 prescribes a maximum daily discharge rate of 6.5 ML/day and EC limit of 500 microsiemens per centimetre (µS/cm) for discharge water, however, average EC and discharge rates are below these maximum limits. If conservative assumptions that discharges occur at the maximum daily rate (6.5 ML/day) at the maximum EC limit (500 µS/cm), the existing approved maximum daily salt load would be approximately 2.11 tonnes[4].

The Modification open cut extension area (i.e. approximately 150 ha) can be compared to the existing approved open cut pits and contained infrastructure area (3,000 ha) to provide context on the potential contribution of the Modification to the Wilpinjong Coal Mine controlled releases, should the Modification be approved.

WCPL notes that it has withdrawn a previous request to vary EPL 12425 to increase permitted controlled discharges (that was not related to the Modification).

7. Mining in Wollar Creek Catchment

Issue

Some submitters raised concern that the Modification would extend mining into the Wollar Creek catchment.

Response

The existing Wilpinjong Coal Mine is located within the catchment of Wilpinjong Creek, which is a sub-catchment of, and flows into, Wollar Creek, downstream of the mine. The existing approved mine has, therefore, reduced catchment area reporting to Wollar Creek during mining.

The Modification would result in a further slight decrease in catchment area reporting to Wollar Creek (a maximum of approximately 0.7% of catchment area is excised) during operations. However, following backfilling and rehabilitation of the Pit 8 Extension area. The rehabilitated landform would result in no excision of the Wollar Creek catchment (WRM, 2025). Predicted incremental baseflow impacts are discussed in the response to Groundwater Issue #3 in Section 4.2.3. Groundwater baseflow impacts associated with the Modification would also recover within approximately 30 years of cessation of mining activities (refer to response to Groundwater Issue #3).

A range of management measures have been developed to comply with the relevant water management performance measures in Table 6 of Development Consent (SSD-6764), including measures relating to potential impacts to Wollar Creek and biodiversity downstream of the Wilpinjong Coal Mine (refer to response to Issue #2 above). Should the Modification be approved, WPCL would continue to comply with these water management performance measures under the modified development consent.

[4] This assumes a total dissolved solids:EC conversion factor of 0.65.

The existing Water Management Plan would be reviewed and revised to incorporate the Modification, subject to the conditions of any modified Development Consent. This would include review and where necessary revision of surface water management and monitoring to address the modified conditions of Development Consent (SSD-6764).

8. Flood Modelling

Issue

Some submitters questioned the suitability of the hydrological flood modelling conducted.

Response

The flood model and assessment has been prepared by Dr David Newton and Hayden Guse of WRM in accordance with:

- *Flood Prone Land Policy and Flood Risk Management Manual* (DPE, 2023a), which aims to make the community more flood resilient, recognising that flood-prone land is a valuable resource; and
- *Mid-Western Regional Local Environmental Plan 2012*, which includes flood planning provisions that aim to minimise the flood risk to life and property.

The flood modelling and assessment was also prepared to address the requirements of the *Information guidelines for proponents preparing coal seam gas and large coal mining development proposals* (IESC, 2024), including requirements for flood assessments.

It is noted that the IESC, DCCEEW – Water and EPA did not raise any concerns regarding the flood modelling in its submissions.

9. Influence of Existing Discharges on Water Resources

Issue

Some submitters raised concerns regarding the influence of the existing approved Wilpinjong Coal Mine on water resources, including the influence of discharges under EPL 12425.

Response

Table 6 of Development Consent (SSD-6774) outlines Water Management Performance Measures for Wilpinjong, Cumbo and Wollar Creeks and aquatic, riparian and GDEs. There has been no exceedance of the Water Management Performance Measures in Development Consent (SSD-6764) due to the existing Wilpinjong Coal Mine.

Surface water quality results are analysed and reported in the Wilpinjong Coal Mine Annual Reviews. The available surface water quality data shows the licensing requirement for EC for Reverse Osmosis Plant discharges at Wilpinjong Coal Mine (i.e. 500 µS/cm) is well below average recorded levels in Wilpinjong Creek and Wollar Creek.

WCPL notes that it has withdrawn a previous request to vary EPL 12425 to increase permitted controlled discharges (that was not related to the Modification).

10. Future Requirements for Water Discharges

Issue

A number of submitters raised concerns that the surface water and groundwater assessments did not assess impacts associated with WCPL's proposed EPL variation application to increase daily discharges from the Water Treatment Plant from a maximum 6.5 ML/day to 20 ML/day.

Response

As explained in response to EPA's Recommendation 1, the Modification does not seek to increase the daily discharge limit in EPL 12425 and WCPL has withdrawn its proposed application to increase discharge limits (that was unrelated to the Modification).

11. Water Management Infrastructure

Issue

Some submitters raised concerns that the Modification's new water management structures including clean water diversion dams and pipelines could pose risks to downstream water resources.

Response

Further details regarding the proposed clean water management system for the Modification are provided in response to EPA's Recommendation 3.

The proposed clean water dams or pipelines would be designed to minimise sediment reaching downstream surface water. Clean water dams would be used to maintain separation of clean water (from up-catchment areas) and mine water by collecting and/or diverting clean water around the mine operations. This new water management infrastructure would be subject to detailed design with input from suitably qualified hydrologists.

Discharge of water from site, including any new clean water discharge locations to be introduced for the Modification, would be subject to strict water quality limits as specified in EPL 12425. Sampling of all discharge water is undertaken to confirm the EPL water quality limits are met for discharges.

Ongoing operation of the water management system would continue to separate and contain mine water within the site water storages and open cut pits. The water balance for the Modification predicts no spills of mine water to the receiving environment (WRM, 2025). Discharges from sediment dams (when rainfall exceeds sediment dam design criteria) would continue to occur for the Modification, and would continue to be directed into the internal mine water management system as per approved operations (i.e. water would not be discharged off-site), unless there is a revision of the EPL (WRM, 2025).

An updated Water Management Plan would be prepared for the Modification, subject to the conditions of any modified Development Consent. The Water Management Plan would describe the operational water management system and would include provisions for review of the site water balance, erosion and sediment controls, surface water (and groundwater) monitoring and management.

12. Influence of Wilpinjong Coal Mine on Invasive Aquatic Species Distribution

Issue

A submitter raised concerns that the assessments did not consider that approved discharges from the Wilpinjong Coal Mine could prevent natural drying cycles of the Goulburn River, which could enable invasive carp to spread further upstream.

Response

It is noted that rainfall in 2020 to 2022 (i.e. the 3-year period up to the surveys) was above average based on the SILO Data Drill dataset presented in Figure 3.7 of the Surface Water Assessment. Despite the above average rainfall (and flows in the Wollar Creek catchment), the Aquatic Ecology Assessment describes that Common Carp (*Cyprinus carpio*) were not collected during the survey undertaken in October 2022, but 19 individuals were previously collected in the downstream section of Wilpinjong Creek in May 2014 (Bio-Analysis, 2015).

As explained in response to EPA's Recommendation 1, the Modification does not seek to increase the daily discharge limit in EPL 12425 and, therefore, would not change the approved discharge regime at the Wilpinjong Coal Mine.

The Modification would result in a slight decrease in catchment area reporting to Wollar Creek (a maximum of approximately 0.7% of catchment area is excised) during operations. However, following backfilling and rehabilitation of the Pit 8 Extension area, there would be no excision of the Wollar Creek catchment. Accordingly, the Modification would have a negligible impacts on flow frequency in the Goulburn River post mining (compared to approved conditions).

13. Consideration of *Water Management Act 2000*

Issue

One submitter suggested that the Modification's water impacts would conflict with the objectives of the NSW *Water Management Act 2000.*

Response

The Surface Water Assessment and Groundwater Assessment has been prepared in consideration of the *Water Management Act 2000* including and relevant NSW Water Sharing Plans and the NSW Aquifer Interference Policy.

WCPL holds appropriate licences under the *Water Management Act 2000* for the existing activities at the Wilpinjong Coal Mine, and the proposed Modification. Appropriate licences under the *Water Management Act 2000* would continue to be held.

In addition to relying on licences to account for the licensable take of water associated with the Wilpinjong Coal Mine, WCPL would apply for any approvals under the *Water Management Act 2000* which may be required for the Modification.

4.2.5 Greenhouse Gas Emissions

Comments made in public and organisation submissions relevant to the greenhouse gas emissions concerns relating to:

1. Consistency with International, National and State commitments.
2. Contribution to greenhouse gas emissions.
3. Description of emission reduction goals for the site.
4. Consistency with Renewable Energy Zones and the energy transition.
5. Assessment of Scope 3 emissions.
6. Assessment of greenhouse gas emission impacts on the locality.
7. Greenhouse gas abatement costs to other New South Wales sectors.
8. Global Warming Potential of methane.
9. Fossil fuels.

Responses to these comments are provided below.

1. Consistency with International, National and State Commitments

Issue

Many submitters raised concerns that greenhouse gas emissions associated with the Modification would not be consistent with International, National and State emission reduction targets or Australia's net zero transition.

Response

Under the Paris Agreement, each Party is responsible for setting and implementing its own Nationally Determined Contribution (NDC) and reporting progress against that commitment. NDCs are submitted to the United Nations Framework Convention on Climate Change on a five yearly cycle, reflecting each country's domestic circumstances and capabilities, and are the primary mechanism by which international commitments are translated into national policy and regulation.

Scope 1 and 2 greenhouse gas emissions from the Modification, as well as any Scope 3 emissions related to the Modification that would be emitted in Australia (e.g. associated with upstream and downstream transport and combustion of coal for electricity production), would be accounted for and managed in accordance with domestic law adopted to implement Australia's NDCs under the Paris Agreement.

Scope 3 emissions produced by the end use of Modification coal overseas would be accounted for and managed in accordance with the laws that have been adopted to implement the NDCs of the countries to which the coal is exported.

It is important to note that WCPL's overseas customers are all located in countries that are subject to the Paris Agreement.

Australia's current NDCs include a 43% reduction in greenhouse gas emissions below 2005 levels by 2030, a 62% to 70% reduction below 2005 levels by 2035 and net zero emissions by 2050. These targets are implemented through domestic law and policy, including mechanisms directed at large industrial facilities.

In this context, the Safeguard Mechanism has been developed to drive emissions reductions at Australia's largest emitting facilities, so that baselines decline over time on a trajectory consistent with Australia's targets. The Modification would be incorporated into the Wilpinjong Coal Mine and reported as a single facility with one Safeguard Mechanism baseline, and the WCPL would be required to retire Australian Carbon Credit Units or Safeguard Mechanism Credits to address any exceedance of the baseline.

The Greenhouse Gas Assessment outlined that the Safeguard Mechanism provides a framework for the Modification to meaningfully contribute to state legislated emission reduction targets.

The Safeguard Mechanism decline rates have been structured to accommodate growth at both existing and new facilities (Commonwealth DCCEEW, 2024b), while still being more ambitious than the average annual reduction required between 2005 and 2030 to achieve NSW's interim 50% reduction target (WCPL, 2025b).

At the State level, NSW has legislated emissions reduction targets under the Net Zero Future Act with a 50% reduction on 2005 levels by 2030, a 70% reduction by 2035, and net zero by 2050.

As discussed in response to Recommendation 10 of the EPA in Section 4.1.2, NSW DCCEEW projections (Figure 11 and 12) indicate that, expressed relative to the 2005 baseline year, the Safeguard Mechanism is projected to drive net emissions from regulated coal facilities down on a pathway that is consistent with the legislated NSW emissions reduction trajectory (including SGM2, a scenario that incorporates emissions from the Modification).

It is important to note that the Modification is scheduled to cease coal production in 2033, prior to the NSW 2035 target of 70% below 2005 levels and 2050 net zero target, and as such would not generate material emissions beyond that timeframe.

2. Contribution to Greenhouse Gas Emissions

Issue

Many submitters noted concern that the Modification's emissions would contribute to global climate change impacts (including impacts on the locality), with some submitters noting specific concerns regarding indirect Scope 3 emissions (25 Mt CO_2-e) associated with customers using Modification product coal.

Response

In accordance with the *Greenhouse Gas Protocol* (World Business Council for Sustainable Development [WBCSD] and World Resource Institute [WRI], 2004), Scope 3 emissions are those emissions that are a consequence of an activity which is not directly owned or controlled by the producing entity (but are rather the Scope 1 emissions of other entities).

As outlined in the *Scope of the NSW state-wide net zero by 2050 target* (NSW DCCEEW, 2025d), greenhouse gas accounting and reporting in NSW is limited to Scope 1 and 2 emissions. Notwithstanding, the Greenhouse Gas Assessment (WCPL, 2025b) does calculate the Scope 3 emissions associated with customers burning Modification product coal (i.e. typically in the production of electricity).

The Greenhouse Gas Assessment (WCPL, 2025b) clarifies that the large majority of Scope 3 emissions from the use of the Modification's coal would occur overseas and therefore would largely not contribute to Australian greenhouse gas emissions. As explained in the *Greenhouse Gas Protocol* (WBCSD and WRI, 2004), reporting of Scope 3 emissions can result in double counting of emissions between entities or jurisdictions.

It is also important to note that WCPL's overseas customers are located in countries that are subject to the Paris Agreement. Under the Paris Agreement, each NDC reflects the country's ambition for reducing emissions, taking into account its domestic circumstances and capabilities. Each country will have its own range of opportunities and priorities to trade off various alternative emission reduction (and carbon sink) options having regard to the economic priorities and physical attributes of the country

Reducing NSW's coal exports is very unlikely to alter global coal consumption, as international electricity generators and steelmakers would simply be forced to source their coal requirements from other jurisdictions.

This is supported by the fact that, following reductions in Russian coal exports in 2022, exports from other countries increased to meet the supply shortfall associated with existing demand and overall global coal demand increased by 1.2% (International Energy Agency, 2022). Therefore, it is reasonable to assume that, if the Modification does not proceed, the market would respond through a small increase in supply from elsewhere to meet global energy demands. For context, product coal from the Wilpinjong Coal Mine in financial year 2024 (i.e. 10.8 Mt) represented approximately 0.1% (approximately one thousandth) of global coal consumption in that year (i.e. 9,114 Mt) (International Energy Agency, 2025).

3. Description of Emission Reduction Goals for the Site

Issue

Many submitters raised a concern that the Greenhouse Gas Assessment did not nominate emissions reductions goals for the Mine, consistent with the Guide for Large Emitters.

Response

Refer to response to NSW EPA Recommendation 10 in Section 4.1.2, where WCPL has nominated emission goals for the Modification consistent with the Safeguard Mechanism.

4. Consistency with Renewable Energy Zones and Energy Transition

Issue

Many submitters raised a concern that the Modification's proposed extension to the Wilpinjong Coal Mine was not consistent with NSW's commitment to the energy transition and specifically the CWOREZ located to the west of Wollar.

Response

The Modification is located on the eastern border of the CWOREZ, accounting for approximately 0.007% of the CWOREZ area. The proposed Modification comprises a modest extension of the existing Wilpinjong Coal Mine and is located within an existing mining precinct that includes the Moolarben Coal Complex and Ulan Coal Mine. Freehold land in the vicinity of the Modification is largely owned by Peabody.

The CWOREZ Transmission Project is being developed by EnergyCo to facilitate export of electricity from the CWOREZ and transects the Wilpinjong Coal Mine. WCPL has worked cooperatively with EnergyCo to facilitate the CWOREZ Transmission Project, including preparing a dedicated modification to Development Consent (SSD-6764) to accommodate the CWOREZ Transmission Project (i.e. Modification 4).

In addition, as outlined in the AGL submission on the Modification (Section 4.2.1, Issue #12), coal supply remains important to domestic electricity generation and the stability of NSW electricity supply during the energy transition.

WCPL considers that the Modification is consistent with the CWOREZ and the continued economic diversity of industry in the MWRC LGA.

5. Assessment of Scope 3 Emissions

Issue

Many submitters suggested that Scope 3 emissions should be included and assessed as part of the Greenhouse Gas Assessment, as coal from Wilpinjong Coal Mine supplies Bayswater Power Station which results in downstream emissions in NSW (and Australia).

Response

The Greenhouse Gas Assessment (WCPL, 2025b) for the Modification is supported by a Greenhouse Gas Calculations Report prepared by Airen Consulting (2025b).

The assessment boundary in the Greenhouse Gas Calculations Report was developed to include all significant Scope 1, Scope 2 and Scope 3 emission sources associated with the Modification, consistent with the completeness principle under the *NSW Guide for Large Emitters* (EPA, 2025b).

Scope 3 emissions include downstream emissions that occur from sources not owned or controlled by the proponent, including emissions associated with the use of sold products. In the context of a coal mine, this includes combustion of thermal coal in power stations by end users.

On that basis, the Greenhouse Gas Calculations Report (Airen Consulting, 2025b) conservatively included Scope 3 emissions that would occur in Australia from the use of product coal, including where Wilpinjong coal is combusted for electricity generation in NSW (the Scope 1 emissions of electricity generators). This approach allows the Scope 3 estimates to be transparently considered in the assessment context, notwithstanding that Scope 3 reporting is not required for NGERS. As explained in the Greenhouse Gas Protocol (WBCSD and WRI, 2004), reporting of Scope 3 emissions can result in double counting of emissions between entities or jurisdictions.

The total annual average Scope 1, Scope 2 and Scope 3 emissions released in Australia as a result of the Modification are estimated to be 1.603 Mt CO_2-e and would contribute approximately 0.370% to Australia's annual emissions from 2022 (Airen Consulting, 2025b). Even when the downstream combustion of coal in Australia is included in this way, the contribution of the Modification Scope 1, Scope 2 emissions and customer's combustion emissions associated with Modification coal (Scope 3) remains a small proportion of national emissions.

In the event that the Modification did not proceed, it is also highly likely that NSW electricity generators would source equivalent volumes of coal from alternative suppliers, and the Scope 1 emissions of these electricity generators would be unchanged in NSW.

The Commonwealth and NSW Government's response to elevated global coal and gas prices in 2022 provides a contemporary illustration that consistency of electricity supply and the associated availability of input fuels to provide stable and suitably priced electricity are matters of national importance. The NSW Premier at the time stated the following in the initial reading of the amending legislation to enact a coal reservation and capped prices (Parliament of NSW, 2022):

> *The conflict in Ukraine and the resulting trade sanctions imposed on Russian coal and gas have distorted the global market by limiting supply while demand remains high. This is causing extreme and unusual increases in energy bills for Australian families and businesses in every State and Territory. The Prime Minister's comments and the cooperative action taken by National Cabinet last week reflect that this is a national issue, within a much broader international context, and New South Wales is not immune.*
>
> …
>
> *Let me be clear: This is not, and must not be, about politics. We have recalled Parliament in highly unusual circumstances due to the urgent need to deliver real relief to the families of New South Wales. I thank my Commonwealth and interstate counterparts and their governments, and the Leader of the Opposition, for their support in reaching this solution. The bill goes directly to the root of the problem. Put simply, it gives the Government the ability to manage the price and supply of coal by enabling the Minister for Energy to make directions regarding coal prices and supply domestically, including the introduction of a temporary price cap.*
>
> …
>
> *Our intent is to ensure that sufficient thermal coal is available for the power stations in New South Wales at the capped price to generate electricity to meet consumer demand. The Liberals and The Nationals understand that this temporary intervention would come at a significant financial cost to coal producers. This sector supports many thousands of people, both directly and indirectly, as well as keeps our State's lights on and homes and businesses working.*

The extracts of the 1st reading speech reproduced also above illustrate why a reduction in production from an existing thermal coal mining operation will rarely translate into any corresponding reduction in consumption of thermal coal by its electricity generation customers. In the event any one coal mine is unable to supply its existing electricity generation customers, these electricity generators (whether located in NSW or internationally) will immediately act to source alternative equivalent supplies of thermal coal from the global coal market to meet their existing contracts and maintain electricity supply for their residential, business and Government customers *because of the centrality of reliable electricity supply to modern society.*

The importance of continued reliable coal supply until such time that a coal fired power station is retired was also highlighted in AGL's submission on the Modification (Section 4.2.1, Issue #12).

6. Assessment of Greenhouse Gas Emission Impacts on the Locality

Issue

Some submitters raised a concern that assessment of environmental, social and economic impacts of greenhouse gas emissions on the locality was insufficient in the context of recent climate change related legal developments in NSW.

Response

The Modification Report prepared for the Modification considered the potential impacts of climate change at a global, national, state and regional/locality scale.

Australia's National Climate Risk Assessment Report (Australian Climate Service, 2025) describes the likely effects of climate change and associated impacts to Australia's key systems, including communities (urban, rural and remote), defence and national security, economy, trade and finance, health and social support, infrastructure and the built environment, the natural environment, and primary industries and food.

Key findings of the risk assessment are as follows (Australian Climate Service, 2025):

Changing hazards

- *Australia's climate is changing and will continue to change into the future. The country is likely to experience more intense and extreme climate hazards, and in some cases in areas where people and places haven't experienced these hazards before.*
- *Climate science indicates that our future extreme weather is likely to differ significantly from the past. Changes in the timing, duration, intensity and spatial patterns of hazards are likely, with many events occurring more frequently, in combination or affecting new locations.*
- *The change in distribution, timing and severity of extreme weather events means that historical observations on their own are not likely to be a good indicator of future risk.*
- *Australia currently experiences compounding and cascading hazards, and this is going to increase. Concurrent events, and reduced time between severe events will become more common.*

Risks to people

- *Individuals and households already disadvantaged are the most vulnerable to the impacts of a changing climate. Actions that address underlying disadvantage can reduce the impacts of climate change.*
- *Aboriginal and Torres Strait Islander peoples will experience unique impacts from climate change. The changing climate threatens the health of Country, access to Country and could challenge self-determination and have flow-on impacts on their social and physical health and wellbeing.*
- *Extreme heat, floods, bushfires, poor air quality and communicable diseases will escalate health risks. Those with pre-existing health conditions, including mental ill-health, are most at risk. This includes the very young and our older populations. People who work outdoors will also be at increased risk.*

Risks to places

- *Climate impacts are experienced differently across Australia. There are several key areas that have been identified as watchpoints:*
    - *Sea level rise and increased coastal hazards will significantly impact coastal communities and cities. By 2050, the number of coastal communities located in high and very high risk areas nationally will increase. If populations remained as they are today, this would equate to >1.5 million people living in areas that will experience sea level rise and coastal flooding risks by 2050.*
    - *Northern Australia is likely to experience escalating challenges as its proneness to hazards increases as global temperature rise. This will put pressure on health, critical infrastructure, natural species and ecosystems, and primary industries. It will also pose additional challenges to emergency responders.*
    - *Outer urban areas of cities stand out as watchpoints. These areas are particularly susceptible to adverse impacts because of their circumstances (location, demographics, proneness to hazards).*
    - *Remote communities are vulnerable today due to limitations in power and telecommunications supply and weak supply chains. This vulnerability will increase as critical infrastructure and supply chains face increased disruptions.*

Risks to our way of life

- *Extreme events will affect some communities more than others. High-risk communities are likely to experience domestic migration, which in turn could disrupt local economies, social networks, traditional identities and cultural heritage.*

- *An escalation of risks in one system is highly likely to have a ripple effect across sectors, services and structures. Extreme events will lead to property damage, increased insurance costs and even loss of homes, particularly in coastal areas vulnerable to sea level rise and erosion. These impacts will contribute to the cost of living, placing further stress on household budgets.*
- *Australians will be impacted by loss of important ecosystems and species by the middle of the century, without implementing direct intervention and adaptation actions. Ecosystems provide clean air and water, food security through pollination, raw materials for medicines, natural disaster protection, and regulate the local climate. Australia's plants and animals have evolved to fit their local climatic conditions.*
- *More frequent and more intense extreme events will affect the way of life in different ways across Australia – from impacts to sport and recreation, to unreliable infrastructure, like energy sources during heatwaves. There will be additional pressure on emergency responders and defence resources. Increased severe floods and bushfires will degrade water quality, placing pressure on already limited water sources.*

Assuming that the Modification's coal would not be substituted with coal from other sources, the Modification's contribution to global climate change (i.e. global average temperature rise) would be proportional to its contribution to global greenhouse gas emissions. Comparison of the annual average Scope 3 emissions of customer entities using coal produced by the Modification (approximately 2.8 Mt CO_2-e per annum on average) to the total anthropogenic greenhouse gas emissions globally (excluding land use change) in 2023 (i.e. 50,300 Mt CO_2-e) indicates these emissions would be approximately 0.006% of global anthropogenic emissions in 2023 (ClimateWatch, 2025).

The Intergovernmental Panel on Climate Change [IPCC] reports that every 1,000 gigatonnes of cumulative global CO_2-e emissions are likely to increase global mean surface temperature by between 0.27 and 0.63 degrees celsius (°C), with a central estimate of 0.45°C (IPCC, 2021). These values describe how the global climate system responds to large scale cumulative global emissions. They are not designed to quantify localised effects or to attribute temperature change to any single emissions source.

The extremely small proportions and very high uncertainties involved lead to the conclusion that locality impacts of Modification-related greenhouse gas emissions (including Scope 3 emissions from NSW or overseas use of Modification coal) during and beyond the life of the Modification would be undetectable.

However, based on a conservative approach that assumes that the Modification's emissions would be wholly additive and adopting the IPCC (2021) central estimate described above, the Modification's total emissions equate to an incremental global temperature influence potentially measured at the scale of millionths (Scope 1 and 2) or ten-thousandths of a °C (Scope 1, 2 and 3). The results are summarised in Table 21.

Table 21
Indicative Incremental Modification Scenario Contribution to Global Surface Temperature Change – Assuming all Emissions are additive

Basis of Incremental Modification Contribution	Global Surface Temperature Change (°C)	Scale Descriptor
Total Scope 1 and 2 Emissions	0.000000168	0.17 millionths of a degree
Total Scope 1, 2 and 3 Emissions	0.0000114	0.11 ten thousandths of a degree

Source: IPCC (2021); Airen Consulting (2025b).

Even if the Modification's estimated greenhouse emissions were considered to result in an incremental increase in global emissions, this contribution would clearly be very small relative to current climate change projections, meaning the Modification's contribution to temperature change would also be very small. As temperature change is used as the basis for determining likely changes in other aspects of the climate (e.g. rainfall), it follows that the Modification's incremental contribution to change in these other aspects would also be very small.

Further, the Economic Assessment (AnalytEcon, 2025) prepared for the Modification considered potential external effects, including greenhouse gas emissions. The assessment concludes that, beyond minor agricultural impacts, no significant uncompensated external effects are predicted to occur at the local level. While the Modification is a source of additional greenhouse gas emissions, the share of emissions that is attributable to the local region is characterised as negligible.

As outlined in the *Scope of the NSW state-wide net zero by 2050 target* (NSW DCCEEW, 2025d), greenhouse gas accounting and reporting in NSW is limited to Scope 1 and 2 emissions. In relation to greenhouse gas emissions, the Economic Assessment (consistent with NSW guidance) estimates an incremental global social damage cost for Scope 1 and Scope 2 emissions attributable to the Modification of $12 million in net present value (NPV) terms, with the NSW share of incremental social damage costs estimated at around $13,000 in NPV terms (AnalytEcon, 2025).

7. Greenhouse Gas Abatement Cost to Other New South Wales Sectors

Issue

A concern was raised that additional Modification greenhouse gas emissions would impose greater abatement obligations on other NSW industries, and suggested these costs were potentially underestimated in the economic assessment.

Response

The relative performance of various NSW economic sectors since 2005 is explored in the Greenhouse Gas Assessment. This comparison reveals the resource sector is the only emitting sector which had an average reported emission reduction rates of approximately 2% per annum, consistent with the average decline rate required to meet the NSW net zero target between 2005 and 2030. The observed reduction in the reported resource sector emissions between 2005 and 2022 occurred prior to the introduction of the reformed Safeguard Mechanism in 2023, which will act to drive further industry net emission reductions.

NSW DCCEEW projections of sectoral performance relative to NSW Government net emission reduction targets to 2050 are reproduced on Figure 12. The NSW DCCEEW projections indicate that emissions from Safeguard regulated coal mining facilities, including the scenario that incorporates the Modification, decline broadly in line with the NSW legislated emissions reduction pathway through to 2050, unlike the projected performance of many other NSW sectors. On this basis, approval of the Modification would not create a material additional abatement burden on other NSW sectors. WCPL also notes that the Safeguard Mechanism decline rates have been structured to accommodate growth at both existing and new facilities (Commonwealth DCCEEW, 2024b).

8. Global Warming Potential of Methane

Issue

One submitter suggested that a shorter-term global warming potential (GWP) should be applied in the greenhouse gas calculation assessment, being a 20-year GWP for methane of 84, rather than the 100-year GWP used by Airen Consulting (2025b).

Response

The greenhouse gas calculations were prepared using the *Australian National Greenhouse Accounts Factors 2025* (NSW DCCEEW, 2025a), which apply a consistent 100-year global warming potential time horizon across all greenhouse gases for CO_2-e reporting. Under this approach, methane is assigned a 100-year global warming potential of 28. This is consistent with international conventions and Australian greenhouse gas reporting conventions used for inventories, NGERS reporting and Australia's reporting requirements under the Paris Agreement as it supports comparability across projects and years (NSW Government, 2023).

Notwithstanding, the Wilpinjong Coal Mine is characterised by low fugitive gas concentrations and volumes as outlined in the response to EPA Recommendation 8 in Section 4.1.2. The low fugitive gas concentrations in the NSW Western Coalfield have also been specifically noted in recent EPA publications (EPA, 2025a).

9. Fossil Fuels

Issue

One submitter suggested that fossil fuels should be treated as pollution and therefore require an emission licence fee.

Response

Environment protection licensing, and the associated annual licence fees, are established under the *Protection of the Environment Operations Act 1997* and its regulations. The Wilpinjong Coal Mine is regulated through EPL 12425 administered by the NSW EPA, with fees applying to licensed premises and, where relevant, to pollutant loads emitted to air and water under the load-based licensing scheme.

The NSW EPA is in the process of expanding its oversight of licenced facilities in NSW to include additional obligations with respect to greenhouse gas emissions reporting and mitigation (EPA, 2025c).

WCPL would continue to comply with all applicable statutory licensing obligations for the Modification.

4.2.6 Social

Comments made in public and organisation submissions relevant to social issues include concerns relating to:

1. Cumulative social impacts.
2. Wollar decline.
3. Tourism and attractiveness of locality.
4. Mental health and wellbeing.
5. Community uncertainty.
6. Social amenity.
7. Community consultation.
8. Goulburn River National Park access and recreational use.
9. Emergency response systems.
10. Negotiated agreements.
11. Competition for labour.
12. Employment impact assessment.
13. Scope of the Social Impact Assessment.
14. Extent of social locality.
15. Assessment of solastalgia.
16. Consideration of vulnerable groups.
17. Consideration of intangible Aboriginal culture.
18. Impact significance rating.
19. Assessment of intragenerational and intergenerational equity.
20. Effectiveness of recommended social mitigation strategies.
21. Loss of property value.

Responses to these comments are provided below.

1. Cumulative Social Impacts

Issue

Concerns were raised that the SIA did not fully account for the cumulative social effects of having multiple mines in the region (i.e. how the combined operations of the Wilpinjong Coal Mine, Moolarben Coal Complex and Ulan Coal Mine have already affected local communities).

Response

Square Peg (2025) assessed the potential social impacts associated within the Modification proceeding, the Modification not proceeding and also considered the cumulative combined impacts with the approved Wilpinjong Coal Mine and surrounding projects and operations, consistent with the NSW SIA Guideline (DPE, 2023b)[5] that was in place at the time of writing the SIA.

The SIA recognises that a range of social impacts have arisen from the development of the Wilpinjong Coal Mine and other mining operations both locally and in the region, as follows:

> *In summary, it is clear that the Wilpinjong Coal Mine has impacted the community of Wollar and the MWRC region, and that impacts have been experienced positively by some, and negatively by others. In particular, a group of residents in the primary social locality have experienced the decline in population and services and the changing physical and social environment associated with the Wilpinjong Coal Mine. Some describe this as having had profound impacts on their lives, their wellbeing and their sense of place. Others described how the acquisition of properties in Wollar had enabled former residents to sell their properties at above market values and move closer to services or facilities in Mudgee.*

Further, the SIA states the following regarding consideration of present and cumulative impacts:

> *Several respondents discussed the cumulative effect the mining industry – including the Wilpinjong Coal Mine, Moolarben Coal Mine and Ulan Coal Mine – had at a regional level. This was mostly considered positive as it contributed to population growth and economic and social vibrancy in the region, although some also acknowledged the pressures on housing affordability and availability and accessibility of social services. As such, much of the currently experienced social impact at a regional level have a cumulative aspect.*
>
> *However, the main contributor to cumulative social impact presently is likely to be a number of renewable energy projects proposed for the region. A report commissioned by MWRC noted that there were 25 proposed State Significant Development Projects in the region. Together, if these projects were to proceed, they would contribute close to 10,000 additional residents in the shire, and lead to a demand for up to 1,500 new dwellings. Additionally, this would lead to further pressures on infrastructure, including producing more wastewater and waste, requiring more road maintenance, and leading to further demand for hospital services and schooling (pwc, 2024).*
>
> *These projects may contribute to cumulative social impact, including the following:*
>
> - *Additional employment and contracting opportunities, with the potential for increased competition for local labour.*
> - *Increased demand for temporary accommodation.*
> - *Increased traffic and road impact, both regionally and locally.*
>
> *It should be noted that any contribution to this change emanating from the Modification would be negligible, as the Modification would not involve any material change to the current operational workforce, and any construction related workforces would be small (section 1.2.1) and approximately 75% currently reside within the region with the majority of the remainder residing at the on-site accommodation facility.*

The above quotation from the SIA is consistent with the SIA Guideline, which requires an SIA to consider current experiences, anticipated impacts from a new project (i.e. the Modification) and any cumulative impacts that may be generated through the Modification.

The SIA Report notes that the affected residents would likely assess the impacts relating to sense of place differently. It thus acknowledges the importance of these issues to the affected communities. The SIA Report does not in any way seek to diminish the current experience of those residents as a result of the Wilpinjong Coal Mine.

However, these are past and current experiences of the Wilpinjong Coal Mine. Whilst providing important context for understanding potential impacts, the SIA Report must assess the potential impacts of the Modification specifically, a relatively modest extension in time and space, and do so using the tools and methods provided in the SIA Guideline and its Technical Supplement (DPHI, 2025b, 2025c).

[5] DPHI issued a revised SIA Guideline in July 2025, however, the SIA for the Modification references the 2023 Guideline.

2. Wollar Decline

Issue

Concerns were raised that the Modification extension of mining towards Wollar would exacerbate the depopulation and future decline of Wollar community cohesion and sense of place.

Response

The SIA conducted for the Modification acknowledges that a key theme raised during community consultation was the population decline of Wollar and the reduction in sense of place and community cohesion, as follows:

> *The stakeholders who spoke about the population reduction were of the view that the Wilpinjong Coal Mine land acquisition process had contributed to the reduction. Some attributed it solely to the Wilpinjong Coal Mine, whereas others described how the population was reducing in the district prior to the mine being established.*
>
> *…*
>
> *Others noted with sadness the population reduction, but had a relatively philosophical outlook towards it, noting that similar processes were occurring across rural Australia. Others yet, primarily current residents or property owners in the district, described how the declining population had significantly affected their quality of life.*

The SIA also acknowledges that:

> *It is likely that the mine land acquisition process has contributed to a further decline in the population in the Wollar area since the time of the WEP SIA.*

The SIA recognises the strong attachment residents have to Wollar's sense of place and the distress caused by depopulation. However, the Modification's incremental social impact was assessed in proportion to its scale and short temporal extension of mining activities. Consistent with the NSW SIA Guideline (DPE, 2023b), the assessment focused on "the consequences that people experience when a new project brings change," meaning it evaluated how this specific extension might alter the community's trajectory beyond what was already approved. Importantly, whilst the SIA does not dispute that ongoing mining has impacted Wollar's social fabric, it finds that Modification alone is unlikely to materially worsen or accelerate Wollar's decline. The anticipated social effects of the Modification are essentially a continuation of existing impacts rather than a new, heightened impact.

The SIA concluded the following:

> *As noted in the social baseline and consultation sections (Sections 3 and 4, respectively), the population in the primary social locality, primarily the Wollar area, has been declining. Whilst this decline was occurring prior to the Wilpinjong Coal Mine commencing, the acquisition process has likely accelerated it. Some respondents during consultation commented that this process had benefitted some stakeholders by enabling them to sell their properties at above market values, however, the remaining residents felt this had contributed to the decline of the village, including the loss of services. The acquisition has largely been driven by noise and air quality impacts, and to the extent the Modification leads to further dwellings being subject to acquisition, it may also continue to contribute to a population decline.*
>
> *The Modification may contribute to a minor continued population decline, as it may lead to more dwellings being acquired. It is thus possible that this impact may occur. Whilst maintaining the population is valued highly by community members, the magnitude of this impact is thus likely to be minor, resulting in a medium significance rating.*

With the exception of three vacant land parcels recently granted by the Crown to MLALC, WCPL owns all but one private property in Wollar and has voluntary agreements with the three closest private receivers. Environmental assessments also predict compliance with applicable noise and air quality criteria at key community locations (such as the Wollar community hall). WCPL acknowledges the community concern that continued mining may "prompt more residents to leave". The SIA indicates this would be of minor magnitude and medium significance should it occur over the life of the Modification.

3. Tourism and Attractiveness of Locality

Issue

Submitters expressed concern that extending the mining operations in closer proximity to Wollar would further diminish the attractiveness and tourism appeal of the locality, following previous closures of community facilities (e.g. former Wollar General Store and former Wollar Public School).

Response

It is acknowledged that the Wilpinjong Coal Mine has influenced the community of Wollar and the broader Mid-Western region, with effects experienced both positively and negatively.

The primary social locality assessed in the SIA (Wollar and surrounds) has limited social infrastructure. Facilities in or near Wollar include the Wollar community hall and a volunteer rural fire station linked to the Cooks Gap brigade. The two former churches have been deconsecrated, and the Wollar Public School has closed. The Wollar General Store operated for a period with financial support from WCPL but closed in 2021 after the operator advised it was no longer viable. WCPL continues to maintain the public toilets and access to Australia Post private mailboxes at that site. The Wollar Progress Association (WPA) also has control of some recreation facilities on Crown Land in Wollar including a cricket oval and associated buildings/infrastructure.

Given the modest scale and short duration of the Modification, the associated social impacts are expected to be minor. They largely reflect a continuation of existing experiences, with only small changes in scale or extent.

Notwithstanding, WCPL would continue to implement and extend existing mitigation measures to minimise visual and amenity impacts including (but not limited to):

- implementation of visual bunds along select pit boundaries;
- tree screening along Wollar Road to the south of the Wilpinjong Coal Mine;
- progressive rehabilitation of mining areas;
- proactive and reactive operational noise monitoring; and
- implementation of general dust mitigation measures (haul road watering).

The SIA concludes that the Modification would not directly result in further loss of facilities or reduced access to recreation areas. It does not encroach into the Goulburn River National Park, and access via Mogo Road to the National Park would remain open during construction of the Ulan–Wollar Road realignment, allowing continued access for visitors from Wollar.

Environmental assessments confirm that noise and dust criteria at key public locations (including the Wollar community hall) would continue to be met.

The ongoing presence of mining near Wollar may continue to influence the atmosphere and perceptions of visitor appeal. The SIA recognises these qualitative factors and considers that such perceptions are likely to persist while mining occurs. However, it finds that the incremental change attributable to the Modification is moderate. As a result, while the effect on community futures (including tourism and new residents) is assessed as High significance, it does not constitute a “very high” or “transformational” impact, as the Modification alone would not fundamentally alter current trajectories.

WCPL would also continue to implement the Wilpinjong Coal Mine Social Impact Management Plan that would be updated to address the Modification.

4. Mental Health and Wellbeing

Issue

Concerns were raised that prolonged exposure to mining emissions (noise, dust, blasting, night lighting) has caused experienced stress and anxiety for community members, and extending the mining operation closer to Wollar could worsen these issues.

Response

During consultation, the SIA documents that nearby residents spoke about how the amenity impacts from the existing Wilpinjong Coal Mine had affected their lives, describing noise, dust, odour and blasting impacts. Residents spoke about how it had affected their sleep as well as their personal and social wellbeing.

The SIA concludes the following:

> *It is almost certain that these impacts would continue, should the Modification proceed. However, they would only do so for a very short period of time – six months – and would be at levels similar to current. Further, although the intensity of the impacts may change for some stakeholders, it is unlikely that many additional stakeholders will be affected. As such, it is reasonable to assess the magnitude of this impact as minor, resulting in a medium significance rating. It should be noted that the affected residents would likely assess this impact differently.*

The Modification would extend the duration of current operations (and associated amenity disturbances) by approximately six months.

The AQIA for the Modification (Airen Consulting, 2025a) has concluded that no exceedances of Development Consent (SSD-6764) air quality criteria are predicted to occur at private residences. Further, the Noise and Blasting Impact Assessment undertaken by RWDI (2025) confirmed that with the implementation of the existing Noise Management Plan (including real-time monitoring and operational controls), no exceedances of noise criteria are predicted at any private residences without existing negotiated noise agreements.

WCPL notes that ongoing compliance with applicable consented noise and air quality criteria does not preclude the mine being audible at the nearest private receivers (e.g. under adverse meteorological conditions). Individual responses to operational noise and air quality are highly variable and complaints can and do arise when the mine is managing its operational noise and air quality limits within consented noise limits.

Existing amenity-related mitigation measures would continue for the Modification, including implementation of the Noise Management Plan, Blast Management Plan and Air Quality Management Plan, which include real-time monitoring systems and adaptive controls to maintain noise, dust and blasting emissions within applicable limits set under Development Consent (SSD 6764).

5. Community Uncertainty

Issue

There were concerns that the Modification and the associated six month extension of operations was contrary to the community's expectation (based on current approvals) that mining would cease by 2033.

Response

Open cut mining operations at the Wilpinjong Coal Mine are currently approved until 31 December 2033. The SIA describes that some residents and community members raise uncertainty about the future of Wollar, and how they aspired for Wollar to be repopulated once mining had ceased at the Wilpinjong Coal Mine, and that they felt that the Modification jeopardised that aspiration.

The Modification proposes a six month extension of mining operations to backfill final voids and shape the final landform, following completion of ROM coal extraction in December 2033. For some community members, concerns regarding the Modification were highly linked to a potential future eastern expansion of the Wilpinjong Coal Mine into Pits 9 and 10 within EL 9399, which would potentially result in the mine life being extended beyond 2034.

It should be noted that the potential eastern expansion into Pits 9 and 10 and extension in mine life is not part of the Modification, and if this opportunity is deemed feasible, would be subject to a separate development application and assessment process, and further community consultation.

The SIA acknowledges that whilst this driver for community uncertainty does not form part of the Modification, it is nevertheless contributing to the feeling of uncertainty about the future of Wollar. The SIA concludes the following:

> *It is thus almost certain that this impact – i.e. the uncertainty – would eventuate, and it relates to something that is valued highly, albeit by a relatively small group of people. It is thus sensible to assess the consequence of this impact as moderate, leading to a high impact significance rating.*

It is also noted that brownfield extensions of open cut coal mines, and associated life extensions are relatively common occurrences in NSW and are consistent with the *Strategic Statement on Coal Exploration and Mining in NSW* (NSW Government, 2020).

Further, WCPL was granted EL 9399 by the NSW Government in May 2022 and has been conducting exploration activities in conjunction with mine planning, engineering and feasibility studies since that time. Regular updates on the status of these forward-looking activities have also been provided to the Wilpinjong Coal Mine Community Consultative Committee (CCC).

6. Social Amenity

Issue

Submitters suggested that extending Pit 8 closer to Wollar would expose residents accessing Wollar community facilities to increased blasting, noise, vibration, dust, or fumes, resulting in a loss of social amenity for remaining residents.

Response

The AQIA for the Modification (Airen Consulting, 2025a) has concluded that no exceedances of Development Consent (SSD-6764) air quality criteria are predicted to occur at private residences.

Consideration has been given to the potential for short-term particulate impacts on community facilities within Wollar. While the Wollar Public School is owned by the NSW Department of Education and has been formally closed, it is understood that one of the former school buildings may currently be tenanted. The Wollar community hall is also expected to continue being used on an infrequent basis.

The AQIA (Airen Consulting, 2025a) identified a potential for very minor short-term particulate matter criteria exceedances occurring at the former Wollar Public School (approximately 0.3 to 0.5 µg/m^3 above EPA assessment criteria) in the modelled 2032 scenario in the absence of reactive air quality management measures. Airen Consulting has modelled an additional scenario with reactive measures. The scenario confirmed that through the implementation of reactive measures these potential short term exceedances would be avoided (refer to response to EPA Recommendation 5 in Section 4.1.2 for further detail).

In accordance with the Noise and Blasting Assessment (RWDI, 2025), exceedances of existing Development Consent (SSD-6764) operational noise criteria are predicted to occur at three of the nearest private residences where noise agreements are in place (i.e. to allow these noise exceedances to occur). RWDI (2025) also found that the Wilpinjong Coal Mine incorporating the Modification would comply with applicable project noise trigger values at the Wollar community hall.

One privately-owned residential receiver as well as the former Wollar Public School and Wollar community hall would fall within the minimum compliance distance for residential ground vibration and airblast overpressure for an MIC of 1,350 kilograms (kg). Based on the proximity of these receivers, it is expected that WCPL would need to implement blast management measures (e.g. reduced MICs) when blasting near the southern boundary of Pit 8 Extension.

WCPL would continue to manage operational noise and blasting impacts such that no exceedances of Development Consent (SSD-6764) operational noise and blasting criteria would occur at relevant community facilities.

Discussion regarding potential air, noise and blasting impacts at the Wollar recreation ground is provided in Sections 4.2.9, 4.2.10 and 4.2.11.

The SIA concluded the following regarding the potential social significance of amenity impacts as a result of the Modification:

> *It should be noted that residents described how the amenity impacts, the visual presence of the mine, the population decline and the loss of services all had coalesced to affect their sense of place. For some, this had a combined social, environmental as well as spiritual dimension, and some used terms such as solastalgia to describe their experiences.*
>
> *It is almost certain that these impacts would continue, should the Modification proceed. However, they would only do so for a very short period of time – six months – and would be at levels similar to current. Further, although the intensity of the impacts may change for some stakeholders, it is unlikely that many additional stakeholders will be affected. As such, it is reasonable to assess the magnitude of this impact as minor, resulting in a medium significance rating. It should be noted that the affected residents would likely assess this impact differently.*

Overall, the Modification would not significantly increase potential environmental impacts in comparison to the approved Wilpinjong Coal Mine, however, would facilitate a continuation of existing experienced amenity impacts for an additional six months and the intensity of impacts would likely change for some local stakeholders.

Existing amenity-related mitigation measures would continue for the Modification, including implementation of the Noise Management Plan, Blast Management Plan and Air Quality Management Plan, which include real-time monitoring systems and adaptive controls to maintain noise, dust and blasting emissions within applicable limits set under Development Consent (SSD-6764).

7. Community Consultation

Issue

Some submitters expressed dissatisfaction with the degree of consultation with local stakeholders regarding the Modification and its potential impacts, which may have limited opportunities to engage in decision making.

Response

A targeted consultation program was implemented to inform the SIA, which focussed on impacted stakeholders and their representatives within the primary and secondary social locality. A total of 20 consultation events were held to inform the SIA. Planning for stakeholder consultation commenced during the scoping phase of the SIA, and involved setting objectives, developing methods and consultation tools, and identifying stakeholders to consult. Consultation planning took into account the SIA Guideline in place at the time (DPE, 2023b), the *Undertaking Engagement Guidelines for State Significant Projects* (DPHI, 2024b) as well as the practice notice for engaging with Aboriginal communities provided by DPE (2023c).

The objectives for the stakeholder consultation process were developed to align with the objectives of the SIA Guideline and included:

- collecting primary information to develop an in-depth understanding of the potentially affected community (the social baseline);
- seeking stakeholder input into social impact identification and significance assessment, particularly seeking to understand how impacts may be experienced from the stakeholder's perspective; and
- ensuring stakeholders have an opportunity to provide feedback into project planning and design.

Section 3 of the SIA provides further detail regarding the consultation methods and events conducted for the Modification as well as themes that emerged from community consultation.

WCPL conducted one-on-one consultation with the three most proximal private dwelling owners and has regularly briefed the Wilpinjong Coal Mine CCC, Native Title stakeholders and RAPs on the status and nature of the proposed Modification. WCPL also operated a 'pop-up' drop-in centre in Mudgee between 13 and 17 October 2025 to provide opportunities for members of the public to discuss and ask questions regarding the Modification.

8. Goulburn River National Park Access and Recreational Use

Issue

Concerns were raised regarding potential impacts on public access and enjoyment of Goulburn River National Park arising from the proposed Modification.

Response

The proposed Pit 8 Extension area is located at significant setback distances from protected lands within the National Park Estate. The Pit 8 Extension is located approximately 6 km from the Munghorn Gap Nature Reserve and approximately 1 km from the Goulburn River National Park. Users of Ulan-Wollar Road are also already exposed to views of Moolarben Coal Mine and the Wilpinjong Coal Mine infrastructure and mine landforms.

National Parks and Wildlife Service's mapping identifies recreational areas near the Modification, including the Moolarben Picnic Area and Castle Rock Walking Track in the Munghorn Gap Nature Reserve, and the Spring Gully and Big River Campgrounds in the Goulburn River National Park.

Based on the predicted outer envelope night-time equivalent continuous noise level over a 15-minute period ($L_{Aeq,15min}$) intrusive noise contours for 2027, 2030, and 2032, noise levels at these publicly accessible locations are expected to comply with the passive recreation criterion (RWDI, 2025).

Topographic variations and dense vegetation would limit views, however, portions of the Pit 8 Extension area would be visible from some locations within the Goulburn River National Park, including areas directly adjacent Pit 8.

Progressive rehabilitation of Modification landforms would be undertaken in order to reduce the contrast between the Modification landforms and the surrounding environment, including the Goulburn River National Park.

WCPL would also seek to minimise interruptions to the public road network associated with the relocation of Ulan-Wollar Road and open cut blasting activities (Section 4.2.14).

WCPL considers that the Modification would not result in any material increase in experienced amenity impacts for recreation users of the Goulburn River National Park or Munghorn Gap Nature Reserve.

9. Emergency Response Systems

Issue

Concerns were raised that further population loss could undermine local emergency services (like volunteer rural fire brigades and first responders), potentially increasing risks for remaining landholders.

Response

As described in the response to Issue #2, whilst the SIA does not dispute that ongoing mining has impacted Wollar's population, which has potentially resulted in stress on the volunteer emergency services, the Modification alone is unlikely to materially worsen or accelerate population decline. The anticipated social effects of the Modification are essentially a continuation of existing impacts.

WCPL would continue to maintain existing emergency management protocols and continue coordination with regional services during the Modification.

10. Negotiated Agreements

Issue

A concern was raised by one submitter that some local private landholders are being compensated financially for amenity-related impacts.

Response

Since the Wilpinjong Extension Project was approved in 2017, WCPL has continued to purchase nearby private land in Wollar when it has come up for sale. WCPL now owns all private landholdings in Wollar, with the exception of one private dwelling, and three vacant blocks of land recently granted by the Crown to the MLAC.

WCPL has developed negotiated agreements with the three nearest private dwelling owners (i.e. within approximately 6 km of the Pit 8 Extension area), including the one private dwelling owner remaining in Wollar. consistent with Development Consent (SSD-6764) requirements. These negotiated agreements allow the mine to potentially exceed criteria set at these individual receivers under Development Consent (SSD-6764).

This approach is consistent with the NSW Government's *Voluntary Land Acquisition and Mitigation Policy for State Significant Mining, Petroleum and Extractive Industry Developments* (VLAMP) (NSW Government, 2018b). The VLAMP states that negotiated agreements are the NSW Government's 'preferred mechanism for managing any exceedances of the relevant assessment criteria' and notes it allows approaches that are tailored to specific individual landowner circumstances.

11. Competition for Labour

Issue

A concern was raised that approval of the Modification would increase competition for labour (including with renewable energy developments) as unemployment in the region is already very low.

Response

The Modification would not increase the existing workforce at the Wilpinjong Coal Mine, rather would act to reduce natural rate of workforce decline and provide approximately six months of additional mining activity (backfill and final landform shaping).

The Economic Assessment (AnalytEcon, 2025) highlights that the mining industry is a significant employer of skilled workers, and average wages in the Australian mining industry are generally higher than in other industries that require similar skilled workers. The high wages paid in the mining industry and contribution to NSW royalties are used by the NSW Government for provision of services and infrastructure, including for renewable energy developments.

Since the inception of the Wilpinjong Coal Mine, WCPL has paid some $934 million in royalties to the State of NSW (as of 31 December 2025). The Modification would result in additional royalty payments to NSW of around $37 million in NPV terms.

12. Employment Impact Assessment

Issue

Concerns were raised that the SIA highlighted job creation benefits without examining whether the mine's demand for workers might negatively affect other employers, for example, by intensifying competition for a limited skilled workforce or driving up wages in the region.

Response

The SIA describes how during consultation, respondents mentioned how employment at the Wilpinjong Coal Mine had enabled people to move to or stay in the Mid-Western region, and how it had enabled them to build good lives for themselves and their families. This consultation feedback suggests provision of employment is highly valued in the region.

However, as noted above, the number of operational employees at the Wilpinjong Coal Mine would not increase and therefore the Modification does not pose a material risk to labour competition in the region, compared to the existing mine operations.

13. Scope of Social Impact Assessment

The WPA engaged Dr Richard Parsons to prepare a submission on the Modification SIA (WPA SIA Submission). The WPA SIA Submission includes several assertions, which are described as key issues in the remaining sections. WCPL engaged Square Peg, author of the SIA, to prepare a response to WPA SIA Submission (Square Peg, 2026), which is provided in Attachment 7 of this Submissions Report. Key issues raised by the WPA SIA Submission and summary responses are outlined under Issues #13 to #20 below, with more comprehensive responses provided in Attachment 7.

Issue

The WPA SIA Submission stated that the scope and depth of the SIA was not commensurate with the scale of the Modification expansion.

Response

The SIA Guideline provides for scalable assessment complexity and indicates that a basic SIA may be appropriate for modifications that do not materially change previously assessed impacts. The SIA for the Modification sits between a basic and complex assessment, which is considered proportionate given the proposal seeks only a six month extension of operations with no change to ROM coal production limits, while still addressing known social considerations (Square Peg, 2026).

The scope and methodology were confirmed with DPHI during early engagement, including through the Scoping Letter and a dedicated meeting with DPHI in March 2024. On this basis, both the level of assessment and the process undertaken to establish the scope are considered appropriate for the nature of the Modification (Square Peg, 2026).

Square Peg also notes that NSW Government approval pathways lie outside the role of an SIA practitioner and are instead matters addressed in the Modification Report and through WCPL's engagement with DPHI (Square Peg, 2026).

Further discussion is provided in Attachment 7.

14. Extent of Social Locality

Issue

The WPA SIA Submission argued that global communities vulnerable to climate change (to which the Modification could contribute) should be considered part of the affected community, not just residents in the immediate vicinity.

Response

Expanding the social locality to include overseas jurisdictions as suggested by the WPA SIA Submission is inconsistent with the SIA Guideline and established NSW practice, where social localities for comparable coal projects are defined at the scale of directly affected or adjacent areas (Square Peg, 2026). Broadening the social locality to encompass global populations would dilute the purpose of an SIA, which is to reflect the experiences of people residing in or having an interest in a reasonably proximal locality to the project. On this basis, Square Peg considers the locality definition used in the SIA to be reasonable (Square Peg, 2026).

The WPA SIA Submission also contends that the SIA inadequately addresses the social impacts of the Modification's contribution to climate change and describes this as a significant oversight. However, Square Peg concluded that the SIA's defined social locality and its approach to climate-related considerations are considered reasonable and consistent with current guidance and practice (Square Peg, 2026).

Further discussion is provided in Attachment 7.

15. Assessment of Solastalgia

Issue

The WPA SIA Submission suggested that the concept of "solastalgia" (the distress and sense of loss people experience due to environmental change in their home place) should be explicitly acknowledged as a social impact on long-term Wollar residents in the SIA.

Response

The WPA SIA Submission, as well as other submitters, raises concerns about impacts on sense of place, displacement and community cohesion, referencing concepts such as solastalgia. While the commentary is generally consistent with the contextual findings presented in the SIA, it reaches different conclusions about the significance of these impacts (Square Peg, 2026).

Square Peg as the SIA assessor has focussed on the potential impacts of the Modification itself, a modest extension in time and disturbance, rather than past or current impacts associated with the existing Wilpinjong Coal Mine. The SIA applies the criteria set out in the SIA Guideline and Technical Supplement and provides supporting evidence for its significance ratings (Square Peg, 2026).

Further discussion is provided in Attachment 7.

16. Consideration of Vulnerable Groups

Issue

The WPA SIA Submission raised a concern that certain vulnerable groups (such as the elderly, children, or those with pre-existing health conditions) might be more severely affected by mine emissions (e.g. noise at night or dust exposure) and disproportionate effects on these populations may have been overlooked.

Response

The SIA explicitly discusses vulnerability considerations, as follows (Square Peg, 2025):

> *In relation to distributive equity between current social groups, the Modification would affect different social groups differently. As described above, some nearby residents and community members would likely continue to experience negative amenity related impacts which effect their sense of place. Some of these could be considered vulnerable, taking into account the various descriptions of vulnerability provided in the SIA Guideline.*
>
> *Conversely, however, the Mine is providing employment to people who also fit some of the descriptions of vulnerability, including people from culturally and linguistically diverse backgrounds and people who have previously been on low incomes. Both of these have been taken into account in the assessment of impacts above.*

Further discussion is provided in Attachment 7.

17. Consideration of Intangible Aboriginal Culture

Issue

The WPA SIA Submission suggested the SIA's consideration of Aboriginal impacts was limited to physical heritage sites and did not consider intangible cultural values or the broader social impact on Aboriginal people's connection to Country.

Response

Square Peg observes that the WPA SIA Submission does not provide any evidence specific to the Modification to support the concern outlined above, and in the absence of such evidence, the assessment as presented in the SIA is considered reasonable (Square Peg, 2026).

Further discussion is provided in Attachment 7 and in Section 4.2.8 (Issue #5).

18. Impact Significance Rating

Issue

The WPA SIA Submission (as well as some other public and organisation submissions), questioned the SIA's impact significance ratings, raising concerns that the report may have downplayed the severity of negative impacts (from the perspective of the local community) while possibly overstating the positive impacts.

Response

Square Peg has considered in detail the WPA's critiques of both negative and positive social impact significance ratings in the SIA relative to the SIA Guideline and leading SIA practice. Square Peg considers the WPA's stated position on these matters is not supported by the evidence gathered for the SIA (Square Peg, 2026).

Further discussion is provided in Attachment 7.

19. Assessment of Intragenerational and Intergenerational Equity

Issue

The WPA SIA Submission considers that the SIA lacks sufficient consideration of intragenerational and intergenerational equity impacts that could arise from the Modification.

Response

In SIA practice, intergenerational equity concerns arise where the ability of future generations to meet their own needs is compromised, not simply where an impact extends into the future (Square Peg, 2026). The WPA SIA Submission has not demonstrated how future needs would be compromised and there is no clear basis to conclude that the Modification gives rise to intergenerational equity impacts (Square Peg, 2026).

The SIA clearly identifies both negative and positive impacts and does not rely on offsetting logic or minimisation of distributional effects (Square Peg, 2026).

Further discussion is provided in Attachment 7.

20. Effectiveness of Recommended Social Mitigation Strategies

Issue

The WPA SIA Submission suggested proposed social management measures were not sufficient to offset the potential social impacts of the Modification.

Response

The WPA's suggestion that environmental management plans are merely "statements of intent" overlooks their function within NSW's regulatory framework. Such plans typically include performance measures, monitoring and reporting requirements, and specific actions linked to statutory compliance. They are also subject to audits and public reporting, and in this case are enforceable conditions under Development Consent (SSD-6764) and the EP&A Act (Square Peg, 2026).

In addition, the Modification SIA cannot pre-empt a future approvals process associated with the potential mining in Pits 9 and 10, and Square Peg recommends that WCPL engages sensitively with the community where uncertainty relates to potential subsequent applications (Square Peg, 2026). This approach aligns with the SIA Guideline's principle of inclusivity, which emphasises respectful, meaningful and effective engagement (Square Peg, 2026).

Further discussion is provided in Attachment 7.

21. Loss of Property Value

Issue

A concern was raised that private properties in the vicinity of the Modification would experience a reduction in property values associated with potential impacts on amenity and land productivity.

Response

The Modification would result in an extension of the operational life of the Wilpinjong Coal Mine by some six months (for backfilling operations), and mining in the Pit 8 Extension area would nominally occur between 2027 and 2034 (inclusive of backfilling operations) (refer Modification Report Figures 10 to 12).

WCPL notes that Peabody has purchased a wide range of property types in the locality since the Wilpinjong Coal Mine commenced operations, ranging from small lots in the locality of Wollar to large agricultural land holdings. In general terms valuations for these land purchases have been based on a combination of land values generated by the NSW Government, comparisons to sale prices in nearby rural areas, *and addition of a purchase premium based upon WCPL's priorities at the time*.

WCPL notes that this purchase premium paid by Peabody was highlighted by some participants in the SIA consultation as follows (Square Peg, 2025):

> *… Others described how the acquisition of properties in Wollar had enabled former residents to sell their properties at above market values and move closer to services or facilities in Mudgee. …*

WCPL considers that it is unlikely that the Modification would significantly alter land values in the locality.

4.2.7 Economic

Comments made in public and organisation submissions relevant to economic issues include concerns relating to:

1. Interaction with the Central West Renewable Energy Zone.
2. Susceptibility of the locality to climate change-related costs.
3. External environmental costs.
4. Opportunity costs.
5. Cost–benefit analysis methodology.
6. Coal price assumptions.
7. Employment benefits.
8. Local disposable income.
9. Scope 3 emission costs.
10. Overall economic justification.

Responses to these comments are provided below.

1. Interaction with the Central West Renewable Energy Zone

Issue

One submitter noted that the Economic Assessment did not consider how the Modification might interact with the CWOREZ, for instance, whether it could compete for local labour, skills, and infrastructure or undermine conservation initiatives.

Response

The Economic Assessment (AnalytEcon, 2025) prepared for the Modification was prepared in accordance with the *Guidelines for economic assessment of mining and coal seam gas proposals* (NSW Government, 2015) and the *Technical Notes supporting the Guidelines for the Economic Assessment of Mining and Coal Seam Gas Proposals* (NSW Government, 2018a). The Economic Assessment was prepared on the basis that the Modification would utilise the existing operational workforce at the Wilpinjong Coal Mine and reduce the rate of workforce decline, rather than generate new operational employment opportunities.

Mining royalties are also used by the NSW Government for provision of services and infrastructure, including provision of services and infrastructure that would benefit renewable energy developments in the region (Section 4.2.6).

Renewable energy developments in the region are also likely to be the main driver of potential cumulative social impacts in the medium term, due to the large number of SSD projects proposed (Square Peg, 2025).

2. Susceptibility of the Locality to Climate Change-related Costs

Issue

A number of submitters suggested that the Central West Region was particularly vulnerable to climate change impacts as evidenced by recent events, and the potential economic costs of these events needs to be considered.

Response

Refer to response to Greenhouse Gas Issue #6 in Section 4.2.5.

3. External Environmental Costs

Issue

There were concerns that the cost-benefit analysis (CBA) did not account for long-term environmental costs such as land rehabilitation, water treatment, contamination remediation, or biodiversity losses. Submitters suggested including these costs would reduce the Modifications' net economic benefit.

Response

The external effects in terms of environmental externalities associated costs that may be attributable to the Modification have been assessed in the Economic Assessment (AnalytEcon, 2025).

With the exception of greenhouse gas emissions, the externality costs have been internalised by WCPL, such as via operational measures or biodiversity offsets (AnalytEcon, 2025). Such costs incorporated in the Economic Assessment included decommissioning of infrastructure and estimated rehabilitation costs post-mining such that the site could be relinquished.

The CBA concluded that the Modification would have a net benefit to NSW (AnalytEcon, 2025).

4. Opportunity Costs

Issue

It was suggested that the Economic Assessment should have compared the Modifications' assessed benefits to the potential economic value of alternative land uses (such as conservation, agriculture, or renewable energy development) which could provide alternative ongoing economic benefits.

Response

The Economic Assessment (AnalytEcon, 2025) did consider the potential opportunity costs to WCPL of developing land it owns for the Modification as opposed to continued grazing production. AnalytEcon (2025) concluded the foregone value added as a result of displacing agricultural activity is estimated as $0.6 million in NPV terms (AnalytEcon, 2025).

5. Cost–Benefit Analysis Methodology

Issue

Some submitters suggested alternative methodologies be adopted to apportion greenhouse gas externality costs to NSW or advocated for the adjustments to the CBA methodology that might reduce the Modification estimated net benefits to NSW.

Response

AnalytEcon (2025) conducted a CBA to evaluate the potential net benefits of the Modification to NSW.

The Economic Assessment was prepared in accordance with the *Guidelines for the Economic Assessment of Mining and Coal Seam Gas Proposals* (NSW Government, 2015) and the *Technical Notes supporting the Guidelines for the Economic Assessment of Mining and Coal Seam Gas Proposals* (NSW Government, 2018a).

AnalytEcon (2025) estimated the Modification would result in a total net benefit of $21 million, which consists of additional coal royalties of $37 million in NPV terms, and a reduction in NSW's deemed share of company income taxes of (-) $16 million in NPV terms.

Sensitivity analysis undertaken for discount rates, royalties, taxes and coal prices also shows that the net benefits accruing to the NSW community remain positive in the scenarios modelled (AnalytEcon, 2025).

AnalytEcon (2025) estimated the incremental global social damage costs for Scope 1 and Scope 2 greenhouse gas emissions attributable to the Modification at $12 million in NPV terms and the NSW share of these damage costs at around $13,000 in NPV terms. Therefore, it is very unlikely that alternative apportionment methodology would significantly reduce the estimated Modification NPV. It is noted that consistent with NSW Government guidance, indirect Scope 3 emissions are not included in this analysis, as described below.

6. Coal Price Assumptions

Issue

One submitter suggested the Economic Assessment adopted optimistic coal price forecasts in projecting the Modification's revenue and royalties with associated impacts for predicted royalties and economic benefits.

Response

Section 3.10 (Sensitivity Analysis) of the Economic Assessment describes the sensitivity analysis conducted for variations in key variables (including coal prices), and states (emphasis added):

> *The EA Guidelines require a proponent to undertake a sensitivity analysis of key variables as part of the CBA. Figure 3-2 below summarises the results of the sensitivity analysis for key assumptions over the entire forecasting horizons:*
>
> - *variations in the central discount rate of 7 per cent – 4 per cent versus 10 per cent;*
> - *variations in coal prices – all coal prices reduced or increased by 20 per cent;*
> - *variations in royalty payments – all coal revenues reduced and increased by 25 per cent; and*
> - *variations in the company income tax – 50 per cent lower or higher than in the central case.*
>
> *The results of the sensitivity analysis suggest that the net benefits accruing to the NSW community remain positive in the scenarios modelled, reflecting the additional royalty payments that would accrue to the NSW community if the Modification is approved. To a greater or lesser extent, the additional royalties would be offset by the deemed share of (negative) corporate income taxes attributable to NSW in all scenarios. Detailed results are shown in Appendix B.*

WCPL notes that the royalty projections associated with the Modification were also reviewed by NSW Resources, which concluded:

> *NSW Resources is satisfied that, should the operational outcomes be realised, the proposed mine design and mining method submissions adequately recover resources and is projected to provide an appropriate return to the state.*

7. Employment Benefits

Issue

One submitter suggested that the Economic Assessment does not provide evidence that the Modification would result in net employment growth.

Response

If approved, the Modification would deliver the following benefits to the Lithgow-Mudgee SA3 Region between 2026 and 2033 (AnalytEcon, 2025):

- local suppliers would benefit from additional expenditure;
- on average, an additional 73 full-time equivalent operational jobs per annum for local workers;
- additional disposable income accruing to the local operational workforce would amount to $41 million in NPV terms; and
- the local operational workforce would earn $23 million in NPV terms more than the median wage in the Lithgow-Mudgee SA3 Region.

It should also be noted that the Modification would not result in any increase in the Wilpinjong Coal Mine operational workforce relative to the current levels. However, it would act to reduce the rate of workforce decline, due to providing an extra working face in the Pit 8 Extension area.

8. Local Disposable Income

Issue

One submitter highlighted that while mine wages may increase local disposable income, this hasn't necessarily translated into benefits for all other local sectors (for example, the local tourism sector remains weak).

Response

The Economic Assessment prepared for the Modification follows the *Guidelines for the Economic Assessment of Mining and Coal Seam Gas Proposals* (NSW Government, 2015) and the *Technical Notes supporting the Guidelines for the Economic Assessment of Mining and Coal Seam Gas Proposals* (NSW Government, 2018a), which require consideration of distributional impacts and environmental externalities. The assessment concludes that the Modification would continue to support regional employment and supply chains, noting that sector-specific performance (such as tourism) may be influenced by a range of broader economic factors and socio-economic trends.

The Economic Assessment considered potential impacts of the Modification on other sectors in the region and concluded:

> *As the Modification represents a variation of the existing activities of the Wilpinjong Coal Mine, the incremental impacts on other industries are likely to be limited.*

10. Scope 3 Emission Costs

Issue

Submitters were concerned that the economic assessment assigned no cost to Scope 3 greenhouse gas emissions (the emissions from burning Modification coal products, including at NSW power stations).

Response

The *Scope of the NSW state-wide net zero by 2050 target* (NSW DCCEEW, 2025d) specifies that NSW's net zero targets are limited to Scope 1 (direct) emissions. This is because indirect emissions of any party (e.g. Scope 2 and Scope 3 emissions) are always the Scope 1 emissions of another party, whether these indirect emissions occur in NSW, or elsewhere.

The Economic Assessment (AnalytEcon, 2025) was prepared in accordance with the *Guidelines for economic assessment of mining and coal seam gas proposals* (NSW Government, 2015) and the *Technical Notes supporting the Guidelines for the Economic Assessment of Mining and Coal Seam Gas Proposals* (NSW Government, 2018a). This guidance material requires consideration of the potential economic costs of Scope 1 and Scope 2 emissions in the *cost benefit analysis* for a coal mining proposal.

The Australian Treasury describes cost benefit analysis as follows (Australian Government, 2025) (emphasis added):

> *Cost-benefit analysis (CBA) is an economic evaluation method that involves estimating the key benefits and costs from a program or policy. The analyst converts benefits and costs into monetary terms and compares them to determine if a proposal is worth pursuing.*

When it comes to indirect (Scope 3) emissions associated with product coal consumption by third parties, these emissions may occur in NSW (i.e. as the Scope 1 emissions of the NSW electricity generator, and reported as an emission against Australia's emission targets and NDC), or alternatively may occur in an overseas country (i.e. as the Scope 1 emissions of the overseas electricity generator, and reported as an emission against the customer country's emission targets and NDC).

Irrespective of the country in which electricity generation occurs, there are obviously a range of significant economic benefits that accrue to the electricity generator and a very broad range of consumers that go on to use the electricity produced from coal combustion (e.g. residential consumers, businesses using electricity in the production of goods and services, Government users). The potential economic *benefits* of this downstream activity would not accrue to WCPL, these economic *benefits* have not been quantified and are also obviously well outside of the scope of the proposed Modification. Accordingly, the potential economic *costs* of the Scope 1 coal combustion emissions of electricity generators (i.e. the Scope 3 emissions of the Wilpinjong Coal Mine) such as estimated greenhouse gas societal damage costs, cannot reasonably be included in the Modification CBA as a *cost*, as the potential economic *benefits* of coal combustion have not been quantified.

11. Overall Economic Justification

Issue

A concern was raised that the Modification would lose money for WCPL, which indicates the development would only be undertaken for strategic reasons.

Response

The Modification would avoid mining two environmentally sensitive areas, the Cumbo Creek corridor and Rocky Hill complex, which are currently approved to be mined and would forego the associated coal resources that would have been relatively cheaper to mine (albeit with associated risks and externalities). As a result, implementing the Modification would be relatively less profitable on a cash flow basis than this approved 'base case'.

The Modification would maximise the use of existing infrastructure and help slow the natural decline in workforce numbers that would otherwise occur as the approved Wilpinjong Coal Mine progressively completes its current working faces (e.g. in Pit 6), by providing an additional working face for the life of the Modification. Approval of the Modification would therefore support the continuation of ROM coal extraction and employment levels while WCPL evaluates opportunities to develop a future Wilpinjong Coal Mine SSD extension proposal (e.g. in EL 9399).

4.2.8 Aboriginal Cultural Heritage

Comments made in public and organisation submissions relevant to Aboriginal cultural heritage include concerns relating to:

1. Cumulative cultural heritage loss.
2. Site disturbance.
3. Blasting impacts on rock shelters.
4. Assessment of Aboriginal cultural heritage.
5. Consideration of cultural values.
6. Consent.

Responses to these comments are provided below.

1. Cumulative Cultural Heritage Loss

Issue

Submitters raised concerns that loss of heritage sites and disturbance of Country associated with the Modification would contribute to the cumulative loss of Aboriginal culture values and connection to land with intergenerational consequences.

Response

As described in response to Heritage NSW Comment #14 in Section 4.1.3, to date there have been 1,096 Aboriginal sites recorded within the Wilpinjong Coal Mine and surrounds. 81 Aboriginal sites were located within the Study Area (72 sites newly recorded). Of the 81 sites, 15 sites were located within the Modification Area, 12 of which would be subject to direct disturbance. Therefore, the Modification would impact approximately 1% of the known heritage sites within the Wilpinjong Coal Mine and surrounds.

Potential impacts from operations at the Wilpinjong Coal Mine are currently being managed with a known and consistent framework through formalised policies and procedures contained within the approved ACHMP (WCPL, 2022). Therefore, with the mitigatory and salvage measures in place, the Modification is considered to have a minor incremental impact compared to the cumulative footprint of the Wilpinjong Coal Mine, and is not considered to have potential to significantly contribute to cumulative impacts on Aboriginal heritage in the region (Navin Officer, 2025;2026).

The Modification also includes the proposed avoidance of direct disturbance of the existing Rocky Hill complex which is currently approved to be mined in Pit 8, under Development Consent (SSD-6764). The Rocky Hill complex as a whole has previously been identified by the RAPs as being of high cultural significance and includes three rock shelters with PADs; two natural waterhole features and a possible Aboriginal scarred tree. The existing ACHMP would be reviewed and updated to capture the formal avoidance of the Rocky Hill complex.

2. Site Disturbance

Issue

Concerns were raised regarding the proposed impacts to 15 additional Aboriginal cultural heritage sites.

Response

The Modification has the potential to directly impact 12 Aboriginal heritage sites within the disturbance area, including nine sites of low scientific significance and three sites of moderate-high scientific significance.

Three additional Aboriginal heritage sites are located adjacent to the surface development area and have the potential to be indirectly impacted by the Modification due to proximity, including one site of low scientific significance and two sites of moderate-high scientific significance.

Through continued management of blasting in accordance with the approved Blast Management Plan, WCPL would manage blast vibration to applicable geotechnical criteria at the proximal rock shelter site subject to potential indirect impacts.

For those areas where Aboriginal heritage sites may be subject to direct surface disturbance as a result of the Modification, a number of mitigation measures and management strategies have been identified, including:

- systematic surface artefact salvage of all the Aboriginal heritage sites within the surface development area would occur prior to undertaking the proposed works;
- sites adjacent to the surface development area would be fenced in accordance with the procedures outlines in the approved ACHMP to avoid inadvertent impacts; and
- a program of subsurface archaeological test and salvage would be undertaken at the three rock shelters with PAD within the surface development area prior to undertaking the proposed works.

3. Blasting Impacts on Rock Shelters

Issue

Some submitters were concerned that two Aboriginal heritage sites that WCPL has avoided by amending the open cut extent (i.e. one rock shelter with PAD [WCP 1129] and one subsurface artefact scatter and PAD [WCP1143]) would still be damaged by blast vibration, given their proximity to mining.

Response

Open artefact scatters and PADs are not considered to be sensitive to potential indirect impacts from blasting vibration.

The Noise and Blasting Assessment (RWDI, 2025) considered potential blasting impacts on sensitive geological features, including archaeological sites such as the rock shelter at WCP 1129. WCPL has adopted a damage criteria of 250 mm/s and performance criteria of 80 mm/s for geological features adjacent to the Wilpinjong Coal Mine that contain rock shelters (including those with art) in the approved Blast Management Plan (WCPL, 2024a). The existing Blast Management Plan criteria for archaeological rock structures have been successfully utilised at the Wilpinjong Coal Mine for an extended period.

An initial geotechnical assessment of the potential sensitivity of nearby geological features to vibration-related damage from blasting activities associated with the Modification was undertaken by PSM (2025).

WCPL would conduct ongoing inspections nearby caves and cliff lines (including rock shelters) as part of the blast monitoring program and adopt suitable vibration criteria to manage blast impacts over the life of the Modification. The results of ongoing geotechnical investigations and the justification for and establishment of site-specific blast threshold criteria for geological structures would be documented via an update to the Blast Management Plan.

Therefore, site WCP1129 would be managed according to the Blast Management Plan, and site WCP1143 would be fenced and managed in accordance with the ACHMP to avoid inadvertent impacts.

4. Assessment of Aboriginal Cultural Heritage

Issue

Some submitters stated broadly that the ACHA was insufficient and/or not comprehensive.

Response

The ACHA prepared by Navin Officer (2025) for the Modification was undertaken in accordance with the relevant codes, regulations and guidelines including (but not limited to):

- *Aboriginal cultural heritage consultation requirements for proponents 2010* (DECCW, 2010a);
- *Code of Practice for Archaeological Investigations of Aboriginal Objects in NSW* (DECCW, 2010b);
- *Guide to investigating, assessing and reporting on Aboriginal cultural heritage in NSW* (OEH, 2011);
- *The Burra Charter: The Australia ICOMOS Charter for Places of Cultural Significance* (Australia International Council on Monuments and Sites, 2013);
- *National Parks and Wildlife Regulation 2019*; and
- *National Parks and Wildlife Act 1974* (NPW Act).

The ACHA incorporates relevant information from previous assessments, the results of field surveys undertaken for the Modification and consultation with the Aboriginal community, and therefore is considered to sufficiently and comprehensively assess potential Aboriginal cultural heritage impacts.

5. Consideration of Cultural Values

Issue

One submitter suggested that the ACHA focuses on tangible artefacts and sites but does not suitably consider intangible cultural values.

Response

To inform the ACHA, Navin Officer (2025) undertook consultation with the Aboriginal community in order to identify and assess the cultural values of the study area.

Throughout various stages of the consultation process, RAPs were provided an opportunity to provide feedback regarding cultural significance and cultural values of Aboriginal place(s) and/or object(s), as well as provide input into the design of the Modification to minimise potential impacts of areas of cultural value. These opportunities included:

- Review and provision of comments on the Proposed ACHA Methodology.
- Attendance at the Proposed ACHA Methodology Information Session.
- Site visit to the Study Area.
- Review and provision of comments on the draft ACHA.
- Attendance at the draft ACHA Information Session.

No areas of particular cultural significance were identified by RAPs during the consultation process for the ACHA.

6. Consent

Issue

Some submitters were concerned that the ACHA consultation process, as described, might have been limited to notification and feedback, rather than free, prior and informed consent from Aboriginal stakeholders to impacts on Aboriginal cultural heritage values.

Response

The framework outlined in the *Aboriginal cultural heritage consultation requirements for proponents 2010* (DECCW, 2010a) that is applicable to SSD in NSW requires proponents to undertake a structured, four-stage consultation process with Aboriginal stakeholders. This process emphasises meaningful engagement and the incorporation of Aboriginal knowledge into the ACHA, but does not require formal consent to impacts occurring.

The consultation process undertaken for the Modification ACHA was conducted in accordance with the *Aboriginal cultural heritage consultation requirements for proponents 2010* (DECCW, 2010a) and consultation was undertaken in a transparent and inclusive manner and involved RAPs in decision-making processes throughout development of the ACHA.

WCPL notes that four out of 19 RAP provided feedback on the draft ACHA, with the final ACHA providing responses to these four comments (Table 3-2 of the ACHA).

4.2.9 Blasting

Comments made in public and organisation submissions relevant to blasting issues include concerns relating to:

1. Blasting criteria for sensitive geological features.
2. Indirect blasting impacts to exclusion areas.
3. Continuation of vibration impacts.
4. Assessment of Wollar structural integrity.
5. Blast management.
6. Existing blast notices.

Responses to these comments are provided below.

1. Blasting Criteria for Sensitive Geological Features

Issue

Submitters raised concerns regarding the selection of vibration criteria for assessment of sensitive geological features, including concerns the upper vibration limits adopted for the Modification would not suitably protect rocky habitat and associated threatened species.

Response

The Noise and Blasting Assessment undertaken by RWDI (2025) applied a conservative approach to vibration criteria for sensitive geological features (including caves, cliffs and overhangs in mapped rocky habitat) based on an initial geotechnical assessment undertaken by PSM (2025) on the potential sensitivity of nearby geological features to vibration-related damage from blasting activities associated with the Modification.

PSM (2025) provided provisional conservative ground vibration peak particle velocity (PPV) criteria of 15 mm/s (threshold) and 25 mm/s (upper limit) for poor quality rock (RMR < 45), and 40 mm/s (threshold) and 50 mm/s (upper limit) for better than poor quality rock (RMR > 45), but recommends further work to identify site-specific criteria (PSM, 2025).

PSM noted that the selected PPV values are conservative compared to some literature and existing PPV limits in the region (PSM, 2025).

The provisional criteria are materially more stringent than the existing Blast Management Plan criteria applied at the Wilpinjong Coal Mine for geological features containing rock shelters with art (80 mm/s performance and 250 mm/s damage), which have been applied successfully at the mine for an extended period.

In applying the criteria for assessment, only 'Good Quality Rock' was identified in areas near the Pit 8 Extension, and the blasting assessment therefore adopted the conservative upper limit (50 mm/s) as a conservative basis for minimum compliance distance predictions, alongside assessment against the existing 80 mm/s performance criterion for rock art sites. On that conservative basis, the minimum compliance distance for sensitive geological features is calculated as 583 m for a representative MIC of 1,350 kg when applying 50 mm/s, reducing to 400 m when applying the 80 mm/s performance criterion (RWDI, 2025).

Rocky habitat blasting performance criteria have been developed for Wilpinjong Coal Mine with consideration of potential damage mechanisms and ongoing natural processes (i.e. no damage that is indistinguishable from natural processes).

Blast management measures for the Wilpinjong Coal Mine would continue to be implemented for the Modification. The Blast Management Plan would be reviewed and updated to incorporate the Modification and WCPL's adopted performance criteria for sensitive geological structures, subject to the conditions of Development Consent (SSD-6764) for the Modification.

2. Indirect Blasting Impacts to Exclusion Areas

Issue

Submitters noted general concern of the potential indirect blasting impacts on the Rocky Hill exclusion zone that would no longer be mined under the Modification.

Response

The Cumbo Creek exclusion zone does not contain any geological structures that are sensitive to blast vibration.

PSM (2025) undertook an initial assessment of geological feature sensitivity as part of the Modification environmental assessments, focusing on the potential susceptibility of sandstone caves, cliffs and overhangs to vibration related impacts from blasting.

PSM (2025) completed a site visit and assessment of representative sensitive geological features at Rocky Hill and near Pit 8, supported by blast vibration monitoring data. The Initial Assessment of Geological Feature Sensitivity (PSM, 2025) concluded that there were no obvious signs of vibration-induced damage at Rocky Hill and that any degradation potentially associated with blasting to date is considered to be indistinguishable from natural degradation processes (PSM, 2025).

In view of this, rocky habitat blasting performance criteria have been developed for Wilpinjong Coal Mine with consideration of potential damage mechanisms and ongoing natural processes (i.e. no damage that is indistinguishable from natural processes).

Notwithstanding the above, blasting would continue to be planned and undertaken in accordance with the Blast Management Plan and all relevant Development Consent (SSD-6764) conditions for the Modification. The Blast Management Plan would be reviewed and updated to incorporate the Modification and the adopted performance criteria for sensitive geological structures (including Rocky Hill), subject to the Development Consent (SSD-6764) conditions and further geological assessments.

3. Continuation of Vibration Impacts

Issue

Submitters are concerned that the Modification would allow for continued vibration impacts, particularly to Wollar.

Response

The Modification does not seek an extension to the approved period of ROM coal extraction at the Wilpinjong Coal Mine. ROM coal mining would cease by 31 December 2033 under Development Consent (SSD-6764), and the Modification would, therefore, not increase the approved duration of blasting activities at the Wilpinjong Coal Mine.

The Modification also does not seek an increase to the frequency of blasting outside the approved limits. Blasting at the Wilpinjong Coal Mine would continue to be undertaken at a maximum of two blasts per day and five blasts per week (averaged over a calendar year) and would continue to be undertaken in accordance with the Blast Management Plan and relevant Development Consent (SSD-6764) requirements.

Blast monitoring would continue to be undertaken in accordance with the Blast Management Plan, including continuation of blast monitoring in Wollar.

4. Assessment of Wollar Structural Integrity

Issue

Some submitters suggested that the Noise and Blasting Assessment does not consider potential impacts on the structural integrity of houses in Wollar.

Response

The applicable Development Consent (SSD-6764) blasting criteria for residences on privately owned land are designed to minimise human discomfort and annoyance and are materially below levels associated with building damage. These criteria include airblast overpressure of 115 decibels linear peak ($dB_{(Lin\ Peak)}$) and ground vibration of 5 mm/s for 95% of blasts over a rolling 12 month period, with absolute limits of 120 $dB_{(Lin\ Peak)}$ and 10 mm/s.

Ongoing compliance with the applicable human comfort airblast and ground vibration criteria at the nearest private receivers would preclude blasting causing structural damage to residential dwellings or public facilities in Wollar. Blast overpressure and vibration monitoring has been undertaken at the Wilpinjong Coal Mine since 2006, including monitoring at Wollar, and a review of recent monitoring data (2021 to 2024) identified no recorded exceedances of the applicable blast criteria at privately owned properties (Onward Consulting Pty Ltd, 2024).

5. Blast Management

Issue

Submitters expressed concerns that compliance with applicable blast criteria for private or public buildings in Wollar would impose unacceptable operational constraints on WCPL's operations in the Pit 8 Extension area.

Response

Blast management is undertaken in accordance with the Wilpinjong Coal Mine Blast Management Plan, which sets out the Development Consent (SSD-6764) and EPL blast criteria, blast design requirements, monitoring and reporting, and exceedance and complaint handling processes.

The Noise and Blasting Assessment (RWDI, 2025) identified that compliance can be achieved in Wollar through the application of standard blast design controls, including adjustment of MIC, delay timing and sequencing, and ongoing calibration of site-specific predictive tools and the site law database.

6. Blast Notices

Issue

One submitter raised a concern regarding the blast notification system and how blast initiation can be varied by WCPL at short notice.

Response

WCPL provides notice to any private receiver that registers an interest in being informed of the blasting schedule via telephone or email, or as otherwise agreed between the parties.

Those same landholders are notified of a misfire, if more than one hour has elapsed since the scheduled blast time, or where the misfire is greater than 30% of the original blast size. Blasts may be delayed for a number of reasons, including postponement due to unfavourable meteorological conditions.

Temporary closures of Ulan-Wollar Road are implemented when blasting is carried out within 500 m, in accordance with the Blast Management Plan. Temporary closures are typically for less than 20 minutes and no more than one closure per day. Notification of temporary road closures is provided at least three days prior to planned closures where practicable, noting that short-term operational requirements may limit the notification period.

WCPL maintains a Blasting Hotline to provide the community with information on the blasting schedule. The Blasting Hotline number is 1800 649 783.

Road closure notification boards are also maintained on Ulan-Wollar Road and Wollar Road and are updated to reflect the current blasting program.

4.2.10 Noise

Comments made in public and organisation submissions relevant to noise issues include concerns relating to:

1. Operational noise extension.
2. Noise enhancing meteorological conditions.
3. Low frequency noise.
4. Model calibration.
5. Operational noise mitigation requirements.
6. Operational noise audibility, noise complaints and links to social impacts.
7. Noise criteria at Wollar community hall.
8. Cumulative noise criteria at Wollar community hall.
9. Noise criteria at Wollar recreation ground.
10. Vacant land assessment.
11. Operational noise impacts on livestock.

Responses to these comments are provided below.

1. Operational Noise Extension

Issue

Community members raised a concern that the Modification would allow for increased and continued operational noise impacts.

Response

The Modification does not extend the approved period of ROM coal extraction at the Wilpinjong Coal Mine. ROM coal mining operations, including those associated with the Pit 8 Extension, would cease by 31 December 2033 as per the existing Development Consent (SSD-6764), with an additional six month period for backfilling. There is no increase to the approved maximum annual ROM coal production rate, no change to the mining method, and no change to the hours of operation.

The Noise and Blasting Impact Assessment undertaken by RWDI (2025) was undertaken in accordance with the NSW EPA *Noise Policy for Industry* (NPfI) and confirms that with the implementation of the existing Noise Management Plan (including real-time monitoring and operational controls), no exceedances of noise criteria are predicted at any private residences without existing negotiated noise agreements.

Notwithstanding, WCPL recognises that compliance with applicable Development Consent (SSD-6764) noise criteria does not preclude the noise being audible at some private residences. The Pit 8 Extension would likely increase the audibility of mining operations at some of the nearest private receivers under adverse meteorological conditions. Individual responses to operational noise are highly variable and complaints can and do arise when the mine is managing its operational noise within consented noise limits. WCPL would continue to apply the Noise Management Plan and associated real-time controls to apply reasonable and feasible measures to minimise noise emissions of the mine, including in the proposed Pit 8 Extension.

2. Noise-Enhancing Meteorological Conditions

Issue

Some submitters were concerned that the Noise and Blasting Impact Assessment did not take a precautionary approach to adopting adverse meteorological conditions (and suggested the AQIA weather analysis had contrary findings).

Response

The Noise and Blasting Impact Assessment completed by RWDI (2025) has applied the NPfI to derive standard and noise-enhancing meteorological conditions for modelling the Modification. The analysis of site-specific meteorological data from the Wilpinjong on-site weather station (2020–2024) indicates that moderate-to-strong temperature inversions rarely coincide with wind speeds greater than 1 metre per second (m/s) (i.e. 2.6% of night-time hours in the worst season, worst wind direction and based on the conservative methodology prescribed in the NPfI). The adoption of a 1 m/s wind in the source-to-receiver direction under a stability category F inversion is consistent with NPfI guidance and is considered more representative of actual conditions at noise-sensitive receivers (RWDI, 2025).

WCPL continuously monitors weather conditions via the on-site meteorological station. When noise-enhancing meteorological conditions are experienced or forecasted, WCPL's proactive noise management system is triggered. Operational changes, including the relocation or shutdown of mobile equipment, are implemented as required to avoid or reduce noise impacts at sensitive receivers as outlined in the Noise Management Plan.

The NSW EPA has reviewed both the Noise and Blasting Impact Assessment and AQIA and did not raise concerns regarding the meteorological conditions adopted for modelling. Regardless of the frequency or duration of adverse meteorological conditions, WCPL would be obligated to comply with consented noise limits at all private receivers without negotiated noise agreements, including during infrequent occurrences of applicable temperature inversions co-incident with wind speeds greater than 1 m/s.

3. Low Frequency Noise

Issue

A concern was raised that the Noise and Blasting Impact Assessment low frequency noise (LFN) assessment did not indicate the potential for unbalanced spectra at two specific receivers located to the east of the site and asserted that the methodology adopted was not compliant.

Response

The Noise and Blasting Impact Assessment prepared by RWDI (2025) applied the NPfI methodology for assessing LFN, including the use of representative properties and zoning based on acoustic similarity and geographic context. The assignment of properties to LFN zones was based on proximity, terrain, and predicted acoustic environment.

WCPL notes that the NSW EPA has reviewed the Noise and Blasting Impact Assessment and did not raise concerns regarding the LFN assessment or zone allocation. Irrespective, WCPL would be required to comply with consented noise limits at the nearest private receivers without noise agreements, including applying LFN penalties where such penalties may be applicable in determining noise emission compliance, consistent with the LFN guidance in the NPfI.

4. Model Calibration

Issue

A number of submissions raised a concern that the noise model calibration was based on short-term monitoring and the noise model calibration factor could result in understatement of potential impacts.

Response

The Noise and Blasting Impact Assessment completed by RWDI (2025) included noise model calibration for the Modification, consistent with the approach adopted for previous noise assessments at the site. Consistent with previous noise impact assessment findings, the calibration results indicated that the noise model overpredicted noise at private receiver locations, with overpredictions ranging from 3.8 to 8.0 A-weighted decibels (dBA), with RWDI conservatively adopting a -2.0 dBA correction for the Modification (RWDI, 2025).

This -2.0 dBA calibration factor is also consistent with the previous correction factor of -1.8 decibels (dB) applied for past Wilpinjong Coal Mine noise assessments (SLR, 2013; 2014).

WCPL notes that the NSW EPA has reviewed the Noise and Blasting Impact Assessment and did not raise any concerns regarding the model calibration. Irrespective of model predictions, WCPL would be required to comply with consented noise limits at the nearest private receivers without noise agreements. WCPL would continue to apply the Noise Management Plan and associated real-time controls to apply reasonable and feasible measures to minimise noise emissions of the mine, including in the proposed Pit 8 Extension.

5. Operational Noise Mitigation Requirements

Issue

Concerns were raised that the application of pro-active noise mitigation (e.g. fleet shutdowns) would need to occur much more frequently than suggested by the Noise and Blasting Impact Assessment.

Response

WCPL has a long history of effectively managing its operational noise emissions to maintain compliance with applicable consented noise criteria at the nearest private receivers without noise agreements, including adjustment of key noise-generating operational activities under adverse meteorological conditions.

The application of WCPL's real-time noise monitoring, noise level triggers and associated operational noise management responses would continue to occur in accordance with the Noise Management Plan as required over the life of the Modification to maintain compliance with consented noise criteria.

6. Operational Noise Audibility, Noise Complaints and Links to Social Impacts

Issue

Concerns were raised that increased audibility of mining operations has led to increased complaints, property purchases and additional social impacts with each mine expansion.

Response

WCPL has a long history of effectively managing its operational noise emissions to maintain compliance with applicable consented noise criteria at the nearest private receivers without noise agreements, including adjustment of key noise-generating operational activities under adverse meteorological conditions. Noise complaints have reduced by approximately 38% from 2020 to 2024 (RWDI, 2025).

WCPL notes that ongoing compliance with applicable consented noise criteria does not preclude the mine being audible at the nearest private receivers (e.g. under adverse meteorological conditions). Individual responses to operational noise are highly variable and complaints can and do arise when the mine is managing its operational noise within consented noise limits. Consideration of the social impacts of WCPL land acquisitions is provided in response to Social Issue #2 in Section 4.2.6.

7. Noise Criteria at Wollar Community Hall

Issue

Some submissions raised a concern that the Wollar community hall does not currently have a specific noise criteria in the Development Consent (SSD-6764) and suggested that the Noise and Blasting Impact Assessment nominated criteria for the hall (53 dBA $L_{Aeq, 15min}$) should instead be consistent with Wollar Public School criteria (45 [external] and 35 [internal] dBA $L_{Aeq, 15min}$) as it may be used overnight in the event of emergencies.

Response

WCPL recognises that the Wollar community hall may occasionally be used for people sheltering overnight in the event of a local emergency (such as a bushfire). However, such very infrequent overnight use in the event of a major emergency is not considered to be a suitable justification to apply a lower applicable noise amenity criteria under the Development Consent (SSD-6764). Notwithstanding, WCPL would continue to apply the Noise Management Plan and associated real-time controls to apply reasonable and feasible measures to minimise noise emissions of the mine, including in the proposed Pit 8 Extension.

8. Cumulative Noise Criteria at Wollar Community Hall

Issue

A concern was raised that consideration of cumulative mine noise emissions in the Noise and Blasting Impact Assessment applies a higher applicable compliance criteria for the Wollar community hall.

Response

WCPL notes that cumulative noise from other mines is highly unlikely to be a practical compliance issue at Wollar community hall due to the significant distance from those operations (e.g. Moolarben Coal Complex is approximately 15 km away from the Wollar community hall). However, the application of cumulative noise criteria is determined by the consent authority and WCPL would comply with any criteria set under the Development Consent (SSD-6764).

9. Noise Criteria at Wollar Recreation Ground

Issue

A concern was raised that consideration of applicable criteria and modelled compliance at the Wollar recreation ground was not included in the Noise and Blasting Impact Assessment.

Response

The Wollar recreation ground does not currently have any applicable noise criteria under Development Consent (SSD-6764). WCPL understands that the Wollar recreation ground is located on the eastern side of Wollar adjacent to Wollar Creek and may periodically be used for sporting events and/or active recreation. While no specific noise modelling has been conducted for this recreation area, if the consent authority was minded to apply a noise criteria, the same amenity criteria would apply as RWDI has nominated for the Wollar community hall (i.e. 53 dBA $L_{Aeq,\ 15min}$, when in use).

WCPL would not object to the same amenity noise criteria (i.e. 53 dBA $L_{Aeq,\ 15min}$) also being applied to the Wollar recreation ground, when it is in use. WCPL would continue to apply the Noise Management Plan and associated real-time controls to apply reasonable and feasible measures to minimise noise emissions of the mine, including in the proposed Pit 8 Extension.

10. Vacant Land Assessment

Issue

Some submissions raised a concern that the VLAMP vacant land assessment in the Noise and Blasting Impact Assessment incorrectly applied the assessment method, and did not consider the recent grant of (formerly) Crown Land to the MLALC.

Response

WCPL notes that the EPA has reviewed the Noise and Blasting Impact Assessment and did not raise any concerns regarding the vacant land assessment.

WCPL understands that MLALC has recently been granted three parcels of land in Wollar that were previously Crown Land, and hence did not historically have a dwelling entitlement. Whether MLALC intends to, or will be granted Development Consent to construct future dwellings on these parcels of land is currently unknown.

Notwithstanding, RWDI has completed a supplementary vacant land assessment on these properties consistent with the VLAMP area methodology and the night-time land area noise criterion of 48 dBA and concluded the 2030 night time noise contours, which represents the worst case scenario year, indicates that two of the land parcels (i.e. Lot 7307, DP 1141383 and Lot 7308, DP 1141383) would exceed the night-time land area noise criterion over more than 25% of the land. On that basis, MLALC would typically be afforded land acquisition upon request rights for those parcels in accordance with the VLAMP.

WCPL would not object to all three of the new MLALC parcels in Wollar being afforded acquisition upon request rights if the Consent Authority was minded to do so.

11. Operational Noise Impacts on Livestock

Issue

A concern was raised that increased industrial noise and blasting from the Modification would lead to increased stress and potentially lower productivity for livestock on private land in the locality (e.g. up Mogo Road).

Response

WCPL has been leasing adjoining Peabody-owned land to local agricultural producers (predominantly for grazing, with some opportunistic cropping) since the mine commenced operations. WCPL is not aware of any observable reduction in grazing productivity associated with reduced (human) amenity in very close proximity to the current mining operations (noise, blasting, etc).

4.2.11 Air Quality

Comments made in public and organisation submissions relevant to air quality issues include concerns relating to:

1. Cumulative air quality impacts.
2. Dust generation and suppression.
3. Wollar recreation ground.
5. Selection of air quality modelling year.
6. Air Quality Impact Assessment predictions for Wollar (PM_{10}).
7. Air Quality Impact Assessment predictions for Wollar ($PM_{2.5}$).
8. Nitrous dioxide emissions and monitoring.
9. Total suspended particulates emissions and monitoring.
10. Train exhaust emissions.
12. Vacant land assessment.
13. Existing air quality management.

Responses to these comments are provided below.

1. Cumulative Air Quality Impacts

Issue

A concern was raised regarding the impacts of existing Wilpinjong Coal Mine, Moolarben Coal Complex and Ulan Coal Mine mining activity and the Modification's potential contribution to cumulative air quality impacts in the region.

Response

Wollar is approximately 15 km from the Moolarben Coal Complex and is separated from Wilpinjong Coal Mine by notable ridgelines, resulting in significant distance and topographical shielding from direct mining emissions. Modelling demonstrates that cumulative air quality criteria for PM_{10}, $PM_{2.5}$, TSP, and deposited dust are met at all private sensitive receptors in Wollar.

WCPL notes that in response to NSW EPA Recommendation #6 (Section 4.1.2), the cumulative assessment in the AQIA was updated with the latest predictions for nearby mining operations. This update confirmed that predicted cumulative concentrations remain effectively unchanged at the nearest private receivers to the Modification and the AQIA conclusions regarding compliance with cumulative criteria are unchanged.

Notwithstanding, WCPL would continue to implement the Air Quality Management Plan and associated real-time controls, applying reasonable and feasible measures to minimise dust emissions from the mine, including in the proposed Pit 8 Extension.

2. Dust Generation and Suppression

Issue

Concerns were raised that the expansion of open cut mining operations would result in increased dust amenity emissions from exposed areas, blasting and movement of machinery and that the proposed mitigation measures such as water sprays would not be adequate during drought or extreme weather events.

Response

Blasting and machinery movement associated with the Modification have been assessed in the AQIA prepared by Airen Consulting (2025a). Modelling demonstrates that deposited dust levels at all private sensitive receptors would remain well below the EPA criterion of 4 g/m²/month (cumulative) and 2 g/m²/month (incremental).

Historical monitoring data confirm that deposited dust levels have not exceeded criteria in recent years, and the predicted incremental contribution from the Modification is minor relative to existing operations.

The Air Quality Management Plan includes various controls that are applied adaptively in response to real-time conditions. These include water sprays and use of dust suppression polymer on haul roads and active areas, progressive rehabilitation, and operational adjustments during adverse weather. Vegetation buffers are also maintained where practical. During drought or extreme weather, WCPL implements additional restrictions on dust-generating activities as required by the Air Quality Management Plan, maintaining dust emissions within compliance limits. The effectiveness of these measures is demonstrated by ongoing compliance with deposited dust criteria under a range of climatic conditions.

The application of WCPL's real-time monitoring, triggers and associated operational management responses would continue to occur in accordance with the Air Quality Management Plan as required over the life of the Modification to maintain compliance with consented air quality criteria.

3. Wollar Recreation Ground

Issue

A concern was raised that consideration of applicable criteria and modelled compliance at the Wollar recreation ground was not included in the AQIA.

Response

The Wollar recreation ground does not currently have any specific air quality criteria under Development Consent (SSD-6764). WCPL understands that the Wollar recreation ground is located on the eastern side of Wollar adjacent to Wollar Creek and may periodically be used for sporting events and active recreation.

The same criteria would apply as Airen Consulting has nominated for the Wollar community facilities, including the former Wollar Public School and Wollar community hall.

To address the NSW EPA Recommendation #5, Airen Consulting developed a scenario which incorporates reactive measures to demonstrate that no additional exceedances for 24-hour average $PM_{2.5}$ criteria (or any other criteria) would occur due to the Modification at the Wollar community facilities as was modelled in the AQIA. This scenario showed that when reactive measures are implemented as outlined in the Air Quality Management Plan that the Modification would not exceed any criterion at the Wollar community facilities (e.g. former Wollar Public School).

WCPL would continue to apply the Air Quality Management Plan and associated real-time controls to minimise dust emissions from the mine, including in the proposed Pit 8 Extension, and would review monitoring results annually to confirm ongoing compliance at all sensitive receptors, including community and recreational areas in Wollar.

4. Selection of Air Quality Modelling Year

Issue

Members of the community raised a concern that selection of the representative modelling year in the AQIA was not suitable or representative.

Response

The AQIA selected the representative modelling year based on a detailed review of available meteorological and air quality data, consistent with the NSW EPA's *Approved Methods for the Modelling and Assessment of Air Pollutants in New South Wales* (NSW EPA, 2022) (Approved Methods).

The modelling year (FY23) was chosen as it provided a complete, high-quality dataset that was representative of long-term local meteorological conditions, with no significant influence from extraordinary events such as bushfires or dust storms. This approach aligns with NSW EPA's Approved Methods, which requires the use of a year that best reflects typical conditions for the site and avoids years with atypical or extreme influences that could distort the assessment.

The AQIA was reviewed by both TAS, an independent specialist, and the NSW EPA and neither party raised any objection nor requested revision of the selected modelling year.

Notwithstanding the AQIA model predictions, WCPL is required to comply with the air quality limits specified in the Development Consent (SSD-6764) at the nearest private receivers without air quality agreements.

5. Air Quality Impact Assessment Predictions for Wollar (PM_{10})

Issue

A concern was raised that the AQIA PM_{10} predictions indicate levels in Wollar in 2032, including at community facilities, would be close to annual average PM_{10} limits (i.e. 25 µg/m^3 that applies to residential receptors).

Response

Annual average PM_{10} criteria are set by the NSW EPA in the Approved Methods to protect human health at sensitive receptors, including an annual average criterion of 25 µg/m³. Consistent with this framework, the relevant air quality limits in the Development Consent (SSD-6764) are applied at the nearest residences on privately-owned land (see condition 17 of Development Consent [SSD-6764]) without negotiated air quality agreements, and the AQIA has assessed compliance against those requirements.

The AQIA predictions for Wollar indicate annual average PM_{10} concentrations in 2032 are close to the 25 µg/m³ criterion at some modelled locations, including community facilities located in Wollar but no exceedances of PM_{10} criterion was modelled in the AQIA (Airen Consulting, 2025a).

Compliance is determined at applicable receivers specified in Development Consent (SSD-6764) and WCPL would continue to implement the Air Quality Management Plan, including real-time monitoring and responsive operational controls, to apply all reasonable and feasible measures to minimise dust emissions from mining operations, including the proposed Pit 8 Extension.

6. Air Quality Impact Assessment Predictions for Wollar ($PM_{2.5}$)

Issue

A concern was raised that the AQIA $PM_{2.5}$ predictions indicate levels in Wollar in 2032, including at community facilities, would be close to 24-hour average $PM_{2.5}$ limits (i.e. 25 µg/m^3 that applies to private residential receptors).

Response

$PM_{2.5}$ impact assessment criteria are set by the NSW EPA in the Approved Methods to protect human health at sensitive receptors. The relevant $PM_{2.5}$ criteria include a 24-hour average criterion of 25 µg/m³ and an annual average criterion of 8 µg/m³, assessed on a cumulative basis at sensitive receptors.

Consistent with this framework, the relevant air quality limits in the Development Consent (SSD-6764) are currently applied at the nearest residences on privately-owned land (see condition 17 of Development Consent [SSD-6764]) without negotiated air quality agreements, and the AQIA has assessed against those requirements.

The AQIA identified a potential for very minor short-term particulate matter criteria exceedances (i.e. cumulative criteria for 24-hour average $PM_{2.5}$) occurring at the former Wollar Public School (Receiver 901 and 944) of approximately 0.1 to 0.5 µg/m^3 above EPA assessment criteria in 2030 and 2032 for a single day each year respectively (Airen Consulting, 2025a).

To address NSW EPA recommendations, Airen Consulting has modelled an additional scenario that incorporates a real-time operational response on the day of the exceedance in 2030 and 2032 and confirmed that the Modification would not result in any exceedances of the 24-hour $PM_{2.5}$ criterion at sensitive receptors when reactive measures are implemented in accordance with the approved Air Quality Management Plan (as described in response to NSW EPA Recommendation #5 in Section 4.1.2).

7. Nitrous Dioxide Emissions and Monitoring

Issue

A concern was raised that Nitrous Dioxide (NO_2) monitoring is not undertaken on-site, and cumulative combustion and blasting emissions of this pollutant may contribute to adverse health outcomes.

Response

NO_2 emissions from blasting activities at Wilpinjong Coal Mine were assessed in the AQIA.

The AQIA adopted a conservative approach for blasting emissions, modelling a scenario where a rated 2 fume blast occurs every hour between 9.00 am and 5.00 pm under worst-case meteorological conditions, with concurrent background concentrations included. Even under these highly conservative assumptions, the maximum 1-hour average NO_2 concentrations did not exceed the EPA's criterion at any private sensitive receptor (Airen Consulting, 2025a). In reality, blasting is limited to no more than two blasts per day and five blasts per week, which would result in much lower NO_2 levels than those predicted by the conservative modelling scenario.

The NSW EPA reviewed the AQIA and did not raise any concerns regarding NO_2 emissions or the absence of on-site NO_2 monitoring.

Blasting activities at Wilpinjong Coal Mine would continue to be conducted in accordance with the approved Blast Management Plan, with all reasonable and feasible mitigation measures incorporated to minimise potential blast fume.

8. Total Suspended Particulates Emissions and Monitoring

Issue

Members of the community raised a concern that the TSP monitoring is not undertaken on-site, and dust emissions contribute to adverse health and wellbeing, or amenity, outcomes.

Response

TSP emissions from Wilpinjong Coal Mine were assessed in the AQIA. While TSP is not directly monitored on-site, the focus of both the Development Consent (SSD-6764) conditions and the Air Quality Management Plan is on health-related particulate fractions (specifically PM_{10} and $PM_{2.5}$) which are most relevant to human health impacts. These fractions are continuously monitored at multiple locations around the mine and in the Wollar community. The AQIA demonstrates compliance with all relevant EPA criteria for PM_{10} and $PM_{2.5}$ criterion at private sensitive receptors.

TSP is included in the AQIA as an indicator of potential impacts on amenity. TSP concentrations were estimated in the AQIA and found that cumulative TSP levels at all private sensitive receptors remain well below the EPA criterion of 90 µg/m³ (annual average).

The AQIA was peer reviewed by TAS, an independent specialist, and the EPA also reviewed the assessment. Neither raised any concerns regarding TSP emissions or the Wilpinjong Coal Mine's monitoring network.

WCPL would continue to operate in accordance with the Air Quality Management Plan, applying real-time controls and adaptive management to minimise dust emissions and protect health and amenity.

9. Train Exhaust Emissions

Issue

A concern was raised that sufficient consideration was not given to cumulative coal train diesel exhaust emissions.

Response

The Modification does not propose any changes to the currently approved coal transport rate as outlined in the Development Consent (SSD-6764) conditions, nor does it propose any extension to the approved duration of ROM coal extraction (i.e. to 31 December 2033). Consistent with the current Wilpinjong Coal Mine operation, the Modification would generate up to an annual daily average of 6 laden trains during peak coal production and a peak daily maximum of 10 laden trains per 24 hours.

The Modification also proposes no change to the existing train loading infrastructure, typical train routes, or the approved daily maximum train movements. Accordingly, cumulative diesel exhaust emissions associated with coal rail transport would remain consistent with the currently approved operation.

Potential diesel exhaust emissions (including oxides of nitrogen) were assessed as part of the AQIA, with the assessment modelling compliance with the EPA's criterion at all private sensitive receptors. The Modification does not introduce additional rail transport intensity beyond the approved train movement limits and therefore does not change the cumulative train exhaust emissions profile relative to the approved baseline.

10. Vacant Land Assessment

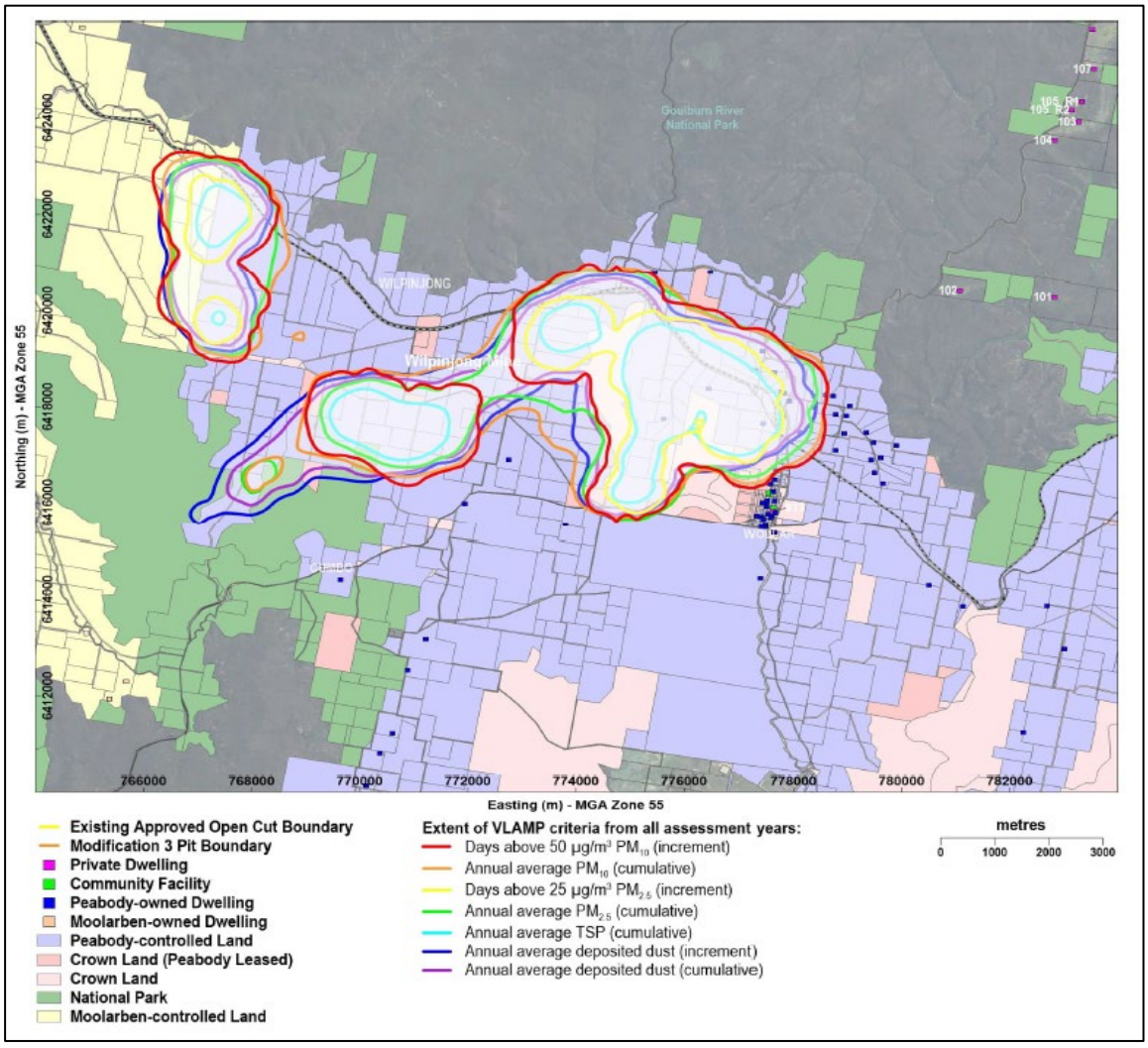
Issue

Members of the community raised a concern that the VLAMP vacant land assessment in the AQIA did not consider the recent grant of (formerly) Crown Land to the MLALC.

Response

WCPL understands that MLALC has recently been granted three parcels of land in Wollar that were previously Crown Land, and hence did not historically have a dwelling entitlement. Whether MLALC intends to, or will be granted development consent to construct future dwellings on these parcels of land is currently unknown.

Notwithstanding, WCPL has reviewed the maximum extent of VLAMP criteria based on all years of assessment and for all relevant air quality indicators as presented in the AQIA as Figure 24, replicated as Figure 17 below and concluded compliance is demonstrated for all air quality indicators and averaging times prescribed by the VLAMP for all vacant land parcels granted to the MLALC.



Source: Airen Consulting (2025a)

Figure 17
Modelled Maximum Extent of VLAMP Criteria

11. Existing Air Quality Management

Issue

One submitter suggested that Peabody's past and existing air quality compliance and management should be reviewed prior to approval of the Modification.

Response

Wilpinjong Coal Mine's existing air quality compliance and management performance is subject to ongoing statutory review and independent verification under Development Consent (SSD-6764) and EPL 12425, implemented through the approved Air Quality Management Plan and relevant review documents.

Air quality environmental performance is reviewed annually which includes an analysis of air quality monitoring results and complaints against criteria, identification of any exceedances or non-compliances, trend analysis over time and comparison with relevant predictions. This review is published in the Annual Review.

The Wilpinjong Coal Mine also periodically undergoes independent environmental audits at prescribed intervals, which includes assessment of compliance, review of the adequacy of management plans and controls, and identification of measures to improve environmental performance. The last independent environmental audit was undertaken by Onward Consulting Pty Ltd (2024) and verified the Air Quality Management Plan was compliant with relevant Development Consent (SSD-6764) conditions.

4.2.12 Visual

Comments made in public and organisation submissions relevant to visual issues include concerns relating to:

1. Cumulative visual impact.
2. Rural character.
3. Light pollution.
4. Scope of visual assessment in Wollar.
6. Viewpoint selection and sensitivity.
6. Assessment of Landscape Character Zones.
7. Goulburn River National Park visual impacts.
8. Methodology adopted for photographs in visual impact assessment.

Responses to these comments are provided below.

1. Cumulative Visual Impact

Issue

Concerns were raised that the Modification would further industrialise the rural landscape. Submitters noted that the Pit 8 Extension would replace open farmland and bushland with open cut, overburden emplacement, and other disturbed land, adding to the existing visual impacts from mining in the locality.

Response

Landscape and visual impact assessments have been previously undertaken to inform the approval of the Wilpinjong Coal Project and the Wilpinjong Extension Project (EDAW Gillespies Australia, 2005; Marc & Co and Resource Strategies, 2015). The Modification Report recognises the existing landscape and visual impacts of the approved Wilpinjong Coal Mine.

WCPL acknowledges that the Modification would extend open cut mining operations into largely cleared farmland and adjoining remnant native vegetation, thereby incrementally expanding the existing Wilpinjong Coal Mine. The potential landscape and visual impacts on the surrounding landscape zones and from representative viewpoints has been assessed in the Modification Report.

The Modification Report landscape and visual impact assessment considers potential incremental visual and landscape character impacts in consideration of the methodology described in the *Technical Supplement – Landscape and Visual Impact Assessment: Large-Scale Solar Energy Guideline* (the LVIA Technical Supplement) (DPE, 2022d). The LVIA Technical Supplement stipulates relative sensitivities for various receptor types (for example a local road is designated as “very low” viewpoint sensitivity, whereas private dwellings in a village zoning are assigned “high sensitivity”), and visual sensitivity and quantitative visual magnitude ratings combine to result in a visual impact rating (refer Modification Report and the LVIA Technical Supplement). It is recognised that some local landholders or visitors may disagree with the visual sensitivity, magnitude or impact ratings derived from application of the LVIA Technical Supplement.

As a relatively shallow and fast-moving mining operation, the Wilpinjong Coal Mine is dynamic and open cut highwalls and exposed working areas do not typically remain open for long. In addition, WCPL would maintain the following existing measures implemented to minimise potential visual impacts at the Wilpinjong Coal Mine for the Modification:

- Visual bunds (e.g. up to 3 m in height) along select pit boundary areas.
- Mine areas are rehabilitated as soon as practicable following disturbance.
- Temporary rehabilitation of approved temporary waste rock emplacements following construction.

Existing remnant vegetation (e.g. along Ulan-Wollar Road) would also continue to be maintained where practicable, to minimise views of the Wilpinjong Coal Mine.

2. Rural Character

Issue

Submitters were concerned that the Modification would adversely affect the rural character and scenic value of the Wollar district and suggested the Modification visual impact assessment underestimated these impacts.

Response

The landscape and visual impact assessment presented in the Modification Report presents a technical assessment based on the LVIA Technical Supplement methodology. WCPL acknowledges that some people in the community may disagree with the assessment findings (for example considering potential visual impacts on local roads should have a higher sensitivity ranking than the LVIA Technical Supplement suggests).

The SIA also identified in consultation that local landholders would likely experience social impacts associated with having views of the Pit 8 Extension when travelling to and from their homes (which was rated a medium social significance rating) (Square Peg, 2025):

> *Visual impact for nearby residents affect their sense of place*
>
> *The Modification would see the extension of Pit 8 in an easterly direction. Some local residents who travelled to their homes via the Ulan-Wollar Road and on to Mogo Road or Araluen Road described how the expansion of the pit would mean they would see the mine when travelling to and from their homes. They described how this provided a visual reminder of the impacts they had experienced.*
>
> *The Pit 8 Extension would be visible from local roads, and progressive rehabilitation of mine landforms would continue to occur.*
>
> *It is thus almost certain that this impact will occur, and it is reasonable to assess its magnitude as minor, resulting in a medium impact significance rating. It should be noted that the affected residents would likely rate this impact differently.*

As described in the previous response, extensions of visual bunds, temporary rehabilitation and progressive rehabilitation of Modification landforms would be undertaken in order to reduce the contrast between the Modification landforms and the surrounding environment.

3. Light Pollution

Issue

Some submitters raised concerns about night-time light pollution and “sky glow” from the Pit 8 Extension, including potential impacts on residential amenity and biodiversity.

Response

Potential direct light effects from the Modification would be primarily associated with vehicle headlights, flashing safety lights of smaller vehicles and mobile lighting equipment. These impacts are consistent with the approved Wilpinjong Coal Mine.

The scale and intensity of night-lighting for the Modification would be similar in intensity to the existing night-lighting at the Wilpinjong Coal Mine. Night-lighting sources would however extend eastward into the Pit 8 Extension area from the existing Pit 8. In-pit lighting is regularly relocated as operations progress, and the additional lighting in the Pit 8 Extension area would correspond in a reduction in the use of lighting in other completed mining areas (e.g. in Pit 6).

Because the Wilpinjong Coal Mine is a relatively shallow and fast-moving mining operation, the duration of the use of night-lighting in any one area is typically for a short duration.

Whilst ensuring that operational safety is not compromised, WCPL would continue to minimise light emissions by select placement, configuration and direction of lighting so as to reduce off-site nuisance effects where practicable.

4. Scope of Visual Assessment in Wollar

Issue

Some submitters raised a concern that the visual impact assessment did not specifically consider the Wollar recreation ground (i.e. public Crown Land) or vacant land recently granted to the MLALC (i.e. formerly Crown Land).

Response

The landscape and visual impact assessment presented in the Modification Report considered the potential for visual impacts from the Modification from key public and private viewpoints, including private residences and public roads. WCPL recognises that MLALC has recently been granted freehold title over a number of formerly Crown Land parcels on the southern end of Wollar. The newly converted freehold land parcels are located at some distance from the proposed Modification (i.e. approximately 950 m), do not currently have any residential use, and intervening land with scattered remnant vegetation and some intervening terrain also occur between these newly freehold land parcels and the Modification (Figure 15).

WCPL also understands that the Wollar recreation ground is located on the eastern side of Wollar adjacent to Wollar Creek and may periodically be used for sporting events and active recreation. Similar to the MLALC land parcels, views of the Modification from Wollar recreation ground would be largely inhibited by intervening terrain and remnant vegetation when in use (Figure 15).

5. Viewpoint Selection and Sensitivity

Issue

Concerns were raised that the selection of viewpoints and the assessment of visual sensitivity and associated visual impact and landscape assessment findings do not reflect local landholder or tourist concerns and perceptions (particularly Viewpoints 2 and 3).

Response

The landscape and visual impact assessment includes a preliminary visual assessment to determine representative viewpoint locations for the Modification. The preliminary visual assessment indicated that the surrounding topographic setting and abundance of vegetation screening would limit direct views of the Modification from most publicly accessible viewpoints, apart from the public road network.

The preliminary visual assessment also determined the areas most sensitive to the changes proposed by the Modification would be along Ulan-Wollar Road and Mogo Road, where views of vegetation clearing, open cut mining operations, highwalls, the temporary Pit 8 waste rock emplacement, mine backfilling and rehabilitation activities would be visible.

The selection of viewpoints, including Viewpoints 2 and 3, was based on a combination of factors such as proximity to the proposed Pit 8 Extension area, visibility of the Modification components, land use, and the presence of sensitive receptors like residences, roads, and public viewpoints. These locations were chosen to represent a range of viewing experiences, including those of local landholders and visitors traveling through the area.

WCPL acknowledges that visual sensitivity is inherently subjective and for this reason, has considered available NSW Government visual assessment guidance (i.e. the LVIA Technical Supplement [DPE, 2022d]), and adopted the visual sensitivity, visual magnitude and visual impact matrices from the LVIA Technical Supplement.

Progressive rehabilitation of the Modification mine landforms would be undertaken to reduce the contrast with the surrounding environment and minimise the temporal duration of visual impacts.

6. Assessment of Landscape Character Zones

Issue

Submitters raised a concern that the classification and assessment of landscape character zones (LCZs) in the visual impact assessment of the Modification do not reflect local landholder perceptions.

Response

The landscape character impact assessment was undertaken consistent with the LVIA Technical Supplement, which provides quantitative assessment techniques that can be applied to evaluate the landscape character impacts of the Modification.

Detail on the methodology that was used to undertake the landscape character impact assessment is provided in Section 6.15 of the Modification Report.

As noted above, WCPL acknowledges that the sensitivity and value of LCZs is inherently subjective, however, it has adopted the LVIA Technical Supplement methodology provided by the NSW Government.

7. Goulburn River National Park Visual Impacts

Issue

Some submitters raised concerns that potential visual impacts on the Goulburn River National Park were not adequately assessed.

Response

The Goulburn River National Park is the primary landscape feature within LCZ 1 assessed as part of the Modification. As the Modification is not located within LCZ 1, direct landscape character impacts would not be experienced. However, due to its existing proximity to the approved Wilpinjong Coal Mine, LCZ 1 is considered to have Moderate sensitivity to landscape character impacts associated with the Modification.

Topographic variations and dense vegetation associated with this LCZ would limit views, however, portions of the Pit 8 Extension area would be visible from some locations within this LCZ, including areas directly adjacent Pit 8. In consideration of this, it is considered that landscape impacts would be Low to Moderate, and therefore there is expected to be a Moderate landscape character impact to LCZ 1 as a result of the Modification.

Progressive rehabilitation of Modification landforms would be undertaken in order to reduce the contrast between the Modification landforms and the surrounding environment, including the Goulburn River National Park.

WCPL would also continue to utilise existing visual mitigation measures to minimise visual impacts for local road users, including:

- visual bunds (e.g. up to 3 m in height) along select pit boundaries; and
- temporary rehabilitation of temporary waste rock emplacements following construction.

WCPL notes that the NPWS has reviewed the application and did not raise any concerns regarding potential visual impacts.

8. Methodology Adopted for Photographs in Visual Impact Assessment

Issue

A concern was raised that the viewpoints and photographs selected and associated visual simulation methodology downplayed potential visual impacts (e.g. for users of Mogo Road).

Response

There are no guidelines outlining a standardised methodology for the assessment of landscape and visual impacts for coal mining developments in NSW. Therefore, the landscape and visual impact assessment provided in the Modification Report was prepared in consideration of the methodology described in the LVIA Technical Supplement (DPE, 2022d).

The Technical Supplement provides quantitative assessment techniques that were applied to evaluate the potential visual impacts of the Modification, and specifies (for example), that a series of photographs be taken from each viewpoint and stitched together to assess a 180-degree view using a grid tool and associated quantitative assessment techniques.

4.2.13 Amenity and Health

Comments made in public and organisation submissions raised concerns relating to:

1. Human health
2. Amenity impacts.
3. Spontaneous combustion.

Responses to these comments are provided below.

1. Human Health

Issue

Concerns were raised about potential health impacts in Wollar, including respiratory, cardiovascular and psychological adverse health outcomes that could arise from the Modification.

Response

The NSW EPA impact assessment criteria and the National Environment Protection Measures Air Quality Protection Goals are set to protect human health and wellbeing. These criteria are periodically reviewed by the relevant NSW and Commonwealth Government authorities in the context of available health and air quality data. The NSW NPfI (EPA, 2017) also considers management of noise impacts to protect the amenity and wellbeing of local community living near industry.

The Modification is predicted to comply with the relevant air quality and noise criteria with the exception of three residences, which are subject to existing negotiated noise agreements, consistent with the currently approved Wilpinjong Coal Mine.

WCPL would continue to implement best management practices in accordance with the Blast Management Plan to achieve compliance with applicable blasting criteria at the nearest private receivers.

Further, the Wilpinjong Coal Mine operates under an Environment Management Strategy (WCPL, 2024) that provides a framework to facilitate conduct of the operation in an environmentally responsible manner and in accordance with relevant statutory requirements. The implementation of the currently approved Environmental Management Strategy would continue for the Modification.

A component of the current Environmental Management Strategy is the Social Impact Management Plan, which would also be reviewed and updated to reflect the Modification SIA recommendations.

2. Amenity Impacts

Issue

Concerns were raised in a range of submissions that residents in the vicinity of the Modification were exposed to mining-related noise, dust, blasting vibration, and odours and the Modification could exacerbate amenity issues.

Response

Amenity impacts associated with the Modification are predicted to be generally consistent with the currently approved Wilpinjong Coal Mine. Whilst the Modification would extend mining operations eastward into the Pit 8 Extension area, the currently approved maximum annual ROM coal production or annual waste rock production rates would be unchanged by the Modification.

Notwithstanding, WCPL would continue to implement air quality, blasting, lighting and spontaneous combustion management measures in accordance with the site's approved environmental management plans and Environmental Management Strategy to minimise amenity impacts where practical.

3. Spontaneous Combustion

Issue

Some submitters indicated spontaneous combustion odours from the Wilpinjong Coal Mine were an existing source of disturbance to community members and expressed concern this may be exacerbated by the Modification.

Response

The Modification would involve extraction of the same coal seams currently mined at the Wilpinjong Coal Mine. There would be no change to the current approved maximum annual ROM coal production rate, or coal handling systems. WCPL would continue to evaluate and manage spontaneous combustion as documented in the Spontaneous Combustion Management Plan (WCPL, 2022) (Appendix 3 of the Air Quality Management Plan). Management of spontaneous combustion would continue to be implemented through implementation of control measures such as regular inspection and monitoring of coal and carbonaceous materials, application of inert materials (e.g. clay capping) and compaction of coal and carbonaceous material in out-of-pit emplacements.

4.2.14 Road Transport

Comments made in public and organisation submissions relevant to road transport issues include concerns relating to:

1. Traffic movements.
2. Road closures.
3. Ulan-Wollar Road realignment.
4. Mogo Road access.

Responses to these comments are provided below.

1. Traffic Movements

Issue

A number of submitters expressed concern that the Modification would lead to more mine-related traffic on local roads with implications for road safety and other road users.

Response

Traffic generated by the Wilpinjong Coal Mine is principally related to the movement of the workforce. The Modification would not involve any increase to the current operational workforce, but would provide an additional six months of mining activity following completion of ROM coal production.

The Transport and Planning Partnership Pty Ltd (TTPP) (2025) concluded that the existing road network can satisfactorily accommodate the forecast traffic demands resulting from the Modification without any specific additional road upgrade requirements.

WCPL notes that TfNSW has also reviewed the Modification application and did not raise any traffic concerns regarding the proposed Modification (Section 4.1).

WCPL would continue to liaise closely with the MWRC during the relocation of Ulan-Wollar Road to minimise potential traffic disruptions to users of Ulan-Wollar Road and Mogo Road associated with public road relocation activities (discussed further below).

2. Road Closures

Issue

Some local residents expressed a concern that the Modification would result in them being exposed to more frequent road closures or delays or could adversely affect emergency services access.

Response

Where practical, development of the relocated Ulan-Wollar Road would largely occur in parallel with the continued free operation of the existing public road alignment. Notwithstanding, it is recognised that there would be periods when tie-ins between the existing and new road alignments are constructed that may necessitate some temporary controls (described below).

Blasting at the Wilpinjong Coal Mine is carried out at a maximum of two blasts per day and five blasts per week averaged over a calendar year. Blasting is carried out between 9.00 am and 5.00 pm Monday to Saturday, inclusive.

Temporary road closures when blasting is undertaken within 500 m of a public road have been occurring at the Wilpinjong Coal Mine since its inception. WCPL notes that these closures would extend to Ulan-Wollar Road and the southern section of Mogo Road adjacent to the Pit 8 Extension as relevant over the life of the Modification.

Temporary road closures are typically for a period of less than 20 minutes and no more than one closure per day. Notification of temporary road closures is provided at least three days prior to planned road closures and in accordance with an approved Blast Management Plan.

Subject to the realignment of Ulan-Wollar Road being designed in accordance with Austroads guidelines and in consultation with MWRC, and construction activity along Ulan-Wollar Road being subject to a Construction Traffic Management Plan, no other specific mitigation or management measures would be required (TTPP, 2025).

3. Ulan-Wollar Road Realignment

Issue

Submitters raised concerns that the proposed Ulan-Wollar Road realignment could cause longer travel times, construction-related disruptions or new safety hazards at the new intersection with Mogo Road.

Response

The realignment of Ulan-Wollar Road would not materially impact the length of the road, and so would have negligible impact on the travel time for drivers along Ulan-Wollar Road once construction is complete (TTPP, 2025). The realigned length of Ulan-Wollar Road would be designed and constructed in accordance with Austroads design guidelines, and to the satisfaction of MWRC.

TTPP (2025) concludes the following regarding the proposed realignment of Ulan-Wollar Road (emphasis added):

> *The new intersection of Mogo Road and the realigned Ulan-Wollar Road is expected to operate at a satisfactory level of service, with minimum BAL and BAR treatments provided in the realigned Ulan-Wollar Road. The detailed design of the intersection would be developed in accordance with Austroads requirements and with due regard to the adjacent railway level crossing (refer to Section 5.11), ensuring that the relevant Safe Intersection Sight Distance and Minimum Gap Sight Distance requirements (Austroads, 2023) are met.*
>
> …
>
> *The realignment of Ulan-Wollar Road and other infrastructure is expected to be undertaken by constructing the realignment while retaining the existing Ulan-Wollar Road for active traffic. The tie-ins between the realigned road and existing road would be constructed while maintaining traffic flow along the existing Ulan-Wollar Road. The realigned Ulan-Wollar Road would then be open to traffic once completed, and existing Ulan-Wollar Road alignment closed to traffic. This is likely to require partial road closures, and traffic control. The road relocation will involve the construction of a new intersection between Ulan-Wollar Road and Mogo Road and a temporary road relocation during construction where the proposed alignment meets the existing road alignment. A Construction Traffic Management Plan (CTMP) and any required traffic control plans would be prepared by suitably qualified personnel, prior to commencement of the construction activity.*
>
> …
>
> *The Ulan-Wollar Road Realignment would relocate Ulan-Wollar Road closer to the Sandy Hollow-Gulgong Railway at the Mogo Road level crossing (LXM 1297). This would reduce the distance available between the tracks and the intersection to accommodate northbound vehicles waiting on Mogo Road when a train occupies the level crossing, and to accommodate southbound vehicles on Mogo Road waiting to enter Ulan-Wollar Road. As traffic demands on both Ulan-Wollar Road and Mogo Road are low, it is unlikely that queuing of vehicles between Ulan-Wollar Road and the level crossing would occur on a regular basis.*
>
> *The detailed design of the realignment of Ulan-Wollar Road and its intersection with Mogo Road would be undertaken with regard to Australian Standard 1742.7 and any other relevant design guidelines, and in consultation with ARTC to ensure that:*
>
> - *the risk of short stacking is minimised by providing adequate distance between the track and the intersection to accommodate a suitable design heavy vehicle between the tracks and the intersection;*
> - *the level crossing control device (flashing signal) is visible from the required safe stopping distance for vehicles approaching on Mogo Road and the realigned Ulan-Wollar Road;*
> - *adequate sight distance is provided for approaching drivers to observe and react to any stationary queue on the approach to the level crossing; and*
> - *the geometric layout of the intersection and level crossing are suitable for the swept path of heavy vehicles, to ensure they can be safely negotiated at the design speed.*
>
> *The existing minor non-conformances with regard to road traffic controls such as signage and road markings observed at the level crossings (Section 3.3 and Appendix C) are minor issues which represent low risks to the safety of the road network, and would not be exacerbated by the approved Wilpinjong Coal Mine or the Modification.*

Overall, while some short-term detours may be necessary during construction of the Ulan-Wollar Road realignment, WCPL would implement a comprehensive Construction Traffic Management Plan to maintain access and minimise delays.

WCPL anticipates that the new Ulan-Wollar Road realignment would be constructed by the MWRC, which obviously has extensive experience managing such works to minimise potential impacts on local road users and maintaining suitable access for emergency services.

4. Mogo Road Access

Issue

Concerns were raised that Mogo Road provides public access to camp grounds in the Goulburn River National Park and private properties and this access road could be adversely impacted by the Modification. Further, one submission suggested WCPL should fund the sealing of the unpaved section of this road to the Goulburn River National Park boundary to improve safety and reduce dust for residents and visitors.

Response

The Modification does not propose any mine-related traffic on Mogo Road or changes to Mogo Road traffic volumes or condition. Given the absence of increased traffic volumes or changes to Mogo Road usage, sealing the unpaved section of Mogo Road is not considered warranted as part of this Modification.

Measures to minimise road closure and public road relocation disruptions to local residents and visitors to the Goulburn River National Park are outlined in the responses above.

4.2.15 Agriculture

Comments made in public and organisation submissions relevant to agriculture issues include concerns primarily relating to loss of productive farmland.

Responses to this comment is provided below.

1. Loss of Productive Farmland

Issue

Concerns were raised regarding the loss of productive agricultural land, which would in turn impact local soil fertility and food security in the long-term.

Response

Biophysical Strategic Agricultural Land (BSAL) is land with a combination of natural resources highly suitable for agriculture, including suitable landforms, soil and water resources that are naturally capable of sustaining high levels of productivity and requirement minimal management practices to maintain this high quality. A BSAL Assessment Report was completed by Minesoils (2023) to support an application for a Site Verification Certificate (SVC) for the land associated with the Modification.

The SVC (Attachment 5 of the Modification Report) subsequently issued by DPHI (August 2024) concluded that the area was deemed non-BSAL due to soil fertility limitations including low soil fertility, poor drainage, and a soil depth to a physical and/or chemical barrier. Further, the soil classification within the Pit 8 Extension area is mostly Land Capability Class 5 (severe limitations), 6 (very severe limitations) and 7 (extremely severe limitations), which restricts land uses to grazing, or selective forestry or nature conservation practices (Minesoils, 2023).

The proposed Modification would not result in any significant loss of productive agricultural land. The additional disturbance area (~155 ha) is largely confined to land that is used for low-intensity agriculture (predominantly cattle grazing on unimproved pasture) by a WCPL licence holder. Around 120 ha of WCPL grazing land would, therefore, be lost to agricultural production and would be rehabilitated to woodland (i.e. native vegetation), should the Modification proceed.

Overall, the Modification does not encroach on any highly productive or strategic farmland and the affected 155 ha represents a very small fraction of the region's available agricultural land.

4.2.16 Geological Features

Comments made in public and organisation submissions relevant to geological features include concerns relating to:

1. Consideration of Earthquakes on sensitive geological features.
2. Engineering geology model.

Responses to these comments are provided below.

1. Consideration of Earthquakes on Sensitive Geological Features

Issue

Some submitters suggested that open cut mining can induce or alter earthquake frequency or magnitude which would result in impacts to sensitive geological features and blasting.

Response

The Wilpinjong Coal Mine is located in a geologically stable part of inland NSW. Unlike areas near active plate boundaries, intraplate regions like this rarely experience significant earthquakes. A review of the *2018 National Seismic Hazard Assessment for Australia* (Geoscience Australia, 2018) indicates that the likelihood of a significant natural earthquake in the Wilpinjong area is very low and categorised as a 'Negligible Event Impact' region.

Over the past 20 years, approximately five minor earthquakes have been recorded by Geoscience Australia in the vicinity of the three coal mines (Ulan Coal Mine, Moolarben Coal Complex and Wilpinjong Coal Mine) as shown by the yellow dots in Plate 3. All five earthquakes had a magnitude of less than 2.8 and occurred at depths of approximately 8-10 km beneath the ground. No 'Felt Reports' or 'Shake Maps' were generated for these minor events (i.e. indicating no residents reported feeling them, and they caused no reported damage) (Geoscience Australia, 2021).

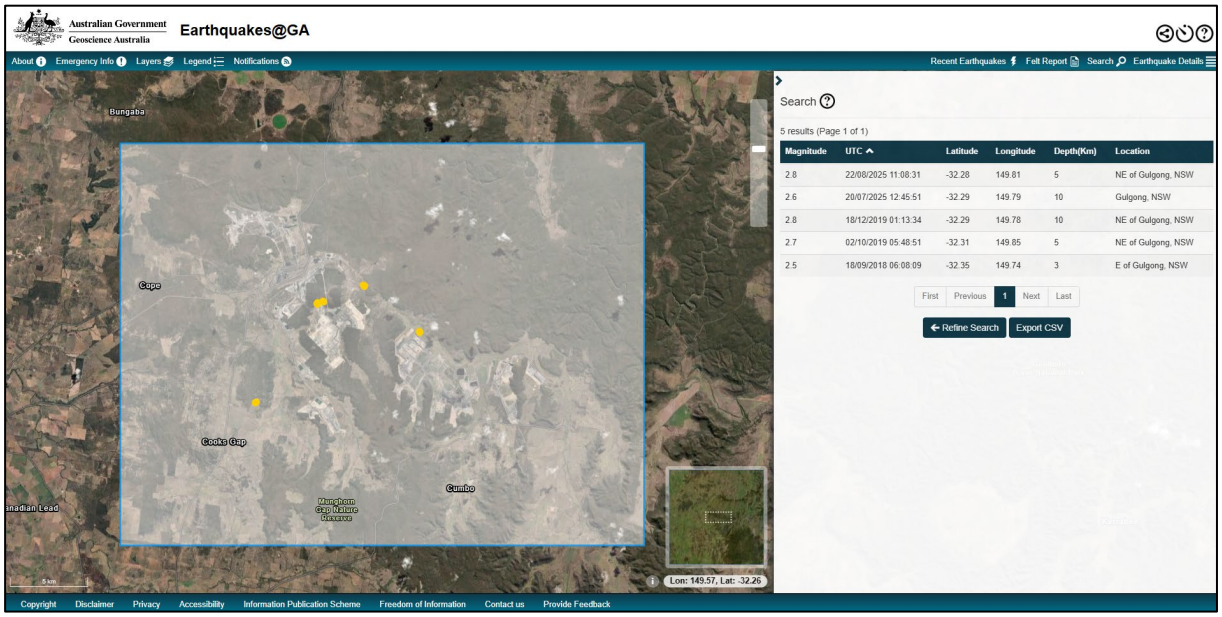


Plate 3 Earthquake Events in the Wilpinjong Area between January 2005 to January 2026 (Geoscience Australia, 2021).

This is consistent with how Geoscience Australia contextualises earthquake hazards, as follows:

> *In Australia, earthquakes with magnitudes of less than 3.5 seldom cause damage, and the smallest magnitude earthquake known to have caused fatalities is the magnitude Mw 5.4 (ML5.6) Newcastle earthquake in 1989 (Geoscience Australia, 2021).*
>
> *…*
>
> *Apart from causing shaking, earthquakes of magnitude 4.0 or greater can also trigger landslides, which can impact communities and infrastructure. The larger the magnitude of the earthquake, the bigger the area over which landslides may occur.*

PSM (2025) conducted an Initial Assessment of Geological Feature Sensitivity to vibration-related damage from blasting activities associated with the proposed Modification. PSM (2025) recognises a number of processes in the natural environment that can result in damage to rock masses, including earthquakes, weathering, erosion and biological factors such as root jacking, which result in rock failures occurring sporadically, irrespective of mining activities.

WCPL has adopted a blasting performance criteria for sensitive geological features (i.e. rocky habitat for threatened species or proximal Aboriginal rock shelter sites) of 'no damage that is distinguishable from natural processes'.

PSM (2025) has provided initial advice that nominates provisional conservative criteria of 50 mm/s (PPV) to achieve this performance criteria, however, recommends further work to identify site-specific criteria. The current Blast Management Plan performance criterion of 80 mm/s for rock art sites has also been assessed by RWDI (2025) that has been employed successfully at Wilpinjong Coal Mine to date.

WCPL would continue to gather data on blast vibration levels and geological feature performance to determine appropriate site-specific blast vibration criteria to achieve the adopted performance criteria for sensitive geological features of 'no damage that is distinguishable from natural processes'.

2. Engineering Geology Model

Issue

One submitter suggested the Initial Assessment of Geological Feature Sensitivity (PSM, 2025) is based on an outdated understanding of geomorphological processes in sandstone geology, which are potentially sensitive to blasting vibration.

Response

WCPL notes that assessment undertaken by PSM (2025) is a preliminary assessment designed to inform early-stage planning and risk mitigation. PSM (2025) recommends that RMR surveys and vibration threshold validations be conducted prior to mining adjacent to sensitive geological features.

WCPL has adopted a blasting performance criteria for sensitive geological features of 'no damage that is distinguishable from natural processes'. The Blast Management Plan would be reviewed and updated to incorporate the Modification and the adopted performance criteria for sensitive geological structures, subject to the Development Consent (SSD-6764) conditions and further geological assessment undertaken.

4.2.17 Final Landform

Comments made in public and organisation submissions relevant to the final landform include concerns relating to:

1. Rehabilitation uncertainty.
2. Post-mining landforms.

Responses to these comments are provided below.

1. Rehabilitation Uncertainty

Issue

Submitters raised concerns that the long-term integrity of post-mining landforms and rehabilitation success is potentially uncertain. Further, one submitter also suggested rehabilitation bonds may not fully cover long-term rehabilitation obligations, including the Modification.

Response

Rehabilitation at the Wilpinjong Coal Mine is undertaken in accordance with the Rehabilitation Management Plan and the Rehabilitation Strategy. The final land use goals for the Wilpinjong Coal Mine are based on the site being safe, stable and non-polluting and meeting the rehabilitation objectives of Development Consent (SSD-6764) as shown in Plate 4.

Rehabilitation is conducted progressively as landforms develop with the advancement of active mining faces (WCPL, 2024). Rehabilitation of completed landforms has been progressively undertaken since 2008 and has included establishing both woodland and grassland vegetation communities. Wilpinjong Coal Mine also conducts regular Rehabilitation Meetings which allow stakeholders involved to be informed on rehabilitation metrics, operational requirements and commitments to meet the operations' rehabilitation requirements under the Forward Work Program (a statutory requirement for mining operations in NSW).

WCPL must maintain a rehabilitation security bond (held by the NSW Government) that covers the full estimated cost of all rehabilitation and closure activities. This bond is periodically reviewed and would be adjusted to account for the Pit 8 Extension should it be approved, maintaining sufficient funds to complete long-term rehabilitation obligations.

Additionally, the key statutory requirements associated with the Wilpinjong Coal Mine (Development Consent [SSD-6764] and mining lease requirements) dictate that WCPL cannot relinquish the Wilpinjong Coal Mine until rehabilitation is demonstrated to meet relevant performance criteria to the satisfaction of the NSW Government.

Rehabilitation at the Wilpinjong Coal Mine would continue to be carried out in accordance with a Rehabilitation Management Plan prepared in line with the standard conditions of the mining leases, and would be updated to reflect the proposed Modification.

REHABILITATION

Rehabilitation Objectives

60. The site must meet the proposed rehabilitation objectives described in the documents listed in condition 2(a) of schedule 2 (and shown conceptually in Appendix 8), and must comply with the objectives in Table 11.

Table 11: Rehabilitation Objectives

Feature	Objective
Mine site (as a whole)	• Safe, stable and non-polluting • Final landforms designed to incorporate micro-relief and integrate with surrounding natural landforms and adjacent mine rehabilitation • Final landforms maximise geotechnical performance, stability and hydrological function • Constructed landforms maximise surface water drainage to the natural environment (excluding final void catchments) • Minimise long term groundwater seepage from the site to ensure negligible environmental consequences beyond those predicted for the development • Minimise visual impact of final landforms as far as is reasonable and feasible
Final Voids	• Minimise to the greatest extent practicable: ○ the size and depth of final voids ○ the drainage catchment of final voids ○ any high wall and low wall instability risk ○ risk of flood interaction for all flood events up to and including the PMF
Surface infrastructure	• To be decommissioned and removed, unless the Secretary agrees otherwise
Rehabilitation	• Rehabilitate at least 2,856 hectares of self-sustaining woodland ecosystem to the BVTs specified in Tables 8 and 9; • Establish self-sustaining ecosystem function in areas of: ○ aquatic habitat, within diverted and/or re-established drainage lines and retained water features, with consideration of hydro-geomorphological constraints; ○ habitat for threatened flora and fauna species; and ○ habitat for flora and fauna species known to occur in the region.
Cumbo Creek relocation	• Restored in accordance with conditions 26 to 28 of this Schedule.
Other reinstated drainage lines	• Drainage lines are restored in accordance with the principles, concepts and techniques described in *"A rehabilitation manual for Australian streams (Rutherford,I; Jerie, K; Marsh, N 2000)*
Community	• Ensure public safety • Minimise the adverse socio-economic effects associated with mine closure

Note: To avoid any doubt, the final landform in Pit 8 must not include a final void and must be consistent with the landform proposed in the Applicant's Response to the Planning Assessment Commission Review, dated February 2017, and shown conceptually in Appendix 8.

Plate 4 – Rehabilitation Objectives as per Development Consent (SSD-6764)

2. Post-Mining Landforms

Issue

Some submitters were concerned that post-mining landforms associated with the Modification may not support natural drainage patterns.

Response

Final landforms at the Wilpinjong Coal Mine are designed to be safe, stable and non-polluting, with constructed landforms shaped to drain to the natural environment (excluding final voids).

The Rehabilitation Strategy (WCPL, 2022) provides context as follows:

> *One objective of the final landform is to develop drainage features in the post-mine landform that mitigate erosion potential and incorporate micro-relief (i.e. geomorphic landform design). The Resources Regulator defined geomorphic landform design in its Rehabilitation Information Release – Geomorphic Landform Establishment at Mount Pleasant Operations Coal Mine (August, 2021) as follows:*
>
> > *Geomorphic design is a method where a landscape is constructed based on a set of geomorphic rules such as Strahler stream order, hillslope length and curvature and stream length.*
>
> *The application of micro-relief concepts to open cut mining activities is principally focussed on "complex landforms", such as the design of large elevated out of pit waste emplacement landforms. However, WCPL incorporates micro-relief within its in-pit waste rock emplacement landforms. The Wilpinjong Coal Mine final landform is much more topographically subdued than post-mining landforms that involve large out of pit waste emplacements or in-pit emplacements that are constructed significantly above pre-mining elevations. Notwithstanding, key principles that have been considered, and where relevant applied, include:*
>
> - *Establishing valleys in rehabilitated landscapes consistent with the types of valleys observed in natural landscapes.*
> - *Rehabilitated areas should blend into and complement the drainage pattern of the surrounding terrain.*
> - *Designing channels of progressively higher orders and of greater capacity and cross-sectional area (Hannan, 1984).*
> - *Establishing watercourses that become progressively steeper as one moves upstream (Environment Australia, 1998, p.20).*

Monitoring and adaptive management is undertaken to confirm that post-mining drainage performance can align with design objectives over time. Re-establishment of drainage in the post-mining landforms is an integral component of the Wilpinjong Coal Mine's rehabilitation and closure planning, which would be reviewed and updated to incorporate the Modification, should it be approved.

4.2.18 Other

Comments made in public and organisation submissions relevant to other issues include clarification of concerns relating to:

1. Peabody Perception.
2. Assessment Process.

Responses to these comments are provided below.

1. Peabody Energy Perception

Issue

A number of submitters indicated Peabody's track record with respect to environmental incidents at other operations, accuracy of reporting, handling of community complaints, or workforce practices made them sceptical of the Modification proposal.

Response

WCPL has a strong environmental compliance record and has been continuously operating in the Western Coalfield for approximately 20 years. WCPL's environmental performance is reviewed each year through the Annual Review process and every three years through an extensive Independent Environmental Audit, with each of these review processes being subject to NSW Government oversight. The associated reports are publicly available on the Peabody website.

WCPL recognises that submitters on the Modification vary widely in their perception of coal mining operations and associated businesses, and that some submitters expressed their low regard for Peabody, which operates a wide range of coal mining operations globally, including the Western Coalfield (i.e. Wilpinjong), Hunter Valley (i.e. Wambo Coal Mine and United Wambo Joint Venture) and the Southern Coalfield (i.e. Metropolitan Mine) within NSW.

WCPL also notes that some 549 public and 61 organisation submissions received were in support of the proposed continuation of Wilpinjong Coal Mine's operations inclusive of the Modification, with a significant proportion of positive submission coming from within the Mid-Western Regional LGA.

2. Assessment Process

Issue

Some submitters expressed concerns regarding the approvals pathway and assessment process for the Modification, including:

- approvals pathway;
- public exhibition period;
- lack of merit appeal rights; and
- determination by a Delegate of the Planning Minister.

Response

WCPL notes that the NSW Government environmental assessment regime, legal context, assessment process and determining authority are all matters that are outside of WCPL's control. Notwithstanding, summary responses are provided below to key points raised in submissions.

The proposed amendments to Development Consent (SSD-6764) as part of the Modification are being sought under section 4.55(2) of the EP&A Act on the basis that the Wilpinjong Coal Mine's incorporation of the proposed modification would be "substantially the same" as the currently approved Wilpinjong Coal Mine. WCPL considers that the key material and essential features of the Wilpinjong Coal Mine would remain substantially unchanged compared to the currently approved operation, as outlined in the Modification Report. The consent authority is ultimately required to be satisfied that this is the case.

Schedule 1, clause 10 of the EP&A Act states the following in relation to public exhibition requirements for Modifications (underline added):

> ***10 Application for modification of development consent that is required to be publicly exhibited by the regulations***
>
> *Minimum public exhibition period for an application for modification of development consent that is required to be publicly exhibited by the regulations—*
>
> *(a) if the relevant community participation plan specifies a period of public exhibition for the application—the period so specified, or*
>
> *(b) otherwise—14 days.*

Therefore, under the EP&A Act, relevant Modifications must be publicly exhibited for a minimum of 14 days. However, in practice, DPHI often exhibits Modifications pursuant under Section 4.55(2) of the EP&A Act for more than 14 days. In the case of the Modification, an approximately 28 day exhibition period was provided by DPHI, which exceeds the statutory requirements under the EP&A Act. WCPL acknowledges that some community members felt the timeframe to make a submission was challenging, however, the public exhibition period is a matter for DPHI to determine.

It is noted that the current Development Consent (SSD-6764) for the Wilpinjong Extension Project was granted by the NSW Planning Assessment Commission (now the NSW Independent Planning Commission [IPC]) as a delegate of the NSW Minister for Planning. Current NSW planning provisions specify that the IPC will also determine modifications if certain triggers apply, notably, if the applicant has made a reportable political donation. In this case, no such donation has been made and the consent authority for the Modification application remains the NSW Minister for Planning and Public Spaces, or Delegate (i.e. DPHI). In both cases, the Wilpinjong Extension Project, and the Modification, no merit appeal rights were/are available under the EP&A Act. However, in both cases, judicial review rights were/are available under the EP&A Act.

Irrespective of the determining entity, the consent authority must, in accordance with section 4.55(3) of the EP&A Act, consider the matters listed in section 4.15(1) of the EP&A Act, to the extent that are relevant to the development the subject of the Modification. To assist the determining authority in its consideration of relevant matters, further discussion is provided in the Modification Report.

5 MODIFICATION EVALUATION

A total of 930 submissions on the Modification were received from government agencies, local council, organisations and members of the public during the exhibition period for the Modification. These comprised 11 submissions (1%) from government agencies and local council, 89 submissions (10%) from organisations, and 830 submissions (89%) from members of the public.

This Submissions Report provides responses to issues or concerns raised by government agencies, local council, organisations and members of the public during the exhibition period for the Modification and has been prepared in consideration of the S*tate significant development guidelines – preparing a submissions report* (DPHI, 2024a).

WCPL has not responded to the 610 submissions (66%) that were in support of the Modification.

The Modification Report provides an evaluation of the Modification in Section 7 (WCPL, 2025). This evaluation concluded that in weighing up the main environmental impacts (costs and benefits) associated with the proposal as assessed and described in the Modification Report, the Modification is, on balance, considered to have merit.

Since lodgement of the Modification Report, WCPL has reviewed the submissions on the Modification and has continued to consult with members of the community and key NSW Government agencies. WCPL has also sought additional advice from environmental technical specialists. Based on feedback from key regulatory agencies and additional technical advice, WCPL has amended some mitigation measures and/or provided further explanation or mitigation/monitoring commitments to address residual concerns.

WCPL notes that the key concerns as observed in objecting submissions from the community (dominated by submissions from NSW outside the Mid-Western Regional LGA) primarily relate to the following potential impacts/topics (Sections 2 and 4.2):

- justification of the Modification;
- biodiversity;
- water resources;
- greenhouse gas emissions and global warming;
- social impacts;
- Aboriginal heritage; and
- amenity impacts.

WCPL notes that key positive benefits as observed in supporting submissions from the community (dominated by submissions from NSW within the Mid-Western Regional LGA) primarily relate to the following topics (Section 2):

- maintaining job security (e.g. for the existing Wilpinjong Coal Mine workforce and contractors/suppliers);
- contribution to the regional economy;
- training, apprenticeships, career development and financial support of community organisations; and
- contribution to royalties, taxes (and export revenues)[6].

Based on the further consultation and analysis, WCPL has concluded that the key potential impacts and benefits of the Modification and the justification for the Modification remain consistent with the conclusions presented in Section 7 of the Modification Report. Some modest changes to Modification mitigation/monitoring and/or proposed offset measures have arisen because of the feedback received in submissions and additional consultation conducted. However, there has been no need to amend the Modification proposal (or modified project description).

[6] It is noted that as of 31 December 2025, the Wilpinjong Coal Mine has contributed more than $934 million in royalty payments to the NSW Government since it commenced in 2006.

The Modification would maximise the use of existing infrastructure and help slow the natural decline in workforce numbers that would otherwise occur as the approved Wilpinjong Coal Mine progressively completes its current working faces, by providing an additional working face for the life of the Modification.

The continuation of ROM coal extraction would also increase the availability and diversity of coal available to the NSW power generation market as Bayswater Power Station transitions to closure by the end of 2033 (AGL, 2025).

In weighing up the main environmental impacts (costs and benefits) associated with the proposal as assessed and described within the Modification Report and this Submissions Report, the Modification remains, on balance, in the public interest of the State of NSW.

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