

# 2018 Independent Environmental Audit

Wilpinjong Coal Mine (Development Consent SSD-6764)

October 2018

# 2018 Independent Environmental Audit

Wilpinjong Coal Mine (Development Consent SSD-6764)

Client: Wilpinjong Coal Pty Ltd

ABN: 87 104 594 694

Prepared by

**AECOM Australia Pty Ltd**

Level 21, 420 George Street, Sydney NSW 2000, PO Box Q410, QVB Post Office NSW 1230, Australia

T +61 2 8934 0000 F +61 2 8934 0001 www.aecom.com

ABN 20 093 846 925

12-Oct-2018

Job No.: 60581170

AECOM in Australia and New Zealand is certified to ISO9001, ISO14001 AS/NZS4801 and OHSAS18001.

© AECOM Australia Pty Ltd (AECOM). All rights reserved.

AECOM has prepared this document for the sole use of the Client and for a specific purpose, each as expressly stated in the document. No other party should rely on this document without the prior written consent of AECOM. AECOM undertakes no duty, nor accepts any responsibility, to any third party who may rely upon or use this document. This document has been prepared based on the Client's description of its requirements and AECOM's experience, having regard to assumptions that AECOM can reasonably be expected to make in accordance with sound professional principles. AECOM may also have relied upon information provided by the Client and other third parties to prepare this document, some of which may not have been verified. Subject to the above conditions, this document may be transmitted, reproduced or disseminated only in its entirety.

## Quality Information

Document 2018 Independent Environmental Audit

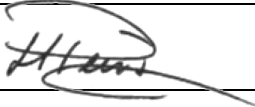
Ref 60581170

Date 12-Oct-2018

Prepared by Kate Michelmores and Helen Onus

Reviewed by Ian Richardson

### Revision History

Rev	Revision Date	Details	Authorised	
			Name/Position	Signature
0	25-Sep-2018	Draft Report for Review by Client	Helen Onus Lead Auditor	
0	08-Oct-2018	Final IEA Report	Helen Onus Lead Auditor	

## Table of Contents

Abbreviations	1
Executive Summary	3
1.0 Introduction	4
1.1 Background	4
1.2 Audit Scope	4
1.3 Audit Methodology	5
2.0 Audit Process	7
2.1 Audit Program	7
2.1.1 Pre-audit meeting	7
2.1.2 Document Review	7
2.1.3 Audit Checklist	8
2.1.4 Site Inspection and Audit Team	8
2.1.5 Audit Verification Activities	9
3.0 Wilpinjong Coal Mine Operations	10
3.1 WCM Overview	10
3.1.1 Approvals History	10
3.1.2 Operations	11
3.1.3 Approvals, Licences and Leases	11
4.0 Agency Consultation	14
4.1 Department of Planning and Environment	14
4.2 Environment Protection Authority	14
4.3 Office of Environment and Heritage	14
4.4 Resource Regulator	15
4.5 Community Consultative Committee	16
5.0 Site Inspection Observations	17
6.0 Environmental Performance	22
6.1 Incident Management	22
6.1.1 Reportable Incidents	22
6.1.2 Regulatory Action	22
6.1.3 Incident Management	23
6.2 Complaint Management	23
6.3 Community Consultation	25
7.0 Review of Environmental Management	26
7.1 Noise Management Plan	26
7.2 Blast Management Plan	26
7.2.1 Blast overview	26
7.2.2 Summary of Effectiveness of Blast Management Plan	27
7.2.3 Blast Management Plan Adequacy Review	28
7.3 Air Quality Management Plan	28
7.4 Water Management Plan	28
7.4.1 Cumbo Creek Relocation Plan	28
7.4.2 Groundwater Management Plan	28
7.4.3 Surface Water Management Plan	28
7.4.4 Site Water Balance	28
7.5 Biodiversity Management Plan	29
7.6 Aboriginal Cultural Heritage Management Plan	29
7.6.1 Aboriginal Cultural Heritage Overview	29
7.6.2 Summary of Effectiveness of Aboriginal Cultural Heritage Management Plan	29
7.6.3 Aboriginal Cultural Heritage Management Plan Adequacy Review	30
7.7 Historic Heritage Management Plan	30
7.7.1 Historic Heritage Overview	30
7.7.2 Summary of Effectiveness of Historic Heritage Management Plan	31
7.7.3 Historic Heritage Management Plan Adequacy Review	31
7.8 Rehabilitation Management Plan and Rehabilitation Strategy	31

7.9	Social Impact Management Plan	31
8.0	Specialist Areas	32
8.1	Rehabilitation Management	32
8.1.1	Rehabilitation Overview	32
8.1.2	Rehabilitation Photographs	32
8.1.3	Summary of Effectiveness of Rehabilitation Management	37
8.1.4	Rehabilitation Management Plan Adequacy Review	39
8.1.5	Biodiversity Management Plan Adequacy Review	39
8.2	Noise Management	40
8.2.1	Noise Overview	40
8.2.2	Summary of Effectiveness of Noise Management Plan	40
8.2.3	Noise Management Plan Adequacy Review	41
8.3	Groundwater Management	41
8.3.1	Groundwater Overview	41
8.3.2	Groundwater Photographs	42
8.3.3	Summary of Effectiveness of Groundwater Management	43
8.3.4	Groundwater Management Plan Adequacy Review	44
8.4	Surface Water Management	45
8.4.1	Surface Water Overview	45
8.4.2	Surface Water Photographs	45
8.4.3	Summary of Effectiveness of Surface Water Management	48
8.4.4	Surface Water Management Plan Adequacy Review	48
8.4.5	Site Water Balance	49
8.5	Air Quality Management	50
8.5.1	Air Quality Overview	50
8.5.2	Air Quality Photographs	50
8.5.3	Summary of Effectiveness of Air Quality Management	53
8.5.4	Air Quality Management Plan Adequacy Review	56
9.0	Compliance Summary and Recommendations	57
9.1	Non-Compliant Conditions	58
9.1.1	Development Consent SSD-6764	58
9.1.2	Environmental Protection Licence 14546	60
9.1.3	Mining Lease 1573	61
9.2	Additional Opportunities for Improvement	62
10.0	Limitations	69
Appendix A		
	Compliance Matrix	A
	Appendix A1 Audit Checklist Development Consent SSD 6764	A-1
	Appendix A2 Audit Checklist Environmental Protection Licence 12425	A-72
	Appendix A3 Audit Checklist Mining Lease 1573	A-89
Appendix B		
	Audit Team DPE Approval	B
Appendix C		
	IEA Declaration Form	C

### List of Figures

Figure 1	Location of WCM ( <i>Source: WCPL 2017 Annual Review</i> )	12
Figure 2	WCM Site Layout and Surrounds ( <i>Source: WCPL 2017 Annual Review</i> )	13

### List of Tables

Table 1	Development Consent SSD-6764 IEA Conditions	4
Table 2	Audit Programme	7
Table 3	Audit Team	8
Table 4	Summary of Existing Major Approvals and Licences	11

Table 5	Site Inspection Photographs	17
Table 6	Summary of Complaints Recorded between 01 April 2017 and 23 August 2018	23
Table 7	Summary of complaints received by each complainant	24
Table 8	Site Inspection Photographs – Rehabilitation Specialist	33
Table 9	Site Inspection Photographs – GroundWater Specialist	42
Table 10	Site Inspection Photographs – Surface Water Specialist	45
Table 11	Site Inspection Photographs – Air Quality Specialist	50
Table 12	Compliance Performance Categories	57
Table 13	Summary of Non-Compliances against Development Consent SSD-6764	58
Table 14	Summary of Non-Compliances against EPL 14546	60
Table 15	Summary of Non-Compliances against ML 1573	61
Table 16	Summary of Opportunities for Improvement not relating to non-compliances	62

## Abbreviations

Abbreviation	Description
ACHMP	Aboriginal Cultural Heritage Management Plan
AECOM	AECOM Australia Pty Ltd
AQMP	Air Quality Management Plan
ARD	Archaeological Research Design
BMgtP	Blasting Management Plan
BMP	Biodiversity Management Plan
BOM	Bureau of Meteorology
BVT	Biometric Vegetation Type
CCC	Community Consultative Committee
CHPP	Coal Handling Preparation Plant
CoA	Conditions of Approval
DC	Development Consent
DPE	Department of Planning and Environment
DRG	DPE, Division of Resources and Geoscience, now Resource Regulator
EA	Environmental Assessment
EL	Exploration Licence
EMS	Environmental Management System
EPA	Environmental Protection Authority
EPL	Environmental Protection Licence
GDP	Ground Disturbance Permit
GWMP	Groundwater Management Plan
HHMP	Historic Heritage Management Plan
IEA	Independent Environmental Audit
ML	Mining Lease
MOP	Mining Operations Plan
NMP	Noise Management Plan
OFI	Opportunity for Improvement
RAP	Registered Aboriginal Party
RAPCC	Registered Aboriginal Parties Consultation Committee
RMP	Rehabilitation Management Plan
ROM	Run of Mine Coal
RR	DPE, Resource Regulator
Secretary	Secretary of the Department of Planning and Environment or delegate
SIMP	Social Impact Management Plan
SWMP	Surface Water Management Plan

Abbreviation	Description
WCM	Wilpinjong Coal Mine
WCPL	Wilpinjong Coal Pty Ltd
WEP	Wilpinjong Extension Project
WMP	Water Management Plan
WTF	Water Treatment Facility



## Executive Summary

AECOM Australia Pty Ltd (AECOM) was engaged by Wilpinjong Coal Pty Ltd (WCPL) to carry out an Independent Environmental Audit (IEA) of the Wilpinjong Coal Mine (WCM) located at Wilpinjong, New South Wales.

WCM previously operated under Project Approval (PA 05-0021), granted on 1 February 2006 however on 24 April 2017 WCPL was granted Development Consent (SSD-6764) for the Wilpinjong Extension Project (WEP) that continues operation of the Mine at rates of up to 16 million tonnes per annum (Mtpa) of run-of-mine (ROM) out to the year 2033.

Schedule 5, Condition 10, of SSD-6764 requires WCPL to commission an IEA within a year of commencing development of the WEP. To meet this requirement AECOM was commissioned officially on 27 July 2018 to carry out an independent audit of the WCM development consent. This is the first IEA to be carried out at WCM under SSD-6764 and for the purpose of this audit the audit period has been defined as from the date of commencement of development under SSD 6764, 19 September 2017, to 24 August 2018 (the date the IEA site visit concluded).

This audit was completed in accordance with the requirements of SSD-6764 Schedule 5, Condition 10, AECOM's proposal to conduct the work dated 24 May 2018 and the NSW Department of Planning and Environment (DPE) Independent Audit Post Approval Requirements June 2018. The IEA assessed compliance with relevant approvals, licences and management plans applicable to the WCM. Detailed compliance registers identifying audit findings, comments and recommendations are presented in Appendix A.

The IEA methodology included:

- Initial discussions with WCPL to organise the audit, including the provision of documentation, the site visit and timing;
- Review of documentation provided by WCPL and preparation of compliance assessment checklists that included a list of conditions of key regulatory approvals to be assessed for compliance;
- Three-day site inspection including review of documentation and interviews with key site personnel and contractors on 22-24 August 2018. The site inspection was attended by the Lead Auditor, Auditor and specialists in the areas of; Noise, Air Quality, Rehabilitation, Surface Water and Groundwater;
- Consultation with key government agencies as presented in this report;
- Review of additional documentation provided by WCPL after the site inspection;
- An assessment of environmental management performance through review of; the implementation of key environmental management strategies, plans and programs; non-compliances documented in annual reporting; regulatory actions; incidents; and complaints.
- An assessment of compliance was undertaken for each condition within the selected regulatory approvals based on a review of documentation, observations during site inspections, interviews, implementation of management plans, incidents, complaints and regulatory action.
- Submission of a draft audit report to WCPL to provide an opportunity for additional information and / or correction of fact; and,
- Finalisation of the report.

In summary four non-compliances were identified against development consent SSD 6764, three non-compliances were identified against EPL 12425 and one non-compliance was identified against WCPL's ML 1573.

Non-compliances identified against relevant approvals are identified and discussed in Section 9.1. A summary of the WCPL's overall environmental performance is summarised in Section 6.0.

## 1.0 Introduction

### 1.1 Background

AECOM Australia Pty Ltd (AECOM) was engaged by Wilpinjong Coal Pty Ltd (WCPL) to carry out an Independent Environmental Audit (IEA) of the Wilpinjong Coal Mine (WCM) located at Wilpinjong, New South Wales.

WCM previously operated under Project Approval (PA 05-0021), granted on 1 February 2006 however on 24 April 2017 WCPL was granted Development Consent (SSD-6764) for the Wilpinjong Extension Project (WEP) that continues operation of the Mine at rates of up to 16 million tonnes per annum (Mtpa) of run-of-mine (ROM) out to the year 2033.

This is the first IEA to be carried out at WCM under SSD-6764 and for the purpose of this audit the audit period has been defined as from the date of commencement of development under the WEP, 19 September 2017 to 24 August 2018 (the date the IEA site visit concluded).

### 1.2 Audit Scope

The requirements for the IEA are set out in Schedule 5, Condition 10 of the Development Consent SSD-6764 granted by the NSW Minister of Planning on 24 April 2017 as detailed in Table 1.

**Table 1 Development Consent SSD-6764 IEA Conditions**

Development Consent Condition	Requirement	IEA Reference
SSD-6764 Schedule 5 Condition 10	Within a year of commencing development under this consent, and every 3 years thereafter, unless the Secretary directs otherwise, the Applicant must commission and pay the full cost of an Independent Environmental Audit of the development. This audit must:	This Report
SSD-6764 Schedule 5 Condition 10(a)	be conducted by a suitably qualified lead auditor and suitably qualified, experienced and independent team of experts in any field specified by the Secretary, whose appointment has been endorsed by the Secretary;	Appendix B
SSD-6764 Schedule 5 Condition 10(b)	include consultation with relevant agencies;	Section 4.0
SSD-6764 Schedule 5 Condition 10(c)	assess the environmental performance of the development and assess whether it is complying with the requirements in this consent and any relevant Environmental Protection Licence (EPL) or Mining Lease (including any assessment, plant and program required under these approvals);	Appendix A, Section 6.0 & Section 8.5.4
SSD-6764 Schedule 5 Condition 10(d)	review the adequacy of strategies, plans or programs required under the abovementioned approvals;	Section 7.0
SSD-6764 Schedule 5 Condition 10(e)	recommend appropriate measures or actions to improve the environmental performance of the development, and/or any strategy, plan or program required under the abovementioned approvals;	Section 8.5.4

Development Consent Condition	Requirement	IEA Reference
SSD-6764 Schedule 5 Condition 10(f)	be conducted and reported to the satisfaction of the Secretary.	-
SSD-6764 Schedule 5 Condition 10 note	Note: The Post Approval Requirements for State Significant Developments – Independent Audit Guideline, NSW Government, October 2015” (or its latest version) provides an audit and reporting framework for the independent audit that will guide compliance with this condition.	-
SSD-6764 Schedule 5 Condition 11	Within 3 months of commissioning this audit, or as otherwise agreed by the Secretary, the Applicant must submit a copy of the audit report to the Secretary, together with its response to any recommendations contained in the audit report, and a timetable for the implementation of these recommendations as required. The Applicant must implement these recommendations, to the satisfaction of the Secretary.	WCPL is required to submit this report along with responses to recommendations made in this report to the DPE.

### 1.3 Audit Methodology

The IEA was undertaken in general accordance with:

- Independent Audit Post Approval Requirements, DPE, June 2018;
- AS/NZS ISO 19011:2014 Guidelines for auditing management systems; and
- AECOM’s proposal (dated 24 June 2018).

The IEA methodology included:

- Pre Audit;
  - Initial discussions with WCPL to organise the audit, including the provision of documentation, the site visit and timing;
  - Review of documentation provided by WCPL and their representatives and preparation of compliance assessment checklists that included a list of conditions of key regulatory approvals to be assessed for compliance; and,
  - Consultation with key government agencies as presented in this report.
- IEA Site Inspection:
  - Three-day site inspection including review of documentation and interviews with key site personnel and contractors on 22-24 August 2018.
- IEA Reporting:
  - Review of additional documentation provided by WCPL after the site inspection;
  - An assessment of environmental management performance through review of: the implementation of key environmental management strategies, plans and programs; non-compliances documented in annual reporting; regulatory actions; incidents; and complaints.
  - An assessment of compliance was undertaken for each condition within the selected regulatory approvals based on a review of documentation, observations during site

inspections, interviews, implementation of management plans, incidents, complaints and regulatory action.

- Submission of a draft audit report to WCPL to provide an opportunity for additional information and / or correction of fact; and,
- Finalisation of the report.

This report provides a summary of findings including details of non-compliances identified in the audit, and recommended actions to improve compliance status and / or environmental performance.

## 2.0 Audit Process

### 2.1 Audit Program

A summary of the audit programme is provided in Table 2.

**Table 2 Audit Programme**

Start Date	End Date	Actions
27.07.18	27.07.18	Project kick-off meeting between AECOM auditors and WCPL
30.07.18	10.08.18	Audit Checklists prepared
30.07.18	18.09.18	Consultation with relevant agencies
13.08.18	21.08.18	Review of evidence provided by WCPL
22.08.18	24.08.18	IEA site inspection
27.08.18	21.09.18	Preparation of IEA draft report
24.09.18	28.09.18	WCPL review draft report and provide comments
01.10.18	05.10.18	Final Report

#### 2.1.1 Pre-audit meeting

A pre-audit project kick off telephone call was held on 27 July 2018 between the following personnel:

- Helen Onus, Lead Auditor, AECOM
- Kate Michelmores, Auditor and Project Manager, AECOM
- Kieren Bennetts, Manager Environment & Community, WCPL
- Stephen Bragg, Senior Environmental Contractor, WCPL

#### 2.1.2 Document Review

AECOM submitted a request for documentation to WCPL on 01 August 2018 as part of the pre-audit preparation. The documents were provided by WCPL and included, but were not limited, to the following:

- Annual Review 2017
- EPL 12425 Annual Return
- Water Access Licences;
- Approval Letters from DPE for relevant management plans
- Environmental Management Strategy
- Noise Management Plan
- Blast Management Plan
- Air Quality Management Plan
- Water Management Plan
- Biodiversity Management Plan
- Aboriginal Cultural Heritage Management Plan
- Historic Heritage Management Plan
- Mining Operations Plan / Rehabilitation Management Plan
- Draft Social Impact Management Plan

- Incident Register
- Complaints Register
- Monitoring records for noise, blasting and air quality
- Meteorological data
- Water balance data
- Sewage Treatment Approvals
- Landowner consultation
- Environmental Induction Program

### 2.1.3 Audit Checklist

An audit checklist was prepared prior to the site inspection, based on the requirements of SSD-6764, EPL 12425 and ML 1573. The completed checklist is provided in Appendix A.

### 2.1.4 Site Inspection and Audit Team

A three day site inspection was conducted at WCM on 22, 23 and 24 August 2018. During the site inspection the weather conditions were cool in the mornings with clear, sunny days and the day time temperature ranging from 4.1°C to 19 °C. Rainfall in the region had been below average in the past 12 months prior to the audit. Rainfall data recorded on the Bureau of Meteorology (BOM) website<sup>1</sup> indicated that the Town of Wollar, located approximately 7 kilometres away from WCM, had received 209mm of rain between January and July 2018. This is lower than the all-time average for this period which is 344mm.

The Audit Team consisted of the following qualified, experienced and independent personnel listed in Table 3.

**Table 3 Audit Team**

Name	Position	Organisation	Onsite
Helen Onus	Lead Auditor	AECOM	22 – 24 August 2018
Kate Michelmore	Auditor	AECOM	22 – 24 August 2018
Amanda Kerr	Surface Water Specialist	AECOM	23 August 2018
Dee Murdoch	Rehabilitation Specialist	AECOM	23 August 2018
Patrick Martinez	Noise Specialist	AECOM	22 August 2018
Angus McFarland	Groundwater Specialist	AECOM	22 August 2018
David Rollings	Air Quality Specialist	AECOM	23 August 2018
Ian Richardson	Peer Review and Verification	AECOM	Did not attend site

Both the Lead Auditor and Auditor are registered Exemplar Global auditors. In addition the audit team, inclusive of specialists, was approved by the DPE to conduct the audit. Refer letter from DPE provided in Appendix B.

<sup>1</sup> Source: BOM Wollar Weather Station (62032), data from 1901 – 2018  
[http://www.bom.gov.au/jsp/ncc/cdio/weatherData/av?p\\_nccObsCode=139&p\\_display\\_type=dataFile&p\\_startYear=&p\\_c=&p\\_stn\\_num=062032](http://www.bom.gov.au/jsp/ncc/cdio/weatherData/av?p_nccObsCode=139&p_display_type=dataFile&p_startYear=&p_c=&p_stn_num=062032)

#### 2.1.4.1 Opening and Closing Meetings

In accordance with *ISO 19011:2018 Guidelines for auditing management systems* an opening and closing meeting was held during the Site inspection. Details of attendees at both meetings are listed below:

- David Mealing, Maintenance Manager
- Ian Flood, Manager Project Development and Approvals
- Sarel Grobler, Manager Commercial
- Nicola Searle, HR Superintendent
- Richard Cade, CHPP Manager
- Blair Jackson, General Manager
- Peter Grosvenor, Mine Manager
- Janiene Hoch, HST Manager
- Kieren Bennetts, Environment and Community Manager
- James Heesterman, Environmental Coordinator
- Josh Frappell, Environmental Advisor
- Stephen Bragg, Senior Environmental Contractor
- Nicholas Collings, Technical Services Manager

#### 2.1.5 Audit Verification Activities

The auditors undertook verification activities to confirm the reliability of audit evidence. This included interviews, data checking, the examination of records, and site inspections. Records were provided in electronic and/or hard copy by site personnel and additional documents were reviewed whilst on site.

Some aspects of the audit process may have relied on information, such as judgements and assumptions where external supporting evidence was unavailable or limited. Where this information was considered, its validity was confirmed to the extent possible prior to use by the auditors and is noted in appropriate areas of the audit checklists.

The majority of information was assessed off-site (e.g. review of management plans). The site inspections concentrated on assessment of the effectiveness of environmental management and adequacy of performance. The extent of audit activities was limited to the time available for the audit site inspections and interviews over three days.

## 3.0 Wilpinjong Coal Mine Operations

### 3.1 WCM Overview

WCM is an open cut coal mine located at 1434 Ulan-Wollar Road, Wilpinjong, New South Wales, 2850, approximately 40 kilometres (km) north-east of Mudgee and is situated within the Mid-Western Regional Local Government Area (refer Figure 1).

The area is characterised by narrow flood plains which link to tributaries of the Goulburn River. The surrounding environment consists of varying topography, including escarpments of the Great Dividing Range. Situated directly north-west of the mine are open cut coal mines operated by Moolarben Coal Operations (MCO) and Ulan Coal Operations (UCML). Other surrounding land uses include agriculture, which is mostly grazing, and rural residential areas concentrated around the villages of Wollar, Ulan, Cumbo and Araluen.

#### 3.1.1 Approvals History

WCM was initially granted project approval PA 05-0021 on 1 February 2006, with construction of the mine commencing in February 2006 and mining operations commencing in September 2006.

Project Approval 05-0021 was modified on six occasions between 2006 and 2016 (modification 2 was withdrawn). This included the following:

- Modification 1; Alternative mine access route and increased blasting frequency, determined 30/11/2007
- Modification 3; Water Treatment Facility, train and production frequency increase, determined 08/09/2010
- Modification 4; Production, trains and reverse osmosis plant, determined 24/08/2012
- Modification 5; extension by 70 hectares, production and infrastructure, determined 07/02/2014
- Modification 6; Production Optimisation increased ROM coal production from 15 Mtpa to 16 Mtpa, determined 21/11/2014
- Modification 7; Temporary product coal increase from 12.5 Mtpa to 13 Mtpa, determined 11/08/2016

In January 2016 WCPL sought approval under Division 4.1 of Part 4 of the EP&A Act for the Wilpinjong Expansion Project (WEP), which would replace the existing coal mine approval PA 05-0021.

On 24 April 2017 WCPL was granted Development Consent (SSD-6764) for the WEP. This resulted in the following:

- Extension to the life of the mine by approximately seven years (from 20026 to 2033)
- Continual open cut mining at rates of up to 16 Mtpa of ROM coal from the Ulan Coal Seam and Moolarben Coal Member in Mining Lease (ML) 1573 and in new Mining Lease Application (MLA) areas in Exploration Licence (EL) 6169 and EL 7091
- Approximately 800 hectares of open cut extension including a new open cut pit (Pit 8)
- Relocation of a section of the TransGrid Wollar to Wellington 330 kilovolt (kV) electricity transmission line
- Various local infrastructure relocations to facilitate mining extensions;
- Construction and operation of additional mine access roads to service new mining facilities located in Pits 5 and 8
- Construction of ancillary infrastructure in support of mining as well as other associated minor infrastructure, plant and activities



- Ongoing exploration activities

Operations at the approved WCM are covered by the existing ML 1573. Exploration activities for future operations are covered under EL 6169 and EL 7091. The Project would extend into three new MLA areas within both EL 6169 and EL 7091.

### 3.1.2 Operations

WCM extracts run-of-mine (ROM) coal that is processed at the Coal Handling Preparation Plant (CHPP) located on site. Coal that does not require processing through the CHPP is sent directly to product stockpiles. Product coal is transported east by rail on the existing Sandy Hollow Gulgong Railway to local energy generators and to the Port of Newcastle for export.

Mining operations occur in seven existing open cut pits (Pits 1-7), with approval for a new open cut pit Slate Gully (Pit 8) approved as part of the WEP approval. Figure 2 outlines the WCM site and specifies the location of the eight approved Pits. At the time of the audit commencement of mining operations in Pit 8 had not occurred.

The site operates 24 hours a day, 7 days a week with a workforce of up to 550, most of who reside in the Mid-Western Regional Area. Major components of the WCM include:

- Elevated waste rock emplacement in Pit 2
- ROM pads/coal stockpiles
- Water management infrastructure including oily water separators and water treatment facility;
- CHPP
- Product coal stockpiles
- Rail loop and associated infrastructure

Mining operations at WCM rely on bulk push dozers and hydraulic excavators to mine coal and waste rock in a strip mining configuration. Steady state mining consists of a combination of truck and excavator mining and dozer bulk pushing of blasted overburden into the previous strip void, followed by the removal of coal and interburden. Coal extraction occurs from the Ulan and Moolarben seams with a seam thickness ranging from approximately 0.5 – 12 meters, at depths of 5 – 40 meters deep.

### 3.1.3 Approvals, Licences and Leases

Table 4 lists the current approvals, licences and leases held for WCPL.

**Table 4 Summary of Existing Major Approvals and Licences**

Title	Agency	Expiry
Development Consent SSD-6764	DPE	2033
Mining Lease 1573	DRG	February 2027
Exploration Licence 6169	DRG	28 November 2017
Exploration Licence 7091	DRG	03 March 2019
Mining Operations Plan	DRG	30 June 2019
Environmental Protection Licence 12425	EPA	Until the licence is surrendered
Explosives Licence XSTR200024	WorkCover NSW	24 March 2018 (licence renewal application in progress)

Figure 1 Location of WCM (Source: WCPL 2017 Annual Review)

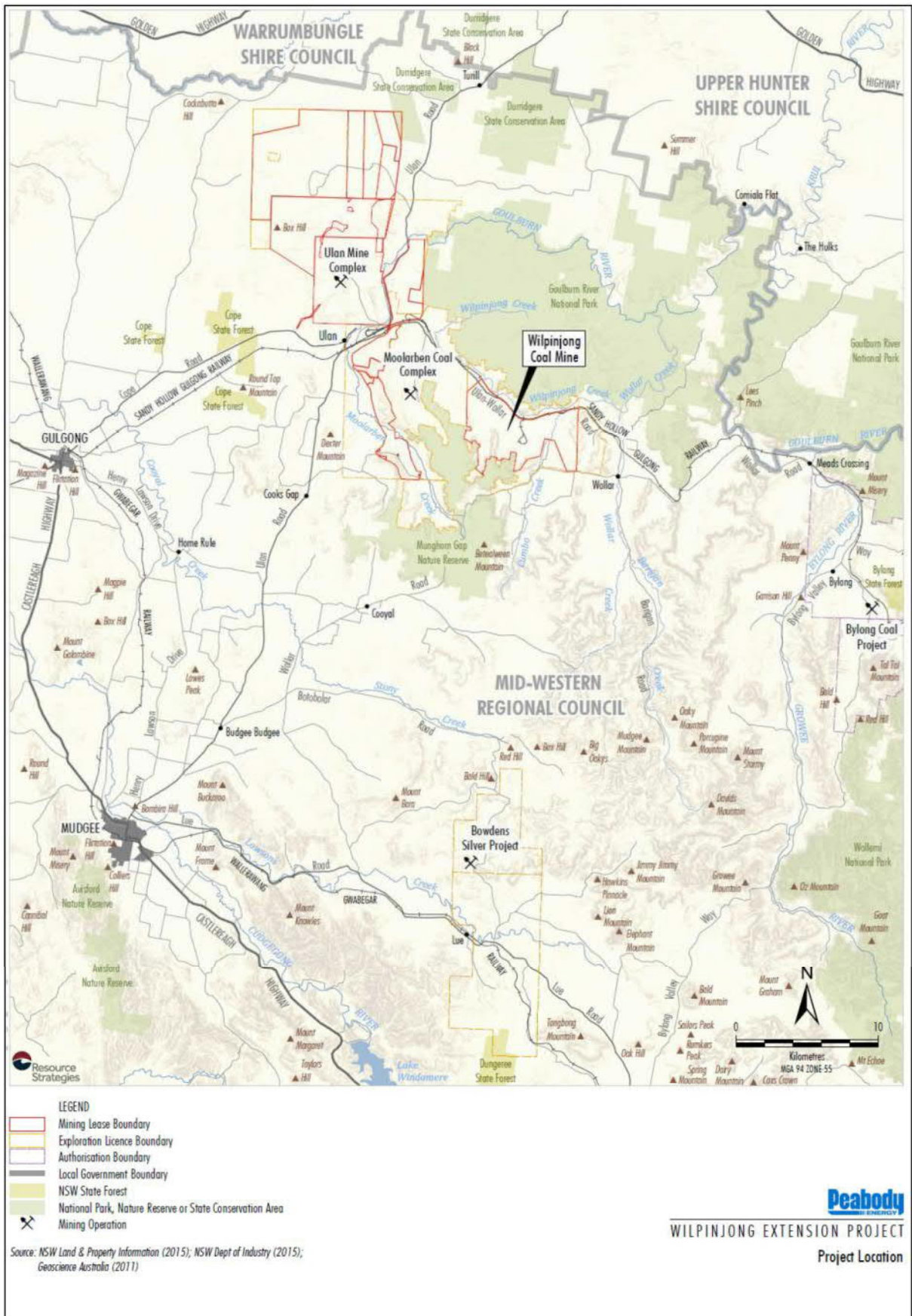
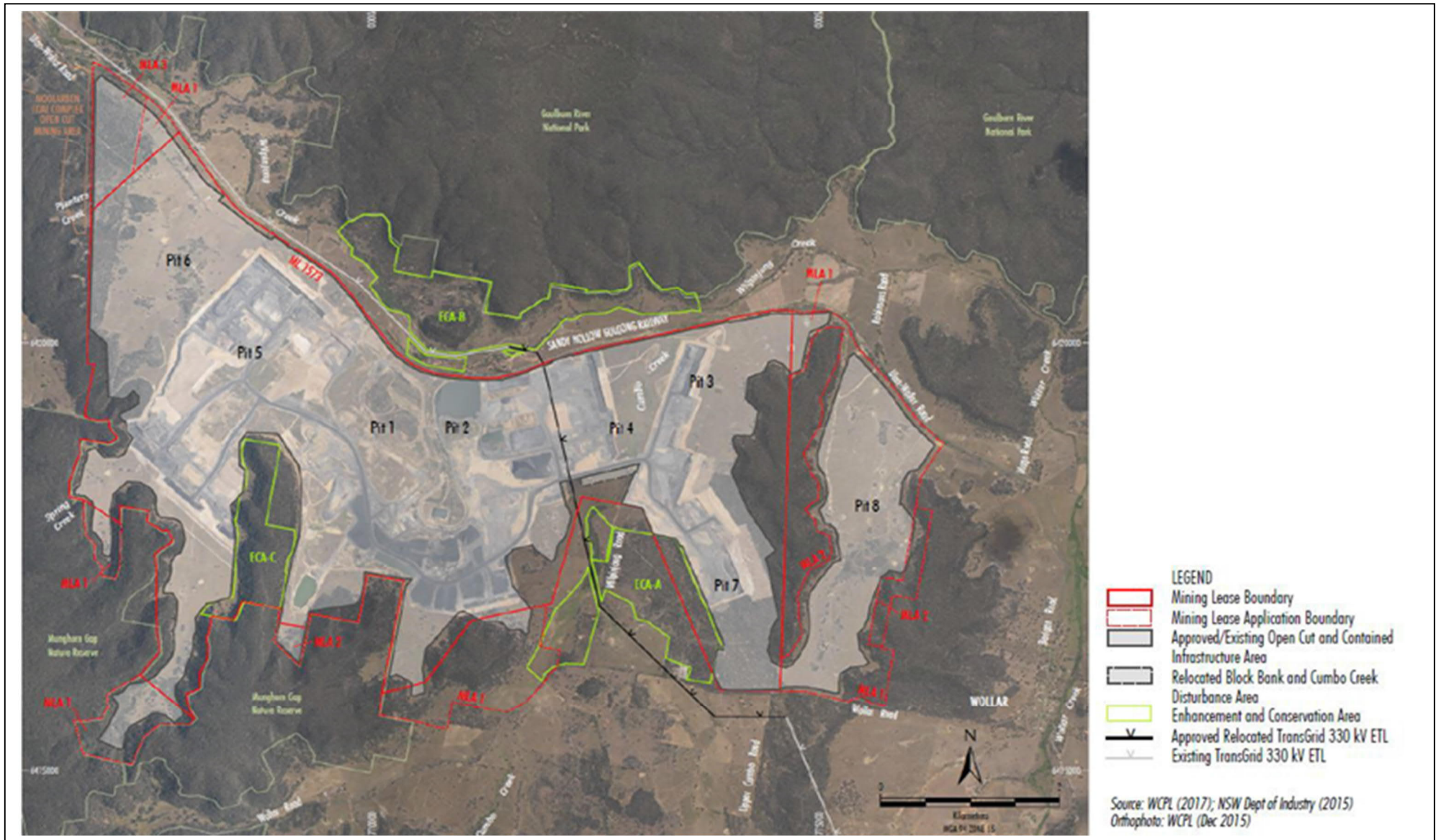


Figure 2 WCM Site Layout and Surrounds (Source: WCPL 2017 Annual Review)



## 4.0 Agency Consultation

As part of the audit process, AECOM consulted with key regulatory agencies to discuss the scope of the IEA and each agencies views on the environmental performance of the WCM. Feedback obtained from the regulatory agencies has been summarised in Section 4.1 –4.4 below.

### 4.1 Department of Planning and Environment

Feedback was sought on 20 August 2018 from the DPE Officer responsible for WCPL. The Officer, Chris Schultz – Senior Compliance Officer DPE, responded on 27 August 2018 indicating that the DPE would like the IEA to focus on the following areas:

- *Review blast monitoring locations in Management Plan for adequacy*
- *Review vegetation growth on visual bund*
- *Review acidic water quality trend downstream of discharge point*
- *Increasing trend for dust generation*

The DPE also made reference to complaints that had been received through the assessment process for the new consent. The DPE representative noted that *“One complaint was received regarding blasting in the area on 1 June 2018. It was noted that a blast had been heard on a property near Ulan and the vibration had been felt. Wilpinjong investigated and noted that the blast was compliant with criteria.”*

When asked about past compliance issues the DPE stated that *“There has been no enforcement action taken against Wilpinjong Coal in the period of the audit. A Warning Letter was issued on 13 June 2017 for the failure to undertake aquatic macroinvertebrate monitoring in Spring 2016 as required.*

*There have been a number of notifications to the Department regarding:*

- *PM10 events;*
- *Missing artefacts from bird rock;*
- *Keylah ash dump (ash on road); and,*
- *Failed HVAS runs and DDG void sample.”*

### 4.2 Environment Protection Authority

Feedback was requested from the NSW EPA officer responsible for WCPL on 20 August 2018. The Lead Auditor was contacted via phone call on 21 August 2018 by EPA Officer Allan Adams. The EPA indicated that it would like the IEA to address the management of dust as well as spontaneous combustion across the site.

The EPA Officer noted that WCPL had dealt with a spontaneous combustion issue “years ago” and that they would like the IEA to review complaints received in relation to spontaneous combustion and dust. In particular the EPA would like the IEA to review WCPL’s system in terms of response to complaints.

### 4.3 Office of Environment and Heritage

Feedback was requested from OEH on 20 August 2018. On 18 September 2018 the Lead Auditor received feedback from Peter Christie, Director, North West Conservation and Regional Delivery OEH. OEH reported that the main areas of interest for the OEH centred around Aboriginal cultural heritage and biodiversity. OEH suggested that the adequacy and effectiveness of the Biodiversity Management Plan and the Aboriginal Cultural Heritage Management Plan is assessed as part of the IEA.

OEH also requested that the following items be considered during the IEA:

**Aboriginal cultural heritage:**

1. Assess the adequacy of investigations into the Aboriginal cultural heritage values in offset areas 1 to 5 (schedule 3, condition 46);
2. Assess the adequacy and effectiveness of the implementation of the Aboriginal Cultural Heritage Management Plan (Schedule 3, condition 47); and,
3. OEH is unsure about whether engagement with the Registered Aboriginal Parties to gain their insights into the effectiveness of the implementation of the ACHMP, and the effectiveness of the engagement with the local community, forms part of the audit scope. We suggest this engagement may be useful.

**Biodiversity:**

1. Assess the adequacy and effectiveness of the implementation of the Biodiversity Management Plan (Schedule 3, condition 42), in particular delivery of the proposed management and monitoring actions, and performance and completion criteria. We are also interested in whether any of the trigger points in the TARP have been enacted and whether the corresponding response was adequate; and,
2. Effectiveness of the implementation of the Biodiversity Offset Strategy (Appendix 7) and the progress towards securing the offset areas with appropriate long-term mechanisms (Schedule 3, condition 32).

#### **4.4 Resource Regulator**

Feedback was requested from the NSW Compliance Operations, Resource Regulator (formerly Environmental Sustainability Unit) on 20 August 2018. Ben Gazi, Inspector Environment RR replied on 21 August 2018 with the following feedback:

*In respect to the scope of the Independent Environmental Audit, the RR would expect that compliance with the Mining Operations Plan (MOP) and conditions of Mining Lease No. 1573 [Mining Act (1992)] is assessed as part of the audit and due regard is given to these documents in accordance with Schedule 5, Condition 10 of the SSD-6764. In terms of the MOP I would suggest addressing the following factors to ensure the review is comprehensive:*

1. General compliance with the activities and objectives prescribed by the MOP;
2. Status of rehabilitation for individual domains (incl. an address areas completed and pending sign off and those still being developed);
3. Appraisal of rehabilitation performance and methodology;
4. Review of monitoring data (incl. soil fertility assessment, LFA data, etc.) and identification of emerging rehabilitation risk, if any;
5. Evaluation as to whether completed rehabilitation will reach 180ha target by end of the approval term; and,
6. Areas of improvement which can be incorporated into a MOP amendment for submission to the Department.

The RR Representative also raised concerns regarding the 180ha of rehabilitation proposed by the end of the MOP term. It was requested that the IEA ensured that when reviewing rehabilitation, "distinction is made between those areas where completion criteria have been attained and is pending review by the Department vs. those areas under active rehabilitation".

It is considered that the points raised by the agencies have been considered in the IEA Report including the Compliance Matrix.

## 4.5 Community Consultative Committee

Feedback was sought from the independent chair of the Community Consultative Committee (CCC) on 31 August 2018. Prior to the IEA audit report being finalised Lisa Andrews, Independent Chair CCC responded with the following feedback:

- The CCC meets on a quarterly cycle every February, May, August and December. WCPL provides a detailed presentation to the CCC each meeting and there are no outstanding compliance issues that the CCC is aware of.
- The chair of the CCC had not received any complaints about the operations of WCPL. The Chair did note that WCPL provide a detailed report to the CCC members during each meeting which outlines details of all complaints received.
- WCPL provide a detailed report on its environmental management including monitoring of dust, noise as well as rehabilitation.

The CCC Chair noted that there were no particular area or issues that she would like the IEA to focus on or investigate.

## 5.0 Site Inspection Observations

The following photographs provide an indication of the general observations made or referenced during the site inspections as detailed in Table 5. Additional photographs are included in each of the specialist areas specific to the observations made by the specialists.

**Table 5 Site Inspection Photographs**



Photo #	Comment	Photo
5-1.	Washed coal from the CHPP going to the product stockpile	
5-2.	Dust generated by non-mine related vehicles passing on the unsealed section of Ulan-Wollar road.	




Photo #	Comment	Photo
5-3.	Water cart sighted, offsite dust visible from Ulan-Wollar road	
5-4.	Air Quality Monitoring site DG12 – located near Aboriginal rock art site 72 (Castle Rock)	
5-5.	Aboriginal rock art site 72 (Castle Rock)	






Photo #	Comment	Photo
5-6.	Vibration monitor located near Aboriginal rock art site 72 (Castle Rock)	
5-7.	Degreaser stored in IBC which is pumped into workshop. Area is contained on hardstand which runs to drains which lead to oily water separator. Each drain also has a catcher, for solid material, which requires emptying.	
5-8.	Sign located on Wollar-Ulan Road, stating - "Wilpinjong Coal Project MINE BLASTING NEXT ROAD CLOSURE" Displays the date, date and time of the next schedule blast that will result in a road closure occurring.	





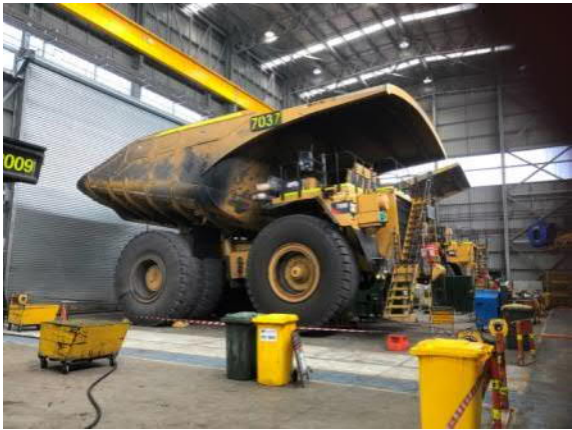
Photo #	Comment	Photo
5-9.	As per Voluntary Conservation Agreement WCPL maintain and have upgraded the toilets at the rear of the general store. The toilets are signposted.	
5-10.	WCPL contract the store owner to maintain the toilet facilities. A sensor light is in place and the toilets are accessible from the carpark area of the general store.	
5-11.	Heavy vehicle refuelling area.	

Photo #	Comment	Photo
5-12.	<p>Maintenance area was well maintained with only minor amounts of soil noted within the maintenance area (due to a bulldozer that was recently bought into the building). Other areas were very clean. Overall parasitic soil was not observed with exception of broken down bulldozer which had not been cleaned.</p>	
5-13.	<p>Maintenance area beneath haul truck was very clean with no tracked soil noted and negligible parasitic soil was observed.</p>	

## 6.0 Environmental Performance

This section assesses the requirement of the scope of works to “*assess the environmental performance of the development*”. It includes a review of incidents, complaints and community consultation practices.

The auditors based the assessment of the environmental performance of WCPL on the following:

- Assessment of implementation of management and monitoring plans described in Section 7.0
- Assessment of compliance with the SSD 6764, ML 1573 and EPL 12425. The findings of this assessment are provided in the Compliance Matrix presented in **Appendix A** with the identified non-compliances and associated recommendations summarised in Section 8.5.4
- Review of incidents reported during Site activities during the audit period (Section 6.1)
- Review of complaints received by WCPL during the audit period (Section 6.2)
- Review of community consultation practices by WCPL during the audit period (Section 6.3)

### 6.1 Incident Management

WCPL commit to managing and reporting all environmental incidents at the Mine in accordance with WCPL’s Incident Management Procedure and Pollution Incident Response Management Plan (PIRMP).

The PIRMP details that all incidents that cause, or threaten to cause, material harm to the environment (as defined by law) will be reported in accordance with the PIRMP. All other incidents and non-compliances with the Impact Assessment Criteria will be reported to DPE and EPA, and any other relevant agencies as specified in the relevant management plan, in accordance with WCPL’s Incident Management Procedure. If a non-compliance of any approval or licence condition is identified, WCPL state they will investigate the non-compliance and implement corrective actions as soon as required.

#### 6.1.1 Reportable Incidents

The site reported to the auditors that no reportable incidents or non-compliances occurred during the audit period which would require a detailed report to be provided to DPE and/or the EPA in accordance with the requirements of the Development Consent SSD 6764 and EPL 12425.

In addition no monitoring results showed an exceedance of the relevant Impact Assessment Criteria and as such WCPL were not required to notify affected landowners as specified in relevant management plans.

#### 6.1.2 Regulatory Action

The EPA issued WCPL with a formal warning letter due to dust emissions from site on 08 February 2018. This warning letter followed an unscheduled visit to site on 17 January 2018. The EPA officer identified excessive dust emissions from the mine as a result of activities being undertaken in Pit 7 and Pit 4. The inspection also identified a dust haze in the area around the mine when compared to that of the Ulan area. The EPA contacted the WCPL E&C Manager at the time of the observations and as a result WCPL ceased activities in the areas of concern and increased the use of water carts. The EPA considered the event to be a breach of the sites EPL conditions (Condition O3.1) and as a result issued the site with a formal warning.

Two additional warning letters were also issued by the EPA with regards to spontaneous combustion odour and noise emissions related to WCPL operations. The warning letters were received on 07 June 2017 and 23 August 2017 and as such are outside of the audit period.

A Formal Warning Letter was also issued for failing to undertake annual aquatic monitoring for macro-invertebrates, however this was outside of the audit period and related to a condition of the previous Project Approval and so was not reviewed in detail in this IEA.

### 6.1.3 Incident Management

In 2017 WCPL established a SAP based EHS Incident Management System to replace the previously used Peabody Incident Management System (PIMS) database. The SAP system includes an incident group of “Environmental Impact” enabling environmental incidents to be tracked. WCPL explained that environmental incidents are reported to the E&C Department who in turn enter the incidents into SAP by completing the “Initial Report of Incident” electronic form. Once the incident is recorded in SAP, additional information including corrective actions, investigations, risk assessments, reports etc. can be added or attached. The SAP incident system was demonstrated to the auditors during the audit site inspection.

The EPA letters were observed to have been entered into the SAP system as environmental incidents. An Opportunity for Improvement (OFI) exists to attach additional information (such as the correspondence to and from the EPA) to the incident logs in SAP.

#### 2018 IEA OFI 001

*Include supporting information (such as correspondence with regulators) to incidents logged in SAP.*

## 6.2 Complaint Management

WCPL has established a Complaint Response Protocol to respond to all community concerns. This Protocol involves operation of a community information and complaints hotline (**Complaints line:** 1300 606 625) which receives complaints from members of the public. WCPL also maintains a separate blasting hotline for blasting information (**Blast hotline:** 1800 649 783).

Complaints received from the community are logged in WCPL’s complaints management system, Consultation Manager. Consultation Manager was demonstrated to the auditors during the audit. Information about the complaint was recorded (date, time, complainants details, nature of the complaint) as well as WCPL’s response. Supporting information such as noise traces were observed to be attached. The auditors obtained an extract of the complaints recorded by WCPL for the period 01 April 2017 to 23 August 2018. These are summarised in Table 6 details below.

**Table 6 Summary of Complaints Recorded between 01 April 2017 and 23 August 2018**

Category	No. of Complaints
Noise	22
Blast	11
Air Quality	10
Odour	4
Infrastructure	1
<b>Total Complaints Recorded*</b>	<b>48</b>

\* Between period 01.04.2017 – 23.08.2018

WCPL received a total of 48 complaints during the audit period. The complaints were received from 10 individual complainants, as summarised in Table 7 below, indicating multiple complaints from the same complainant.

As indicated in Table 6 the majority of complaints (46%) received related to noise. 23% of complaints received related to blast operations and 29% of complaints received related to air quality and odour. These are discussed further under the relevant sections relating to those topics.

**Table 7 Summary of complaints received by each complainant**

Complainant	Noise	Blast	Air	Odour	Infrastructure	Total
Complainant 1	1	1				2
Complainant 2		6				6
Complainant 3	2	1				3
Complainant 4	6					6
Complainant 5	10		1			11
Complainant 6	3	1	1	3		8
Complainant 7		1				1
Complainant 8			8			8
Complainant 9				1		1
Complainant 10		1			1	2

In addition to the above complaints, WCPL also received a number of complaints via the EPA.

The EPA complaints had not been logged in Consultation Manager and were managed separately. Whilst WCPL was able to retrieve information relating to the EPA complaints efficiently, it is recommended they are also included in Consultation Manager so that all complaints are recorded in the one place.

#### **2018 IEA-OFI 002**

*Include complaints received via the EPA into Consultation Manager so that all complaints are captured in the one place to better facilitate data retrieval and trend analysis.*

The number of complaints recorded during the reporting period is comparable to that reported in the 2017 Annual Review and is consistent with the downward trend in complaints received from 2006 to 2018.

The audit identified that WCPL maintain a stringent complaints management process which complies with Development Consent and EPL requirements. In addition the auditors note that in many instances the WCPL environment department have investigated complainants concerns to a level which has included; attending the area, both in the day and at night, where noise or dust has been identified, consulting with Global Acoustics noise specialists regarding noise potential in the area of concern, consulting with WCPL dispatch department and requesting operations are ceased or altered and providing complainants with detailed technical information to justify findings and attempt to satisfy concerns.

### 6.3 Community Consultation

WCPL has a range of communication methods in place which enables it to share information with the local community. These methods include:

- Community Consultative Committee (CCC);
- Aboriginal Heritage Meetings;
- The Peabody Energy website - <https://www.peabodyenergy.com/Operations/Australia-Mining/New-South-Wales-Mining/Wilpinjong-Mine>
- Community Newsletters; and,
- 'Have a Chat' meetings on the first Thursday of every month in Wollar Village which allows for ad hoc meetings with members of the community. The dates of the 'Have a Chat' meetings are posted on the Peabody Energy website for WCM.

The WCPL CCC is run in accordance with NSW Planning and Infrastructure Guidelines for Establishing and Operating Community Consultative Committees for Mining Projects. CCC meetings allow WCPL to provide to the community a report on the progress of the mine as well as environmental performance. CCC meetings are held quarterly and include the following:

- An independent chairperson approved by the DPE;
- Council (MWRC) and National Parks and Wildlife Services (NPWS) representation;
- WCPL representation; and,
- Community representation.

Minutes of the meetings were available on the WCPL website. The minutes were noted to include the following:

- A summary of previous Action Items and an update on their status;
- An update on operations and overview of activities via a presentation by the E&C Manager.;
- An update on the WEP and property matters via a presentation by the Manager Project Development and Approvals;
- General business;
- A list of the correspondence provided to and from committee members; and,
- A summary of new Actions.

In general, it was considered that issues raised by the community during the CCC meetings were being considered and actions put in place to address questions / concerns. Communications with the CCC appeared to be transparent and information provided as requested.

## 7.0 Review of Environmental Management

Controls measures for environmental management of the WCM are outlined in the site environmental management plans. WCPL's Development Consent SSD-6764 requires the following management plans to be developed and implemented following approval from DPE:

- Environmental Management Strategy
- Noise Management Plan (NMP)
- Blast Management Plan (BMgtP)
- Air Quality Management Plan (AQMP)
- Water Management Plan (WMP) including Surface Water Management Plan (SWMP), Site Water Balance (SWB) and Groundwater Management Plan (GWMP)
- Biodiversity Management Plan (BMP)
- Aboriginal Cultural Heritage Management Plan (ACHMP)
- Historic Heritage Management Plan (HHMP)
- Rehabilitation Strategy
- Rehabilitation Management Plan (included as part of the Mining Operations Plan - MOP)
- Social Impact Management Plan (SIMP)

In accordance with Condition 10(d), Schedule 5 of SSD-6764A this audit has conducted a review of the adequacy of each plan listed above. Results of the adequacy review are summarised in the sections below. Management plans relating to topics covered by the specialists were reviewed by the specialists and included in Section 8.

### 7.1 Noise Management Plan

Condition 5, Schedule 3 of SSD-6764 requires a Noise Management Plan to be developed, prior to carrying out any development under the consent. A review of the adequacy of the noise management plan was conducted by the audit team's noise technical specialist. This information is provided in Section 8.1.3.

### 7.2 Blast Management Plan

#### 7.2.1 Blast overview

Overpressure and vibration associated with blasting activities at Wilpinjong Coal Mine is managed in accordance with the Blast Management Plan (BMgtP), reference document WI-ENV-MNP-0037, Version 3, dated June 2017 (WCPL, June 2017). The BMgtP has been prepared to address the requirements of Schedule 3, Condition 14 of Development Consent (SSD-6764).

The BMgtP details the procedures to manage blast induced ground vibration and airblast overpressure levels and minimise these blast emission impacts on the local community, infrastructure, vulnerable micro-bat species and cultural heritage sites to the extent required by the Blast Conditions in Development Consent (SSD-6764) and EPL 12425. The BMgtP was developed to:

- Describe the measures to be implemented to comply with the blast Conditions
- Describe the blast management and mitigation strategies used to manage impacts from blasting
- Provide a management plan to minimise disturbance to a roosting site for the Eastern Bentwing-bat
- Provide a blast monitoring protocol for evaluating compliance with the blast Conditions



- Provide a protocol for managing and reporting any blast emission exceedances or non-compliances
- Communicate with the local community and regulators regarding WCPL's blasting activities
- Describe and assign responsibilities relating to blast management at WCPL
- Describe how the BMgtP will be reviewed and updated
- Support the WCPL EMS and associated aspects and impacts register

### 7.2.2 Summary of Effectiveness of Blast Management Plan

The auditors conducted a review of non-compliances, complaints and incidents recorded during the audit period. No technical non compliances or incidents with regards to blasting occurred during the audit period. With regards to complaints, a total of 11 complaints were received in relation to blasting operations during the audit period. Of the complaints received 4 complaints were in relation to noise occurrences resulting from blast operations and 7 complaints were in relation to overpressure or vibration resulting from blast operations. WCM conducted an investigation into the complaints received in accordance with the Complaints Response Protocol outlined in Section 8.0 of the BMgtP. In each instance the noise and vibration monitoring records were reviewed by WCPL and identified that results were below the blasting criteria limits outlined in SSD-6764 and EPL 12425.

In summary, the audit concluded that the BMgtP was considered to be adequately implemented as indicated by the following:

- **Blasting hours:** The auditors viewed an extract from the Wilpinjong Blast Tracking Spreadsheet for the period 24 April 2017 to 23 August 2018. No blasts were identified to have occurred before 9am or after 5pm. The earliest blast recorded during the audit period occurred at 09:24am, the latest blast recorded during the audit period occurred at 03:38pm. No blasts were identified to have occurred on a Sunday.
- **Blasting frequency:** An Average of 4.79 blasts occurred per week during the audit period. No exceedances to the blast occurrence requirements were identified. WCPL contracted Ecotech to set up and maintain vibration and noise monitors at the locations specified in Figure 9 of the Blast Management Plan, a sample of which were sighted during the site inspection. Automated monitoring was conducted at blast monitoring locations during blast events. The data was available for viewing on an online system which can be interrogated in the Wilpinjong Blast Tracking Spreadsheet maintained by Technical Services. In addition following each monitoring event the results were sent as a text message and email to relevant personnel in Technical Services, Operations and Environment.
- **Blast notifications:** The auditors sighted signs on Ulan-Wollar Road which detailed upcoming road-closures due to blasting operations at WCPL. WCPL also maintains a Blasting Information Hotline - 1800 649 783. The hotline is managed by the Technical Services Department. The auditors called the blasting hotline and were informed of the next scheduled blast to occur on site.

In addition to the public notifications the Technical Services Department also calls / texts a list of local landowners and business to notify them of an upcoming blast. The list includes seven people, the local public school, Mudgee Police, Mudgee Fire Department and Dubbo Ambulance Department.

- **Blasting design and control procedures** were being implemented such as completion of Shotfirer Checklist and Blast Controller Checklist.
- **Blasting criteria:** The auditors viewed an extract from the Wilpinjong Blast Tracking Spreadsheet for the period 24.04.2017 to 23.08.2018. Results from indicated the following:
  - 0.4% of blasts during the audit period exceeded 115 dB (Lin Peak). This was below the criteria of 5% allowable exceedance;

- No exceedances of the 120 dB (Lin Peak) criteria were recorded during the audit period; and,
- No exceedances of ground vibration criteria were recorded during the audit period.

### **7.2.3 Blast Management Plan Adequacy Review**

The original BMgtP was prepared by Thiess in May 2006. The Plan was amended a number of times with version 3 (June 2017) revised to address the requirements of SSD-6764. The BMgtP Version 3 was reviewed by SLR Consulting Australia Pty Ltd (SLR) and was approved by the DPE on the 4 August 2017.

The review of the BMgtP determined the Plan adequately addresses the requirements of SSD-6764 and EPL 12425.

## **7.3 Air Quality Management Plan**

Condition 20, Schedule 3 of SSD-6764 requires an AQMP to be developed, prior to carrying out any development under the consent.

A review of the adequacy of the AQMP was conducted by the audit team's air quality specialist. This information is provided in Section 8.1.3.

## **7.4 Water Management Plan**

Condition 30, Schedule 3 of SSD-6764 requires a WMP to be developed, prior to carrying out any development under the consent. The plan must include the following:

- Cumbo Creek Relocation Plan;
- Site Water Balance;
- Surface Water Management Plan; and,
- Ground Water Management Plan.

### **7.4.1 Cumbo Creek Relocation Plan**

Schedule 3, Condition 30(d)(i) requires that a Cumbo Creek Relocation Plan (CCRP) must be developed as part of the WCPL Water Management Plan.

At the time of the audit the Cumbo Creek Relocation had not commenced and the CCRP was yet to be developed. Development of the WMP without the CCRP was approved by the DPE on 04 August 2017. The staged submission of the CCRP is outlined in Section 1.1 of the WMP which stated the following:

- 2021 to 2023 – Development of mine planning, engineering and supporting technical advice for the creek relocation;
- 2024 – Preparation of the draft CCRP and conduct of associated regulatory consultation; and
- 2025 – Approval of the CCRP.

### **7.4.2 Groundwater Management Plan**

A review of the adequacy of the GWMP was conducted by the audit team's groundwater technical specialist. This information is provided in Section 8.2.3.

### **7.4.3 Surface Water Management Plan**

A review of the adequacy of the SWMP was conducted by the audit team's surface water technical specialist. This information is provided in Section 8.3.3.

### **7.4.4 Site Water Balance**

A review of the adequacy of the SWB was conducted by the audit team's groundwater technical specialist. This information is provided in Section 8.4.5.

## 7.5 Biodiversity Management Plan

Condition 42, Schedule 3 of SSD-6764 requires a Biodiversity Management Plan to be developed, prior to carrying out any development under the consent.

A review of the adequacy of the BMP was conducted by the audit team's rehabilitation specialist. This information is provided in Section 8.1.5.

## 7.6 Aboriginal Cultural Heritage Management Plan

### 7.6.1 Aboriginal Cultural Heritage Overview

Aboriginal cultural heritage sites were identified in the Aboriginal Cultural Heritage Assessment conducted by SEA (2015) as part of the WEP EIS. The identified Aboriginal sites within the WCPL development area are recorded in the WCPL Cultural Heritage Site Database which is maintained by WCPL and the site appointed archaeologist. A total of 293 Aboriginal heritage sites were located and recorded within the extension area specific to the WEP approval. In total, over 700 Aboriginal Cultural heritage items have been recorded in relation to WCPL. During heritage clearance surveys conducted by WCPL's heritage consultants NOHC, a number of new unidentified Aboriginal items were discovered. These items were reported in the clearance report and logged in the WCPL site register and also reported to the Registered Aboriginal Parties (RAPs) via the Registered Aboriginal Parties Consultation Committee (RAPCC).

### 7.6.2 Summary of Effectiveness of Aboriginal Cultural Heritage Management Plan

The ACHMP was considered to be adequately implemented as evidenced by the following:

- **Inductions:** The auditors reviewed the standard induction package and confirmed it contained adequate information with regards to Aboriginal heritage. In addition the following were also noted:
  - Heritage signage at the site entrance
  - Aboriginal heritage is included in the visitor induction, which is completed at the log-in points
  - Records of employee and contractor inductions were sighted by the auditor
  - WCPL has a Native Title Liaison Officer onsite who participates in the fortnightly induction process for new employees and contractors to WCM. This is an interactive training session in which the Officer brings in artefacts to familiarise their appearance with workers
- **Clearance Surveys:** Clearance surveys at WCPL are conducted by NOHC and aim at identifying, recording and salvaging surface artefacts located in the specified areas. A number of clearance surveys were conducted during the audit period and a sample were reviewed by the auditors. The surveys include consideration of the archaeological and cultural heritage values associated with the site and the potential value of conducting subsurface salvage.

The clearance reports are conducted in consultation with the eight RAPs. For the September clearance survey, for example, NOHC contacted the RAPs on 6<sup>th</sup> September 2017 inviting a representative of each group to be involved with the assessment. As a result four representatives accepted the invitation and attended the fieldwork.
- **New Finds:** New finds are predominately identified as part of the clearance survey process. New finds are recorded in the WCPL Cultural Heritage Site Database.
- **Managing Dust Impacts:** In December 2014, NOHC identified surface dust evidence across the rock surfaces at Castle Rock (WCP72) which appeared to be visually darker when compared to baseline recordings. WCPL informed the auditors that they are aware of the concerns and impacts associated with dust around Castle Rock. In June 2016 an investigation was undertaken into dust and other surface deposits associated with the rock art site. As a result a number of management measures were put in place and verified by the auditors during the IEA:

- Dust deposition levels are monitored at WCP72, WCP153 and WCP153 (dust monitor sighted by air quality specialist during the site inspection)
- Regular inspection of WCP72, WCP153 and WCP152 is conducted by the WCPL environment department. This was conducted by WCPL personnel on day 3 of the site inspection.
- WCPL were in the process of contracting NOHC to conduct a pilot study for the removal of dust and dung deposits within WCP72. Table 5 of the ACHMP states the indicative timing for the pilot study to occur in April 2018. At the time of the IEA site inspection WCPL were in the process of reviewing NOHC's proposal and methodology to conduct the pilot study.
- **Consultation with RAPs:** WCPL has formed a RAPCC which comprises one representative from each RAP. RAPs are invited to attend any clearance surveys conducted by the WCPL contracted archaeologist. In addition RAPs have also been invited to review the ACHMP and have conducted various site visits to inspect artefacts and discuss concerns regarding dust and dung at Castle Rock.
- **Complaints and Incidents Review:** At the time of the audit no complaints had been received regarding Aboriginal cultural heritage management at WCPL. WCPL reported in the 2017 Annual Review that it informed the OEHL on the 9 June 2017 of the unintentional collection of a single artefact outside of the project approval boundary by WCPL's contract archaeologist and member from the RAPs while carrying out an Aboriginal cultural heritage survey. The artefact was recorded and replaced back insitu at the original GPS position and reported to the OEHL. This incident occurred outside of the audit period.

### 7.6.3 Aboriginal Cultural Heritage Management Plan Adequacy Review

Condition 47, Schedule 3 of SSD-6764 requires an ACHMP to be developed, prior to carrying out any development under the consent. The ACHMP was originally developed in 2006 to address the requirements of project approval 05-0021. The ACHMP was revised and updated multiple times to address comments from DPE and modifications to PA 05-0021.

In August 2017 the plan was updated following approval of the WEP and associated consent SSD-6764 and approved by the DPE on the 4 August 2017.

The ACHMP was reviewed by the auditors during the IEA document review process. The auditors confirm the ACHMP includes the required information as specified by Condition 47(c), Schedule 3. The following administrative OFI was identified relating to the Plan:

#### **IEA 2018-OFI 003**

*Review indicative timing outlined in Table 5 of the ACHMP*

## 7.7 Historic Heritage Management Plan

### 7.7.1 Historic Heritage Overview

A Historic Heritage Assessment was conducted by Niche in 2015 which identified a total of 21 items of local historical heritage significance. Of the 21 items of local heritage significance, four have the potential to be impacted by the WCPL operations. These four items include the following:

- The Historic Shale Oil Mine Complex, inclusive of nine individual historic heritage items;
- The road embankment, specifically the downslope retaining wall of the road;
- The pine park, comprised of a homemade grain silo, a large open pole shed and a woolshed; and,
- William Carr's Hut.

The management measures for historic heritage have been adopted from the WEP EIS and specifically the recommendations made in the Historic Heritage Assessment conducted by Niche in 2015.

### 7.7.2 Summary of Effectiveness of Historic Heritage Management Plan

The auditors reviewed the standard induction package and confirmed it contained adequate information with regards to historic heritage. The auditors also reviewed the Ground Disturbance Permit (GDP) process and confirmed that historical heritage items are considered in the GDP process.

WCPL reported in the 2017 Annual Review that no complaints had been received during the audit period with regards to historical heritage. The auditors reviewed the complaints register and verified that no complaint had been recorded during the audit period in relation to historic heritage.

A number of items from the HHMP had not been triggered during the audit period, these included the following:

- The management of test and salvage excavations of the Potential caretaker's cottage site near Wollar is to be conducted in accordance with the ARDt (Niche, 2017). WCPL stated that it did not plan to undertake any works in the vicinity of the potential caretaker's cottage site until all necessary heritage management works in accordance with the ARD have been completed. At the time of the audit no work had been conducted in this area;
- The requirement to undertake archival recording of all features of the shale oil mine prior had not been triggered at the time of the audit. Mining works associated with Pit 8 had not commenced at the time of the audit; and,
- Based on evidence provided the contingency plan for unpredicted impacts or finds had not been implemented or required to be implemented during the audit period.

Based on the information reviewed, the fact that there have been no incidents involving historical heritage, and the actions of those items triggered in the plan, the HHMP is considered to have been adequately implemented at the time of the audit.

### 7.7.3 Historic Heritage Management Plan Adequacy Review

Condition 49, Schedule 3 of SSD-6764 requires a HHMP to be developed. On 8 June 2017 WCPL proposed to DPE that the HHMP be submitted in a staged submission, in accordance with Condition 6, Schedule 5 of SSD 6764. WCPL proposed to submit an initial HHMP which would not include the ARD for the test and salvage excavation required at the potential caretaker's cottage site in Pit 8.

On 04 August 2017 the DPE approved the HHMP and stated that "*The Department is satisfied that the proposed staging of the Historic Heritage Management Plan is reasonable*". WCPL submitted a revised HHMP, which included the ARD to the DPE on the 20 December 2017 and the DPE approved the revised Plan on the 12 July 2018.

The HHMP was reviewed by the auditors during the IEA document review process. The auditors are not experts in historic heritage however confirm the HHMP includes the required information as specified by Condition 49(c), Schedule 3 and as such consider the Plan to be adequate.

## 7.8 Rehabilitation Management Plan and Rehabilitation Strategy

A review of the adequacy of the rehabilitation management plan and rehabilitation strategy was conducted by the audit team's rehabilitation technical specialist. This information is provided in Section 8.1.

## 7.9 Social Impact Management Plan

Condition 68, Schedule 3 of SSD 6764 requires that a Social Impact Management Plan (SIMP) be developed within 12 months of the commencement of development (19 September 2017) under SSD 6764. At the time of the audit the plan was in the final stages of development and was yet to be submitted and approved by the DPE. As it was yet to be approved it was not reviewed by the auditors.

## 8.0 Specialist Areas

This section addresses the specialist areas of rehabilitation, noise, groundwater, surface water and air quality, as required by Condition 10, Schedule 5 of Development Consent SSD-6764.

### 8.1 Rehabilitation Management

#### 8.1.1 Rehabilitation Overview

The Wilpinjong MOP 2017-2019 has been used to address the requirements of the Rehabilitation Management Plan (RMP) required by Schedule 3, Condition 64 and includes the Rehabilitation Objectives outlined in Table 11 of Schedule 3, Condition 60.

The MOP discusses rehabilitation planning, implementation, monitoring and research and includes Rehabilitation Plans showing the Sequence of Mining and Rehabilitation Activities for Year 1 (2017/2018) and Year 2 (2018/2019) and the Final Rehabilitation and Post Mining Land Use at End of Approval. A review of the adequacy of the MOP is provided Section 8.1.3.

The 2017 Annual Review reported that approximately 456 ha of completed landforms had been rehabilitated as at 31 December 2017 however none of the rehabilitated landforms are yet considered ready for formal sign off by the RR in terms of meeting the relevant completion criteria.

As part of the WEP EIS, it was decided to prioritise woodland establishment within the existing mine rehabilitation areas as opposed to the establishment of productive pasture for grazing. WCPL were in the process of developing Biometric Vegetation Type (BVT) performance and completion criteria (as required by Condition 37 of Schedule 3) to prioritise Regent Honeyeater habitat establishment within existing mine rehabilitation areas. At the time of writing Draft BVT Performance and Completion Criteria had been submitted to the DP&E for approval following consultation with OEH and DoEE.

The MOP commitments for 2018 were to rehabilitate a total of 95 ha of mine waste rock emplacements in Domain 5, within Pit 1, Pit 2, Pit 3, Pit 4, Pit 5 and Pit 7 and complete rehabilitation of TD3. As at 14 August 2018 approximately 21 hectares had been topsoiled and was awaiting seeding with cover crop (Fortnightly Wilpinjong Rehabilitation Meeting Minutes 140818). At the time of the site inspection, rain had been forecast for the upcoming weekend and WCPL was planning seeding activities to coincide with this rainfall event to increase the chance of successful seed establishment.

#### 8.1.2 Rehabilitation Photographs

The following photographs provide an indication of the observations made or referenced by the Rehabilitation specialist during the site inspections.

**Table 8 Site Inspection Photographs – Rehabilitation Specialist**



Photo #	Comment	Photo
8-1.	2017 fire trial area – note re-sprouting of eucalypts	
8-2.	Mulching veg ahead of pit 6	



Photo #	Comment	Photo
8-3.	West of Pit 6- awaiting soil stripping	
8-4.	Older woodland rehab	





Photo #	Comment	Photo
8-5.	ECA C Western Area – note sparse ground cover	
8-6.	Visual bund along access road to site	




Photo #	Comment	Photo
8-7.	Pit 5 – SE area – 2017 rehab using pasture cover crop species	
8-8.	Pit 5 South – centre block – 2011 rehabilitation	

Photo #	Comment	Photo
8-9.	Seeded July 2018	

**8.1.3 Summary of Effectiveness of Rehabilitation Management**

Considering the ongoing drought conditions those areas that have historically (prior to 2017) been revegetated are showing residual ground cover (exotic grass species) and overstorey woodland species.

The more recently rehabilitated areas (Southeast of Pit 6) showed residual pasture / cover crop species with native forbs and herbs. Heavy grazing pressure from kangaroos was evident in these areas and has resulted in a reduced above ground vegetated cover.

Visual bunds have had a 150-200mm cover of mulched organic matter sourced from site, which appears to be providing stabilisation to the steeper batters of these bunds. The bunds had not been vegetated at the time of the audit site inspection however it was reported that they were hydro-mulched post site inspection on the 21 September 2018. Photos were sighted by the auditors demonstrating this.

The primary concern is the ability of the skeletal soils, (much of which were (pre-mine) covered in exotic pasture species) to provide a suitable medium for the establishment of the defined woodland based plant communities. The current approach of seeding with a cover crop for two seasons and then the incorporation of the resultant plant material into the soil profile, has merit, however this approach will mean the establishment with the species from the woodland community will not take place for 18-24 months post the placement of the topsoil.

The following recommendations are made relating to rehabilitation at WCM.

**2018 IEA OFI 004**

Consideration should be given to including trials within the MOP and implementing these trials to underpin informed decision making. Options for the trials include:

- use of fire vs herbicide as a control of pasture species
- patch establishment of iconic woodland species
- use of stag trees to enhance habitat value
- review topsoil source in terms of pre mine plant community and implement direct placement rather than stockpiling
- addition of soil ameliorants to subsoil material as per the requirements of Table 15 of the MOP Table 15,
- Review of fertiliser regimes – soils testing and associated reports (PB Ag Consulting Pty Ltd – dated 24 Feb 2018) appeared to be focused on the optimal establishment of pasture species. this info should be reassessed in light of the rehab goals of woodland based plant communities
- Establishment of Mistletoe (*Amyema quandang*) on rehabilitated lands
- Asexual propagation of *Ozothamnus tessellatus*
- Establishment of native vegetation across of strata in areas that are dominated by weed and exotic pasture species
- Use of organic matter / ameliorant / biosolids in establishment of native plant communities

**2018 IEA OFI 005**

WCPL should develop a seed collection plan / procedure to outline its seed collection program. This plan should include the amount of seeds required of each species based on the area of rehabilitation to be undertaken in the calendar year. It should also include a contingency for when seed is unavailable for key species detailing how those species will be incorporated into the rehabilitation program, e.g. tubestock planting. The Seed Bank spreadsheet (Masterfile – Seed Bank) which lists the amount of seed collected of each species could form an appendix to this seed collection plan.

**2018 IEA OFI 006**

Undertake a review of the seeding species mix using historical monitoring data to define which species have occurred on the revegetated area vs. those species that were used in the seeding mix.

**2018 IEA OFI 007**

Ensure information on seed collection follows the Florabank Guidelines

Section 3.4.1 of the MOP states that rehabilitated areas will be periodically analysed for pH, electrical conductivity, major cations and organic matter to understand the soil ability to support vegetation goals. It commits to taking soil samples generally at 10 m intervals along the monitoring transect every three years or as required. It was unclear whether this soil analysis has been undertaken.

**2018 IEA OFI 008**

Implement a soil monitoring program within rehabilitated areas (as outlined in the MOP) to ascertain growing conditions and facilitate informed decision making on the use of soil ameliorants and issues such as sediment and erosion control. The soil monitoring program needs to recognise the focus of the rehabilitation is the establishment of a native plant community on land historically vegetated with pasture species. Soil sampling should include analogue sites and be aligned to the BVT.

*Ozothamnus tessellatus* typically flowers / seeds in November each year, however flowering is impacted by extended drought conditions. Field data collected by monitoring the known populations would assist in informing the propagation and seed collection program for the species. This data could be used in discussion with regulators should the *Ozothamnus tessellatus* not flower / seed this year.

**2018 IEA OFI 009**

*Monitor the known populations of Ozothamnus tessellatus plants for impacts from drought that may effect flowering / seeding. Target seed collection in November when the plant is flowering and post rainfall (>25mm in 24 hour).*

**8.1.4 Rehabilitation Management Plan Adequacy Review**

The MOP includes the requirements of the RMP and was approved on 04 July 2017. The MOP states that upon resolution of the performance and completion criteria, the MOP and BMP will be comprehensively updated as required to reflect the new criteria.

The following areas for improvement have been identified:

**2018 IEA- OFI 010**

*The LFA component of the monitoring program should define the completion criteria for each component rather than a combined score of 50. Benchmarks should be established for:*

- *Landscape Organisation*
- *Stability*
- *Infiltration*
- *Nutrient cycling*

**IEA 2018- OFI –011**

*Consider rewording parts of Section 3.3 of the MOP relating to the management of the PAF to reflect that the PAF is to be located either 2m below overburden and where it is placed in the elevated waste rock emplacement then it is to be placed at 5m depth.*

**IEA 2018- OFI –012**

*Section 5.3.4 Ecosystem Establishment Phase should include revegetation of the native plant community. This Section of the MOP currently focuses on the soil preparation and techniques required for pasture species. Details could include the seeding mix for each BVT, fertilisers / soil ameliorants for BVT/ woodland areas, delineation of those species which would be targeted for establishment via tubestock planting rather than direct seeding and approaches to tubestock planting and ongoing maintenance to ensure that these plantings reach the next phase, and the location of patch areas for iconic plant species.*

**8.1.5 Biodiversity Management Plan Adequacy Review**

The Biodiversity Management Plan (BMP), August 2017, was initially developed in September 2014 to address the requirements of Project Approval 05-0021. The BMP has been amended multiple times since 2014, most recently it was amended in August 2017 to meet the requirements of the WEP EIS and Development Consent SSD-6764. The revised BMP was approved by DPE on 04 August 2017.

The BMP commits to updating the Plan upon resolution of the BVT performance and completion criteria.

The adequacy review of the BMP identified the following:

**IEA 2018- OFI –013**

*Section 7.1.3, Weed management, this Section should also include consideration of exotic pasture species as well as the management of macropod species whose grazing habit may have detrimental impact on cover crop species, native seedlings and tubestock planting.*

**IEA 2018- OFI –014**

*Section 7.4.9 Revegetation Techniques, include discussion of how the direct seeding program will be undertaken in context of the management of weed and exotic pasture species*

### **IEA 2018- OFI –015**

*Section 7.4.9, Revegetation Techniques, include information on implementing a watering regime for direct seeded and tubestock areas during adverse weather conditions. Include discussion of the maintenance phase for tubestock planting programs.*

### **IEA 2018- OFI –016**

*Section 7.4 10, Weed Management, information on weed legislation needs to be updated to reflect biosecurity focus*

### **IEA 2018- OFI –017**

*Section 7.4.10, Weed Management, ensure weed control program takes into account local and recent weather conditions and soil moisture*

## **8.2 Noise Management**

### **8.2.1 Noise Overview**

Noise at Wilpinjong Coal Mine is managed in accordance with the NMP, reference document WI-ENV-MNP-0011, Version 3, dated June 2017 (WCPL, June 2017).

The NMP details the procedures to minimise and manage noise emissions from the Mine operations and determine noise compliance with the acoustic requirements established by the noise Conditions in Development Consent (SSD-6764), WEP EIS and EPL 12425. The NMP was developed to:

- Describe the measures to be implemented to comply with the noise Conditions;
- Describe the noise management and mitigation strategies used to minimise mine noise;
- Provide a noise monitoring protocol for evaluating compliance with the noise Conditions;
- Provide a protocol for managing and reporting any noise exceedances or non-compliances;
- Describe and assign responsibilities relating to noise management at the mine;
- Describe how the NMP will be reviewed and updated; and,
- Form part of the WCPL EMS and associated aspects and impacts register.

### **8.2.2 Summary of Effectiveness of Noise Management Plan**

During the audit period, it was considered that the NMP was generally being implemented. This included implementing planning and operational measures to minimise noise, implementing a noise monitoring program and comprehensive noise management system incorporating real time monitoring and meteorological forecasting.

WCPL operates a comprehensive Noise Management System (NMS) that uses a combination of predictive meteorological forecasting and real-time noise monitoring data to guide the day to day planning of mining operations. The auditors sighted examples of the daily weather briefing which includes thunderstorm risk, overpressure/ noise forecast, inversion risk, dust risk.

Interviews with the Dispatch Operators that were on duty during the site inspection indicated the NMS was well understood. Operators were able to explain what to do if a noise alarm, elevated noise level or noise complaint was received. The Dispatch Operators explained that they log their notes on the "Noise & Dust Assessment Form". A sample of completed forms were viewed by the auditors and observed to include notes of the elevated noise level or alarm, a review of the audio and what the contributing noises were and communication with the Open Cut Examiner (OCE) on whether a change of operations is required.

WCPL received a formal warning letter from the EPA in relation to a noise complaint received on the 17 July 2017 outside the audit period. The EPA considered that the low frequency noise exceeded 40 dBA between 0800 and 0900, that mine related noise was the dominant noise source in the audio file between 0800-0815 and that no action was taken until 0900 hours to reduce mine related noise. WCPL considered this wasn't a non-compliance as it was based on real time noise data and not attended monitoring. However it did acknowledge that a more pro-active response was needed in

response to the real time noise alerts. Refresher training of the Dispatch Operators was undertaken to enforce the requirements to pro-actively respond to noise trigger alarms.

Given the responsibility placed on the Dispatch Operators for implementing the NMS, it is considered that refresher training should be provided on an annual basis.

#### **IEA 2018 OFI 018**

*Undertake the Dispatch Operator refresher training on an annual basis to ensure the NMS requirements are reviewed and reinforced.*

22 complaints from five complainants had been received relating to noise during the audit period. Just under half of these were from the one complainant. The majority of noise complaints were received at night when the background noise levels are very low. A review of an extract of the complaints database indicated that response to the complaints included an investigation by the Dispatch Operator including a review of the real time noise monitoring data, weather conditions and audio and a follow up call the following day (unless not requested) by the E&C Manager. In all instances, WCPL reported that it was operating within its approved noise limits.

#### **2018 IEA-OFI 019**

*Conditions of approval and the EPL require WCPL to comply with a sleep disturbance criterion of LA1(1 minute) of 45 dB(A), during the night-time period. WCPL should investigate if the LA1(1 minute) descriptor can be generated by the real-time noise monitoring system. This would be beneficial when reviewing noise levels against noise sources when complaints are received during the night-time period.*

An observation made during loading of haul trucks in Pit No.5 indicated the use of audible horn by the loader operator to alert haul truck drivers of position for loading and then when loading was completed. Subjectively, the audible horn was deemed to be loud and could potentially impact nearby residential receivers (depending on location of mining activities).

AECOM was advised by WCM personnel that all mine excavators and haul trucks are fitted with “silent horns” and at the time of the observations during the truck loading operations, both the audible horn and silent horns were being used by the mining operators.

#### **2018 IEA-OFI 020**

*Subject to safety requirements, AECOM recommends the use of “silent horn” at all times to minimise potential noise emissions from mine operations, especially when working closer to the surface and on mine pits closer to residential receivers.*

### **8.2.3 Noise Management Plan Adequacy Review**

The original NMP was prepared by WCPL and Heggies Pty Ltd (Now SLR) in February 2006. The Plan was amended a number of times with version 3, (June 2017) revised to satisfy Development Consent (SSD-6764). The NMP Version 3 was reviewed by SLR and was approved by the DPE on the 4 August 2017.

The review of the NMP determined the Plan adequately addresses the requirements of SSD-6764 and EPL 12425.

## **8.3 Groundwater Management**

### **8.3.1 Groundwater Overview**

Groundwater is present at the WCPL in the following two distinct groundwater systems:

- Alluvial groundwater system – associated primarily with Wilpinjong Creek and Wollar Creek;
- Porous rock groundwater system – primarily the Illawarra Coal Measures

Groundwater inflows to the pit are predicted to primarily be derived from the porous rock groundwater system. The volume of inflows and potential impacts to both systems has been predicted by groundwater modelling conducted by Hydrosimulations in 2015. Groundwater is not directly extracted from the alluvium, however due to hydraulic connection with the porous rock groundwater system groundwater is indirectly taken from the system. Groundwater extraction licences are required to

extract groundwater from each system and part of the compliance is that extraction volumes per annum cannot exceed the licence conditions.

Extraction of groundwater from these groundwater systems has the potential to adversely impact the local hydrogeological regime by:


- Lowering groundwater levels within the aquifers
- Impacting groundwater users or groundwater dependent ecosystems due to lowering the water table or potentiometric pressures
- Impacting groundwater quality by drawing in more saline groundwater due to extraction;

The GWMP includes a series of responses and mitigation measures to manage any adverse impacts due to groundwater extraction from the two aquifers.



**8.3.2 Groundwater Photographs**

The following photographs provide an indication of the observations made or referenced by the Groundwater specialist during the site inspections as detailed in Table 10.

**Table 9 Site Inspection Photographs – GroundWater Specialist**

Photo #	Comment	Photo
9-1.	Site water infrastructure is well maintained and good records are being kept	



<p>9-2.</p>	<p>A groundwater datalogger that is used to automatically/ continuously measure water level.</p>	
<p>9-3.</p>	<p>Groundwater monitoring bores appear well constructed and in good working order.</p>	

**8.3.3 Summary of Effectiveness of Groundwater Management**

The groundwater specialist conducted a review of groundwater management measures in place at WCPL. This involved physical validation of management measures via a site inspection, interviews with key WCPL staff and review of monitoring data.

An assessment of the effectiveness of compliance for pit extraction and dewatering bores was conducted for the July 2016 - June 2017 water year and for the 2017 Annual Review for the WCM, by HydroSimulations, 2018. The raw groundwater monitoring data recorded between 18 January 2017 – 08 December 2018 and 05 January 2018 – 27 July 2018 was also reviewed and the following identified:

- Groundwater level monitoring was undertaken in 13 alluvial bores and 5 coal bores during the audit period. A trigger level exceedance was recorded in alluvial bore GWa14 for the whole

2017 monitoring period. The groundwater drawdown at this location is attributed in part to Pit 4 extraction that has been exacerbated by long periods of below average monthly rainfall.

- Groundwater exceedances for electrical conductivity (EC) were recorded in two alluvial bores (GWA5 and GWA6). These exceedances are attributed to declining groundwater levels due to declining rainfall events and a mild mining effect. The increase in EC is assessed as being due to declining water levels and the alluvial groundwater being sourced from proportionally more of the more saline Permian groundwater. EC exceedances were recorded in four coal bores (GWC1, GWC3, GWC4 and GWC5). These exceedances do not correlate to increased mining activities and have been attributed to factors not related to climatic or groundwater level influences. No pH exceedances were observed.
- The groundwater 'take' due to dewatering and pumping is licensed under licence number 20BL173513 to cover extraction from all pits. The licenced volume of water extraction is 2,021 ML/year. Flows estimated for the 2016/17 water year were below this allowance. Similarly modelled estimates for the 2016/17 water year were below this allocation. Thus it is assessed that the groundwater modelling used to predict and manage groundwater extraction is adequate and effective.

In summary no non-compliances were recorded relating to groundwater in the 2017 Annual Review and no non-compliances were identified for 2018 at the time of the audit. Exceedances recorded for drawdown and EC in alluvial groundwater are attributed to climatic influences and mild mining effects. Exceedances in the coal bores for EC do not correlate with mining and are not related to climatic or groundwater level influences.

The audit teams Groundwater specialist reviewed the WCPL implementation of the GWMP on site and concluded that groundwater management was adequate at the time of the audit.

### 8.3.4 Groundwater Management Plan Adequacy Review

The GWMP was prepared by WCPL, Resource Strategies and AGE consultants in February 2006 and has subsequently been amended a number of times. The most recent version of the GWMP, dated August 2017 was prepared by Dr Noel Merrick who was approved by the Secretary of DPE as suitably qualified and experienced to prepare and review the GWMP.

The requirements of the GMP are outlined in Condition 30(d)(iv), Schedule 3 of the Development Consent (SSD-6764). These requirements have been reproduced in Table 1 of the GWMP which also outlines where these requirements have been addressed in the plan. It was identified, following the review that groundwater dependent ecosystems (GDE) are not outlined in Section 4 as stated in Table 1 but are adequately described in Section 6.5.

#### **IEA 2018 OFI 021**

*Update Table 1 of the GWMP to ensure it references Section 6.5 instead of Section 6.1 with regards to GDEs.*

The GWMP includes monthly metals monitoring to assist with identifying seepage from nearby backfilled open cut pits and decommissioned tailings dams however no trigger levels have been identified to facilitate analysis.

#### **IEA 2018 OFI 022**

*Include trigger levels for metals within the GWMP to facilitate trend analysis and assist in identifying seepage from nearby backfilled open cut pits and decommissioned tailings dams*

In summary it is considered that the GWMP has been prepared by suitable and qualified persons and has been reviewed by reputable consultants and the appropriate agencies. The GWMP was considered adequate at the time of the audit.

## 8.4 Surface Water Management

### 8.4.1 Surface Water Overview

WCPL is located in the Upper Goulburn River catchment, which forms part of the Hunter River Basin. At a local level, the Wilpinjong Coal Mine lies in the Wilpinjong Creek catchment. A number of local watercourses are tributaries of Wilpinjong Creek including Cumbo Creek, Planters Creek, Spring Creek and Bens Creek.

Water management on site relies principally on containing all potentially contaminated or dirty water from active mining or disturbed areas within existing site storages. Excess volume within all of these storages either overflows or is transferred to the Pit 2 void.

From Pit 2, WCPL treats water using a containerised Water Treatment Facility plant prior to a licenced discharge under an EPL of high-quality treated water to Wilpinjong Creek.

Runoff from rehabilitation areas is currently wholly contained on site and contributes to the site-wide mine water management system. In future as rehabilitation progresses and areas are considered suitable to allow them to be free-draining, a series of sedimentation dams will be constructed within rehabilitated catchments and be designed and/or modified to discharge off-site under an EPL. There are no private landholders immediately downstream of the Wilpinjong Coal Mine on either Wilpinjong Creek or Wollar Creek. The nearest downstream private landholders are located on the Goulburn River, downstream of the Goulburn River National Park.

The Wilpinjong Coal Mine lies to the south of Wilpinjong Creek and has disturbed some of its former minor tributaries. These tributaries flowed in a general south to north direction through the mining lease until merging with Wilpinjong Creek immediately north of the Ulan-Wollar Road. As such, up-catchment diversion works were proposed both as part of the original approval and the recent WEP. The extent of these diversions has become constrained as the mining extent has progressed. The current approval and water management plans describe how in some of these active mine areas (for example, south of Pit 5, Pit 1 and Pit 7), up-catchment diversions will be achieved.

### 8.4.2 Surface Water Photographs

The following photographs provide an indication of the observations made or referenced by the Surface Water specialist during the site inspections as detailed in Table 10.

**Table 10 Site Inspection Photographs – Surface Water Specialist**


Photo #	Comment	Photo
10-1.	Perimeter of active site – access road north of Pit 3. Observed that sediment fence, bund and road cross fall was consistently installed and maintained to ensure runoff from disturbed extent was directed internally.	






Photo #	Comment	Photo
10-2.	As above	
10-3.	Eastern extent of Pit 3/7, looking South (Cumbo Creek is to right of shot)	

Photo #	Comment	Photo
10-4.	Cumbo Creek on northern side of Haul Road.	
10-5.	Sump adjacent to refuel point	
10-6.	Truck Wash	

### 8.4.3 Summary of Effectiveness of Surface Water Management

A review was conducted of the surface water management measures in place at WCPL. This involved physical validation of management measures via a site inspection, interviews with key WCPL staff and review of monitoring data. The following observations were made:

- Upslope diversions were not installed in some areas, for example, upslope of Pit 3 and Pit 7, and this is not entirely consistent with the measures proposed in the Environmental Assessment. It is noted however that the SWMP allows for *up-catchment diversion works will continue to be designed subject to site-specific review of soils and upslope catchment areas, with particular focus on channel stability and longevity.*
- Where diversions were not installed, this will allow additional clean water runoff to enter the active mining areas, and will contribute to the overall volume of mine water to be managed on site. This may therefore deviate from predictions developed from the site water balance simulations. Technically this approach is not in keeping with normal practice or the measures outlined in the WEP EIS.
- Where diversions adjacent to Pit 3 and Pit 7 have not been constructed, these locations occur at the base of the steeper vegetated slopes and soils appear of poor quality and of high erodibility. Not installing diversions in such locations has merit in that it will minimise potential risk of erosion and destabilisation of areas outside the permitted mining boundary, in addition this will have other environmental values (ecology, heritage). However, this change in approach may differ from the assumptions made in the site water balance, impacting forecast of the longer-term site water balance, and potentially the calculation of harvestable rights.

#### IEA 2018 OFI 023

*In the next revision of the SWMP it is recommended to allow clearer flexibility so that decisions can be made on balance which approach has the least net impact to the environment or presents the lowest longer-term risk. Where diversions are not adopted, this should be accounted for and adopted in each annual review of the site water balance and calculation of harvestable right.*

A review of non-compliances, incidents and complaints recorded with regards to surface water was also conducted as part of the IEA. No complaints were recorded during the audit period with regards to surface water. In addition no reportable incidents relating to surface water occurred during the audit period.

Operations on site appear to manage water effectively with external interfaces with potential for dirty water to drain off site all appropriately mitigated using bunds and sediment fences. There is minimal risk for offsite transport of water.

### 8.4.4 Surface Water Management Plan Adequacy Review

The WCPL Surface Water Management Plan (SWMP) is included in Appendix 2 of the WMP and was approved by the DPE on 04 August 2017, in accordance with the requirements of SSD 6764.

The SWMP was prepared by Jim Heaslop, who was approved by the DPE as suitably qualified and experienced on 24 May 2017. The SWMP provides an updated baseline on surface water flows and water quality in potentially affected waterbodies, description of the water management system, performance criteria, monitoring program and Trigger Action Response Plans (TARPs) to respond to exceedances.

The requirements of the SWMP are detailed in Table 1 of the SWMP which also outlines where these requirements have been addressed in the plan.

The adequacy review of the SWMP identified the following:

- The previous versions of the SWMP included trigger levels for streamflow monitoring in Wilpinjong Creek however these have not been provided in the August 2017 version. Whilst performance criteria for stream flow is no longer explicitly required by Condition 30(d)(iii), Schedule 3 of SSD 6764, it can be reasonably considered to form a performance measure for measuring impact to Wilpinjong, Cumbo and Wollar Creeks.

Notwithstanding, the SWMP has responded to IESC 2016-078 recommendations that changes to flow regime, particularly characterisation of timing and seasonality of peak and low flows, will be assessed when updating the WMP so as to fully identify impacts to downstream ecosystems by updating baseline data presented in the SWMP.

#### **IEA 2018 OFI 024**

*It is recommended that trigger levels for streamflow monitoring in Wilpinjong Creek be reviewed and defined and incorporated into the SWMP, along with associated TARP.*

- Condition 30(c), Schedule 3 of SSD 6764 requires that the WMP consider the recommendations of the IESC advice (IESC 2016-078) dated 2 September 2016. The response and documentation of the IESC 2016-078 recommendations are not fully addressed in the SWMP. IESC recommendations include (but are not limited to) monitoring monthly and event based monitoring of metals. The SWMP has not fully adopted these, for example the SWMP does not nominate event based sampling. In addition the triggers levels and an associated TARP have not been defined in the SWMP. Section 1.2 is referred to in the SWMP as addressing the IESC recommendations however Section 1.2 does not reference or provide detail as to how the IESC recommendations have been adopted or considered.

#### **IEA 2018 OFI 025**

*Develop surface water triggers and associated TARP for metals for identification and respond to downstream impacts, as recommended by IESC advice (Item 3c) Monitoring for metals should also be amended to include event based monitoring for metals.*

- The objectives or performance criteria for investigating any potential or actual adverse impacts on channel stability attributable to WCPL activities are not defined in the SWMP. Section 6.3 documents only the parameters to be monitored and does not identify triggers levels (other than 'perceptible impact'). In addition no TARP is provided in Section 7 for Channel Stability.

#### **IEA 2018 OFI 026**

*Include objectives or performance criteria for investigating potential or actual adverse impacts on channel stability attributable to WCPL activities. Include trigger levels and a TARP for Channel Stability.*

- Table 3 of the WMP outlines the detailed performance criteria and makes reference to the WMP's respective sub-plans as to where the performance criteria are documented. It was identified that the SWB is referred to in this section however the SWB does not include performance criteria, monitoring, contingency or response.

#### **IEA 2018 OFI 027**

*The SWB should be reviewed to ensure it includes performance criteria, monitoring, contingency or response as referenced in Table 3 of the WMP. Alternatively Table 3 of the WMP should be amended to ensure the references included in the table contain the stated information.*

### **8.4.5 Site Water Balance**

The WCPL SWB is included in Appendix 1 of the WMP. The SWB was prepared by Jim Heaslop, who was approved by the DPE as a suitably qualified and experienced person on 24 May 2017.

The SWB describes sources of water on site and assesses probability of surplus / deficit using an OPSIM model. Water use on site is documented as well as provisions for off-site discharge and minimisation measures are also considered. Annual review of the SWB and reporting is also documented.

The SWB includes sizing and discussion of Sediment Dams, but the plan is ambiguous / unclear on the procedure or timing for construction of these measures, or how they should then be managed. Sediment Dams were not constructed / in operation at the time of the audit and were reported to not be required until such time that rehabilitated catchments are considered suitably stable and mining progresses to transition these catchments to freely drain to Wilpinjong or Cumbo Creek (under an EPL

as required). Description of how this will be managed was considered to be lacking by the audit teams surface water specialist, further details are provided in Section 8.3.3.

### **IEA 2018 OFI 028**

*Update the SWB to include details on the timing of the construction of sediment dams and include further details of how they should be managed.*

## **8.5 Air Quality Management**

### **8.5.1 Air Quality Overview**

Sources of particulate matter which are likely to impact air quality in the region have been attributed to local active mining, quarries, agricultural and rural activities and anthropogenic activities i.e. vehicles and dust from unsealed roads). Specifically from WCPL the main sources causing impacts to air quality include the following:

- Blasting and drilling operations
- Waste rock emplacements
- Coal stockpiles
- Haul roads
- Light vehicle roads
- Topsoil stripping and stockpiling
- General areas disturbed by mining

Other sources of air pollution emitted from the mine include those which have the potential to generate offensive odour. WCPLs sewage treatment plant has been regarded as having a low potential to emit odours from the mine. In addition areas at risk of spontaneous combustion may release offensive odour offsite. These areas predominately include the out of pit dumps, ROM stockpiles and product stockpiles, however the in pit dumps, reject and tailings emplacement areas and highwalls are also considered minor areas prone to spontaneous combustion occurrences.

### **8.5.2 Air Quality Photographs**

The following photographs provide an indication of the observations made or referenced by the air quality specialist during the site inspections as detailed in Table 11.

**Table 11 Site Inspection Photographs – Air Quality Specialist**


Photo #	Comment	Photo
11-1.	Dust plume formed beneath an early morning inversion layer. This dust was observed by site personnel, recorded in the control room (observed records in control room) and mining activities ceased until the inversion broke up and dust dissipated. This was a good demonstration of the air quality management system at work.	



Photo #	Comment	Photo
11-2.	Observed operation of a water cart. Water carts were observed in multiple locations during the site visit and requests for a water cart heard over the radio during the site inspection.	
11-3.	Maintenance register in the CHPP. This showed the areas which needed to be addressed. The visual cues provided a good way of ensuring the areas to be maintained were well understood.	
11-4.	Telescopic chute used to minimise the drop height when loading product stockpiles. The length of the chute can be changed depending on the stockpile being loaded.	





Photo #	Comment	Photo
11-5.	Dust from public road observed during site inspection. This dust was <u>not</u> due to mine vehicles or mining activities but was considered to be a significant dust source in the area and was observed a number of times during the inspection.	
11-6.	Dust gauge observed at Castle Rock. Dust gauge bottle and funnel was intact and the gauge was in good condition.	
11-7.	Water sprays active on the ROM during raw coal dumping. Water sprays remained active until after the truck had completed the dump and moved off.	

Photo #	Comment	Photo
11-8.	Photo of coal loading into a haul truck. Minor levels of dust were observed on the day of the inspection, which dispersed quickly and was not observed to be leaving the immediate area surrounding the loading activities.	

### 8.5.3 Summary of Effectiveness of Air Quality Management

The air quality specialist conducted a review of air quality management measures in place at WCPL. This involved physical validation of management measures via a site inspection, interviews with key WCPL staff and review of monitoring data. The air quality specialist made the following observations:

- A visible dust plume was observed when arriving on site around 8am. This dust plume was gone by the time of the site inspection which commenced around 9am. The dust plume was discussed with the site personnel in the control room who showed the actions taken in the morning to control the observed dust. The actions including ceasing all mining activities in that area until the inversion conditions had abated. The identification and action taken to mitigate the effects of the plume were all in line with the requirements of the AQMP and demonstrated good work practices in line with the AQMP.
- There were a number of water carts observed operating along the haul roads. They were also being requested over the radio later in the day when conditions were warmer and the roads dryer.
- There were no visible dust emissions from the raw coal stockpiles or the product coal stockpiles. Loading was occurring on the day of the inspection with no visible plume noted. It was observed that the product coal in particular was rarely a problem due to the wet nature of the product coal from the CHPP.
- Sprays were noted to be operating on the ROM bin during unloading. Water sprays were active before tipping and continued until after the truck had completed its tip and moved away. No visible dust was noted during the unloading event.
- The areas beneath the conveyors within the CHPP were observed to have some coal collecting around the base of the conveyor transfer points. This was wet coal and was in the process of being clean-up up by a bobcat when inspected. This clean-up was part of routine housekeeping and maintenance as observed in the CHPP offices.
- Coal haul trucks had a small amount of visible dust trailing the trucks on haul roads. The observed plumes were lower than the wheel hubs and in most cases barely visible.
- The most significant dust source observed was the off-site unsealed public road which is used by non-mine traffic and generates significant dust plumes when any vehicles drive along the road. This is not the responsibility of Wilpinjong but may contribute to the dust monitoring results given the road is to the NE of the mine upwind of the monitoring stations (DG11, TEOM4, HV5 and DG15).

A review of monitoring data identified that overall the air quality in the area surrounding the WCM is good with a small number of PM<sub>10</sub> exceedances noted as follows:

Jan-Dec 2017:

- Exceedance of PM<sub>10</sub> criteria (HVAS4, HVAS5, TEOM3, TEOM4) on a single day in February 2017. This exceedance was due to elevated regional dust levels as shown in the OEH monitoring station in Merriwa.
- Small number of elevated dust gauge readings during the year. Annual average results acceptable.

Jan-Jul 2018:

- Exceedance of PM<sub>10</sub> criteria (HVAS5, TEOM4) on a single day in March 2018. This exceedance was due to elevated regional dust levels as shown in the OEH monitoring station in Merriwa.
- Two minor exceedances of PM<sub>10</sub> criteria (both at TEOM4) on two days in April 2018. This exceedance was likely due to elevated regional dust levels as shown in the OEH monitoring station in Merriwa
- One minor exceedance of PM<sub>10</sub> criteria (TEOM4) on a single day in May 2018.
- Exceedance of PM<sub>10</sub> criteria (HVAS1, HVAS5) on a single day in July 2018. This exceedance was due to elevated regional dust levels as shown in the OEH monitoring station in Merriwa.

The above exceedances were reported to the EPA and DPE and reported in the 2017 Annual Review. It is noted that whilst the EPL includes air monitoring requirements it does not include criteria for PM<sub>10</sub>, PM<sub>2.5</sub> or deposited matter and therefore there was no requirement to report these exceedances in the Annual Return. The exceedances were generally considered to be due to factors other than mining such as regional events including bushfires.

Deposited dust and PM<sub>10</sub> levels have indicated an increasing trend across recorded years. In addition annual average dust deposition results for 2017 were higher than those predicted in the WEP EIS (1.3g/m<sup>2</sup>/month). Air Quality data shows an upward trend over the past seven years with regards to deposited dust generation.

The increasing trend is particularly prominent from the result recorded at DG11. In addition, results for the maximum 24hr average PM<sub>10</sub> at HV5 have revealed an increasing trend since 2007. Comments from WCPL attribute the elevated recordings from DG11 to the unsealed section of Ulan-Wollar road. In response to findings recorded in the 2017 Annual Review WCPL reviewed and updated the AQMP to revise the notification protocols for landholders / tenants upon verification of an exceedance of the applicable dust criteria. At the time of the audit site inspection the AQMP was undergoing review by DP&E.

WCPL received a formal warning letter on 08 February 2018 from the EPA following an unannounced visit to site on 17 January 2018. The EPA officer identified excessive dust emissions from the mine as a result of activities being undertaken in Pit 7 and Pit 4. The inspection also identified a dust haze in the area around the mine when compared to that of the Ulan area. The EPA considered the event to be a breach of the sites EPL conditions (Condition O3.1) and as a result issued the site with a formal warning. WCPL conducted an investigation of site operations and monitoring results at the time the EPA reported visible dust. WCPL reported that no exceedances of air quality criteria had been recorded. The EPA contacted the WCPL E&C Manager at the time of the observations and as a result WCPL ceased activities in the areas of concern and increased the use of water carts. This was conducted in consultation with the WCPL Dispatch Office and Open Cut Examiner.

### 8.5.3.1 Spontaneous Combustion

The WCPL Spontaneous Combustion Management Plan (SCMP) is included as Appendix 3 of the Air Quality Management Plan and was approved by the DPE on 4 August 2017. The prominent areas at risk of spontaneous combustion events occurring include the Keylah Dump, out of pit dumps, ROM stockpiles and product stockpiles.

The audit verified that WCPL implement management measures for spontaneous combustion with the aim of preventing the occurrences of spontaneous combustion events rather than managing its existence. In addition WCPL also have in place an inspection and monitoring program for the management of spontaneous combustion. This includes the following measures:

- Inspection of coal stockpiles each shift;
- Inspection of the high wall, active pits and rejects disposal areas daily;
- Inspection of soil dumps daily;
- Inspection of rehabilitation areas quarterly;
- Inspection of the tailings emplacement weekly and formally each year as part of the annual surveillance report undertaken by the tailings engineer;
- Weekly stockpile plan is developed; and,
- Gas monitoring was conducted as part of the Keylah dump removal. This involved monitoring from a temporary ambient air quality monitoring station in the Village of Wollar. This was no longer required by WCPL's EPL at the time of the site inspection however monitoring requirements are still stipulated in the management plan.

A total of four complaints were received by two complainants in the audit period in relation to odour. Each complaint was investigated and deemed to either be inconclusive in origins or not related to WCPL operations.

WCPL received a number of complaints and a formal warning letter from the EPA relating to spontaneous combustion odour outside the audit period. The majority of the concerns relating to spontaneous combustion were in proximity to the Keylah Dump area which has since been removed.

The procedures for dealing with spontaneous combustion are spelt out clearly and appeared to be being adequately applied at the time of the site inspection. The WCPL dispatch room was able to show notes on the day-to-day handling and consideration of spontaneous combustion and the auditor sighted the CHPP utilising the weekly stockpile plan for the purpose of spontaneous combustion management when stockpile planning.

The air quality specialist noted detectable spontaneous combustion odour on the day of the inspection when close to the centre of the site. No odour was detected at the edge of the site.

### 8.5.3.2 Summary

In summary it is considered that the management measures in place at the time of the audit site inspection were reasonable and feasible in minimising off-site odour, spontaneous combustion and dust emissions.

#### 8.5.4 Air Quality Management Plan Adequacy Review

The Air Quality Management Plan (AQMP) was originally developed in 2006 to address the requirements of PA 05-0021. In June 2017 the plan was updated following approval of the Wilpinjong Extension Project (WEP) and associated consent SSD-6764. As per letter from WCPL to DPE dated 18.09.17, WCPL commenced development on 19.09.17. DPE approved the AQMP on 4.08.17. The AQMP was updated following submission of the Annual Return in June 2018. At the time of the audit site inspection the AQMP was undergoing review by DPE.

The air quality management plan was reviewed to assess its adequacy in reducing and controlling dust emission from the site. A total of 11 complaints were received during the audit period with relation to dust. The complaints received were deemed either to not be a non-compliance based on WCPL operations and dust monitoring data, not associated with mining operations or associated with a regional dust event.

The WCPL AQMP is a comprehensive document which covers all of the areas required of an AQMP for a coal mine. While the AQMP is considered adequate, there are some minor recommendations that should be considered as improvements:

##### **IEA 2018 OFI 029**

*Although the  $PM_{10}$  criteria are defined by the approval consents, consideration should be given to modifying the  $PM_{10}$  annual criteria from  $30\mu\text{g}/\text{m}^3$  to  $25\mu\text{g}/\text{m}^3$ . The NSW EPA approved method document change in late 2016 / early 2017 to adopt the lower criteria and it would be a good idea to proactively consider this criterion as it is likely that it will change as part of any future approvals or changes.*

##### **IEA 2018 OFI 030**

*It is recommended that the AQMP and SCMP is updated to reflect the current monitoring conducted in relation to spontaneous combustion. Remove reference to monitoring requirements relating to the Keylah Dump Removal.*

## 9.0 Compliance Summary and Recommendations

The findings of the IEA compliance assessment for conditions within the Development Consent SSD-6764, EPL 14546 and Mining Lease 1573 are presented in this section.

The compliance status was assessed by application of the criteria generally in accordance with the Independent Audit Post Approval Requirements (DPE, June 2018) provided in Table 12 below.

**Table 12 Compliance Performance Categories**

Performance Category	Definition
Compliant	The auditor has collected sufficient verifiable evidence to demonstrate that all elements of the requirement have been complied with within the scope of the audit.
Non-Compliant	The auditor has determined that one or more specific elements of the conditions or requirements have not been complied with within the scope of the audit.
Not Triggered	A requirement has an activation or timing trigger that has not been met at the time when the audit is undertaken, therefore an assessment of compliance is not relevant.

Comments are listed beside each condition to explain aspects of the audit review.

In general, no specific or rigorous assessment of documents required as part of meeting the Development Consent has been undertaken during the assessment, particularly where they have been signed off by other parties.

The non-compliances and corresponding recommendations are summarised in Non-Compliant Conditions Table 7 and detailed in Appendices.

## 9.1 Non-Compliant Conditions

### 9.1.1 Development Consent SSD-6764

Table 13 Summary of Non-Compliances against Development Consent SSD-6764

Reference	Condition Requirement Summary	Audit Finding and Recommendation
Schedule 3, Condition 19(a)	Implement all reasonable and feasible measures to minimise the off-site odour, fume, spontaneous combustion and dust emissions of the development;	<p>With regards to the generation of dust WCPL received a formal warning letter on 08 February 2018 from the EPA following an unannounced visit to site on 17 January 2018. The EPA officer identified excessive dust emissions from the mine as a result of activities being undertaken in pit 7 and pit 4. The inspection also identified a dust haze in the area around the mine when compared to that of the Ulan area.</p> <p>The EPA contacted the WCPL E&amp;C Manager at the time of the observations and as a result WCPL ceased activities in the areas of concern and increased the use of water carts.</p> <p>The EPA considered the event to be a breach of the sites EPL conditions (Condition O3.1) and as a result issued the site with a formal warning.</p> <p>This condition was found to be non-compliant on the basis that the EPA found WCPL to be in breach of EPL 12425 requirements O3.1 which requires the following, <i>“All operations and activities occurring at the premises must be carried out in a manner that will minimise the emission of dust from the premises”</i>.</p> <p>Management measures in place at the time of the audit site inspection were reasonable and feasible and as such no recommendation has been made.</p>
Schedule 3, Condition 31	The Applicant must implement the approved Water Management Plan for the development.	<p>The audit team’s surface water specialist reviewed management measures in place on site at WCPL during the audit site inspection. The surface water specialist concluded that there are some discrepancies between the approved SWMP, and its implementation on site. In particular relating to sediment basins and up-stream diversions that are depicted in the SWMP but have not been constructed.</p> <p>Operations on site appeared to manage water effectively with minimal risk for offsite transport of water, however on the basis that the approved SWMP did not reflect the current operations, this Condition has been assessed as non-compliant.</p> <p><b>IEA 2018 REC 001</b> <i>Update the SWMP and SWB to reflect measures being implemented on site. Refer to OFI’s under Condition 30 of Schedule 3 in Table 16 below.</i></p>



Reference	Condition Requirement Summary	Audit Finding and Recommendation
Schedule 3, Condition 37	<p>Within 6 months of the commencement of development under this consent, or as otherwise agreed by the Secretary, the Applicant must, in consultation with OEH, the Department and DoEE and to the satisfaction of the Secretary, develop suitable rehabilitation performance and completion criteria for:</p> <ul style="list-style-type: none"> <li>(a) the BVTs in Tables 8 and 9; and</li> <li>(b) Regent Honeyeater habitat.</li> </ul> <p>The performance and completion criteria must include consideration of the effect of climatic conditions, such as drought, and the NSW Biodiversity Offsets Policy for Major Projects 2014 and the associated Fact sheet: Mine Site Rehabilitation (OEH, 2014).</p>	<p>WCPL submitted Draft BVT Performance and Completion Criteria for the BVTs listed in Tables 8 and 9 of the Development Consent and Regent Honeyeater Habitat to OEH, DoEE for consultation on the 19.02.18.</p> <p>DoEE responded by email dated 13.03.18 that it was not commenting on the Draft Performance and Completion Criteria at this time.</p> <p>OEH provided comments on the Draft Performance and Completion Criteria including recommendations by letter dated 14.03.18.</p> <p>WCPL made amendments to its Proposed BVT Performance and Completion Criteria and provided this together with its response to each of the OEH comments to the DPE by letter dated 19.03.18 (within six months of the commencement of development). At the time of writing (October 2018) the DPE was yet to respond.</p> <p>On the basis that confirmation of the satisfaction of the DPE was not received within 6 months of the commencement of the development (March 2018), this condition is considered non-compliant. It is noted that the DPE has had the revised Draft Criteria for seven months and has not provided further feedback or approval of the Criteria and this has led to the timeframe not being met. WCPL personnel indicated they believed the intent of this Condition was to submit the Draft BVT Performance and Completion Criteria within six months of the commencement of development.</p> <p><b>IEA 2018 REC 002</b> <i>Continue to work with DPE and OEH to finalise the BVT Performance and Completion Criteria.</i></p>
Schedule 3, Condition 61	<p>Within 6 months of the commencement of development under this consent, unless the Secretary agrees otherwise, the Applicant must prepare a Rehabilitation Strategy to the satisfaction of the Secretary.</p>	<p>A Rehabilitation Strategy (March 2018) was prepared and submitted to the DPE for approval on the 19 March 2018. At the time of writing, (October 2018) WCPL was yet to receive confirmation from the DPE that the Strategy was prepared to its satisfaction and on this basis, this Condition has been assessed as non-compliant. WCPL personnel indicated they believed the intent of this Condition was to submit the Draft Rehabilitation Strategy within six months of the commencement of development.</p> <p><b>IEA 2018 REC 003</b> <i>Continue to work with the DPE to obtain feedback on whether the Rehabilitation Strategy has been prepared to the DPE's satisfaction.</i></p>

### 9.1.2 Environmental Protection Licence 14546

Table 14 Summary of Non-Compliances against EPL 14546

Reference	Condition Requirement Summary	Audit Finding and Recommendation
Conditions M2.1 and M2.2	For each monitoring/discharge point or utilisation area specified below (by a point number), the licensee must monitor (by sampling and obtaining results by analysis) the concentration of each pollutant specified in Column 1. The licensee must use the sampling method, units of measure, and sample at the frequency, specified opposite in the other columns.	<p>WCPL reported non-compliances against condition M2.2 in the 2017/18 Annual Return. The non-compliances were due to equipment issues which resulted in a gap of continuous monitoring at points 13, 20, 25 and 28.</p> <p>WCPL reported that in response to these failures the site replaced HV1 while repairs were made to the unit, in addition TEOM 3 was reportedly checked monthly on site, remotely each day and as soon as possible when equipment issues are identified. Periodic checking of TEOM data by Dispatch Operators was observed during the site inspection. During the site inspection it was reported that monitors are also checked on a daily basis, Monday to Friday by the E&amp;C team and the Service Provider.</p> <p>No further recommendations are considered necessary.</p>
Condition M4.2	For each monitoring point specified in the table below the licensee must monitor (by sampling and obtaining results by analysis) the parameters specified in Column 1. The licensee must use the sampling method, units of measure, averaging period and sample at the frequency specified opposite in the other columns.	<p>Due to general maintenance or equipment issues in 2017, continuous monitoring for air temperature, wind speed/direction, lapse rate, rainfall and humidity did not occur for 1.6% of the reporting period. This was reported as a non-compliance against Condition M4.2 in the 2017/18 Annual Return. In response to the non-compliance WCPL committed to remotely checking meteorological equipment each day and as soon as possible when equipment issues are identified. It was reported that data was checked daily by the Service Provider, Dispatch Operators and E&amp;C team and if any discrepancies detected they are reported between the teams for actioning.</p> <p>This is considered appropriate and no further recommendations are considered necessary.</p>
Condition O3.1	All operations and activities occurring at the premises must be carried out in a manner that will minimise the emission of dust from the premises.	<p>WCPL received a formal warning letter on 08 February 2018 from the EPA following an unannounced visit to site on 17 January 2018. The EPA officer identified excessive dust emissions from the mine as a result of activities being undertaken in pit 7 and pit 4. The inspection also identified a dust haze in the area around the mine when compared to that of the Ulan area.</p> <p>The EPA contacted the WCPL E&amp;C Manager at the time of the observations and as a result WCPL ceased activities in the areas of concern and increased the use of water carts. The EPA considered the event to be a breach of the sites EPL conditions (Condition O3.1) and as a result issued the site with a formal warning.</p> <p>This condition was found to be non-compliant on the basis that the EPA found WCPL to be in breach of EPL 12425 requirements O3.1.</p> <p>Management of air quality at the time of the audit site inspection was considered to be adequate at minimising the emission of dust from the premises, as such no recommendation has been made.</p>

### 9.1.3 Mining Lease 1573

Table 15 Summary of Non-Compliances against ML 1573

Reference	Condition Requirement Summary	Audit Finding and Recommendation
Condition 7	<p>The leaseholder must provide an exploration report, within a period of twenty-eight days after each anniversary of the date this lease has effect or at such other date as the Director-General may stipulate, of each year. The report must be to the satisfaction of the Director-General and contain the following:</p> <p>Full particulars, including results, interpretation and conclusions, of all exploration conducted during the twelve months period;</p> <p>Details of expenditure incurred in conducting that exploration;</p> <p>A summary of all geological findings acquired through mining or development valuation activities</p> <p>Particulars of exploration proposed to be conducted in the next twelve months period;</p> <p>All plans, maps, sections and other data necessary to satisfactorily interpret the report.</p>	<p>The anniversary of the Mining Lease is 8 February each year and as such the report is due for lodgement by 07 March each year. The annual exploration report for ML 1573 for the reporting period 08.02.17 -07.02.18 was lodged on 09 March 2018. The auditors reviewed the email trail with regards to the Annual Exploration Reports submission. WCPL stated that the time delay for submission was caused by the lengthy process associated with uploading the data for the 176 boreholes.</p> <p>On the basis that the exploration was not submitted within the required timeframe, this condition has been assessed as non-compliant.</p> <p><b>2018 IEA REC 004</b> <i>In future, account for the time taken to upload borehole data to ensure the annual exploration report is lodged by the due date.</i></p> <p><b>2018 IEA OFI 032</b> <i>Review table of contents and report headings and ensure they align.</i></p>

## 9.2 Additional Opportunities for Improvement

The following table has been reproduced from Appendix A. For details on the requirement, and for further discussion of the issue, refer directly to the tables in Appendix A. Many of the opportunities for improvement detailed in Table 16 are based around continuous improvement opportunities identified during the audit and do not necessarily represent immediate potential non-compliance issues.

**Table 16 Summary of Opportunities for Improvement not relating to non-compliances**

Reference	OFI #	OFI
<b>Other</b>		
Complaints Management	IEA 2018 OFI 001	Include supporting information (such as correspondence with regulators) to incidents logged in SAP
Complaints Management	IEA 2018 OFI 002	Include complaints received via the EPA into Consultation Manager so that all complaints are captured in the one place to better facilitate data retrieval and trend analysis.
Aboriginal Cultural Heritage Management Plan Adequacy Review	IEA 2018 OFI 003	Review indicative timing outlined in Table 5 of the ACHMP
Effectiveness of Rehabilitation Review (Report Section)	IEA 2018 OFI 004	<p>Consideration should be given to including Trials within the MOP and implementing these trials to underpin informed decision making. Options for the trials include:</p> <ul style="list-style-type: none"> <li>• use of fire vs herbicide as a control of pasture species</li> <li>• patch establishment of iconic woodland species</li> <li>• use of stag trees to enhance habitat value</li> <li>• review topsoil source in terms of pre mine plant community and implement direct placement rather than stockpiling</li> <li>• addition of soil ameliorants to subsoil material as per the requirements of Table 15 of the MOP Table 15,</li> <li>• Review of fertiliser regimes – soils testing and associated reports (PB Ag Consulting Pty Ltd – dated 24 Feb 2018) appeared to be focused on the optimal establishment of pasture species. this info should be reassessed in light of the rehab goals of woodland based plant communities</li> <li>• Establishment of Mistletoe (<i>Amyema quandang</i>) on rehabilitated lands</li> <li>• Asexual propagation of <i>Ozothamnus tessellatus</i></li> <li>• Establishment of native vegetation across of strata in areas that are dominated by weed and exotic pasture species</li> <li>• Use of organic matter / ameliorant / biosolids in establishment of native plant communities</li> </ul>

Reference	OFI #	OFI
	IEA 2018 OFI 005	WCPL should develop a seed collection plan / procedure to outline its seed collection program. This plan should include the amount of seeds required of each species based on the area of rehabilitation to be undertaken in the calendar year. It should also include a contingency for when seed is unavailable for key species detailing how those species will be incorporated into the rehabilitation program, e.g. tubestock planting. The Seed Bank spreadsheet (Masterfile – Seed Bank) which lists the amount of seed collected of each species could form an appendix to this seed collection plan.
	IEA 2018 OFI 006	Undertake a review of the seeding species mix - using historical monitoring data to define which species have occurred on the revegetated area vs. those species that were used in the seeding mix
	IEA 2018 OFI 007	Ensure information on seed collection follows the Florabank Guidelines.
	IEA 2018 OFI 008	Implement a soil monitoring program within rehabilitated areas (as outlined in the MOP) to ascertain growing conditions and facilitate informed decision making on the use of soil ameliorants and issues such as sediment and erosion control. The soil monitoring program needs to recognise the focus of the rehabilitation is the establishment of a native plant community on land historically vegetated with pasture species. Soil sampling should include analogue sites and be aligned to the BVT.
	IEA 2018 OFI 009	Monitor the known populations of Ozothamnus tessellatus plants post for impacts from drought that may effect flowering / seeding. Target seed collection in November when the plant is flowering and post rainfall (>25mm in 24 hour).
Rehabilitation Management Plan (MOP) Adequacy Review	IEA 2018 OFI 010	The LFA component of the monitoring program should define the completion criteria for each component rather than a combined score of 50. Benchmarks should be established for: <ul style="list-style-type: none"> <li>• Landscape Organisation</li> <li>• Stability</li> <li>• Infiltration</li> <li>• Nutrient cycling</li> </ul>
	IEA 2018 OFI 011	Consider rewording parts of Section 3.3 of the MOP relating to the management of the PAF to reflect that the PAF is to be located either 2m below overburden and where it is placed in the elevated waste rock emplacement then it is to be placed at 5m depth.
	IEA 2018 OFI 012	Section 5.3.4 Ecosystem Establishment Phase should include revegetation of the native plant community. This Section of the MOP currently focuses on the soil preparation and techniques required for pasture species. Details could include the seeding mix for each BVT, fertilisers / soil ameliorants for BVT/ woodland areas, delineation of those species which would be targeted for establishment via tubestock planting rather than direct seeding and approaches to tubestock planting and ongoing maintenance to ensure that these plantings reach the next phase, and the location of patch areas for iconic plant species.

Reference	OFI #	OFI
Biodiversity Management Plan Adequacy Review	IEA 2018 OFI 013	Section 7.1.3, Weed management, this Section should also include consideration of exotic pasture species as well as the management of macropod species whose grazing habit may have detrimental impact on cover crop species, native seedlings and tubestock planting.
	IEA 2018 OFI 014	Section 7.4.9 Revegetation Techniques, include discussion of how the direct seeding program will be undertaken in context of the management of weed and exotic pasture species
	IEA 2018 OFI 015	Section 7.4.9, Revegetation Techniques, include information on implementing a watering regime for direct seeded and tubestock areas during adverse weather conditions. Include discussion of the maintenance phase for tubestock planting programs.
	IEA 2018 OFI 016	Section 7.4 10, Weed Management, information on weed legislation needs to be updated to reflect biosecurity focus
	IEA 2018 OFI 017	Section 7.4.10, Weed Management, ensure weed control program takes into account local and recent weather conditions and soil moisture
Effectiveness of Noise Management Review	IEA 2018 OFI 018	Undertake the Dispatch Operator refresher training on an annual basis to ensure the NMS requirements are reviewed and reinforced
	IEA 2018 OFI 019	Conditions of approval and the EPL require WCPL to comply with a sleep disturbance criterion of LA1(1 minute) of 45 dB(A), during the night-time period. WCPL should investigate if the LA1(1 minute) descriptor can be generated by the real-time noise monitoring system. This would be beneficial when reviewing noise levels against noise sources when complaints are received during the night-time period.
	IEA 2018 OFI 020	Subject to safety requirements, AECOM recommends the use of “silent horn” at all times to minimise potential noise emissions from mine operations, especially when working closer to the surface and on mine pits closer to residential receivers.
Groundwater Management Plan Adequacy Review	IEA 2018 OFI 021	Update Table 1 of the GWMP to ensure it references Section 6.5 instead of Section 6.1 with regards to GDEs. The GWMP includes monthly metals monitoring to assist with identifying seepage from nearby backfilled open cut pits and decommissioned tailings dams however no trigger levels have been identified to facilitate analysis.
	IEA 2018 OFI 022	Include trigger levels for metals within the GWMP to facilitate trend analysis and assist in identifying seepage from nearby backfilled open cut pits and decommissioned tailings dams  In summary it is considered that the GWMP has been prepared by suitable and qualified persons and has been reviewed by reputable consultants and the appropriate agencies. The GWMP was considered adequate at the time of the audit.
Effectiveness of Surface Water Management Review	IEA 2018 OFI 023	In the next revision of the SWMP it is recommended to allow clearer flexibility so that decisions can be made on balance which approach has the least net impact to the environment or presents to lowest longer-term risk. Where diversions are not adopted, this should be accounted for and adopted in each annual review of the site water balance and calculation of harvestable right.

Reference	OFI #	OFI
Surface Water Management Plan Adequacy review	IEA 2018 OFI 024	It is recommended that trigger levels for streamflow monitoring in Wilpinjong Creek be reviewed and defined and incorporated into the SWMP, along with associated TARP.
	IEA 2018 OFI 025	Develop surface water triggers and associated TARP for metals for identification and respond to downstream impacts, as recommended by IESC advice (Item 3c) Monitoring for metals should also be amended to include event based monitoring for metals.
	IEA 2018 OFI 026	Include objectives or performance criteria for investigating potential or actual adverse impacts on channel stability attributable to WCPL activities. Include trigger levels and a TARP for Channel Stability.
	IEA 2018 OFI 027	The SWB should be reviewed to ensure it includes performance criteria, monitoring, contingency or response as referenced in Table 3 of the WMP. Alternatively Table 3 of the WMP should be amended to ensure the references included in the table contain the stated information.
Site Water Balance Adequacy Review	IEA 2018 OFI 028	Update the SWB to include details on the timing of the construction of sediment dams and include further details of how they should be managed.
Air Quality management Plan Adequacy Review	IEA 2018 OFI 029	Although the PM10 criteria are defined by the Development Consent, consideration should be given to modifying the PM10 annual criteria from 30µg/m <sup>3</sup> to 25µg/m <sup>3</sup> . The NSW EPA approved method document changed in late 2016 / early 2017 to adopt the lower criteria and it would be a good idea to proactively consider this criterion as it is likely that it will change as part of any future approvals or EPL Variations.
	IEA 2018 OFI 030	It is recommended that the AQMP and SCMP are updated to reflect the current monitoring conducted in relation to spontaneous combustion. Remove reference to monitoring requirements relating to the Keylah Dump Removal.
EPL 12425, Condition L2.4	IEA 2018 OFI 031	Include discussion within the SWMP of how the discharge regime from Point 24 will be managed to ensure it is variable and consistent with the ephemeral nature of the flows in Wilpinjong and Cumbo Creeks
Mining Lease, Condition 7	IEA 2018 OFI 032	Review table of contents and report headings in the annual exploration reports and ensure they align.
SSD 6764, Schedule 3, Condition 4(f)	IEA 2018 OFI 033	Include within the monthly attended noise monitoring reports, a list of equipment operating at the Mine during the noise monitoring period.
SSD 6764, Schedule 3, Condition 14(e)	IEA 2018 OFI 034	Include the Road Closure Plan as an appendix to the Blast Management Plan as indicated in the Plan.

Reference	OFI #	OFI
SSD 6764, Schedule 3, Condition 24	IEA 2018 OFI 035	Long term groundwater level monitoring could be undertaken in the Wollar public school bore to provide advanced warning if water levels were to further decline.
SSD 6764, Schedule 3, Condition 29	IEA 2018 OFI 036	Review water management strategy, including check that mine is not exceeding harvestable right (based on additional collection of clean water) and potential impact to Site Water Balance due to large catchment / runoff contributing to overall volume of water stored on site
SSD 6764, Schedule 3, Condition 29	IEA 2018 OFI 037	Sumps alongside Haul Road over Cumbo Creek be reviewed for sizing against Bluebook, inspected daily, with inspections documented
SSD 6764, Schedule 3, Condition 30(c)	IEA 2018 OFI 038	It is recommended that the SWMP is reviewed and updated to provide clarity on water quality monitoring relating to metals, trigger values and associated TARP. Develop surface water triggers and associated TARP for metals for identification and respond to downstream impacts, as recommended by IESC advice (Item 3c).
SSD 6764, Schedule 3, Condition 30(d)(ii)	IEA 2018 OFI 039	Review procedures for the implementation of sediment basins and ensure it is clearly defined in the SWB.
SSD 6764, Schedule 3, Condition 30(d)(ii)	IEA 2018 OFI 040	Review calculations of harvestable rights for annual reviews.
SSD 6764, Schedule 3, Condition 30(d)(iii)	IEA 2018 OFI 041	Include further details within the SWMP of the timing and procedures for designing and constructing up catchment diversions and sediment basins within rehabilitated areas of the site
SSD 6764, Schedule 3, Condition 42(a)	IEA 2018 OFI 042	Update Appendix 2 to include key consultation records for the updated BMP.
SSD 6764, Schedule 3, Condition 42(e)	IEA 2018 OFI 043	Consider adopting the Biodiversity Assessment Method for the annual rehabilitation monitoring program in consultation with OEH
SSD 6764, Schedule 3, Condition 42(e)	IEA 2018 OFI 044	Consider acquiring a Phytophthora Pocket Diagnostic Test Kit



Reference	OFI #	OFI
SSD 6764, Schedule 3, Condition 43	IEA 2018 OFI 045	Update weed control records in accordance with best practice to include all weather data
SSD 6764, Schedule 3, Condition 43	IEA 2018 OFI 046	Develop and implement a Weed Management Plan.
SSD 6764, Schedule 3, Condition 43	IEA 2018 OFI 047	Undertake a review of the seeding species mix – using historical monitoring data to define which species have occurred on the revegetated area vs. those species that were used in the seeding mix. Also review which species of seed may be required from iconic species.
SSD 6764, Schedule 3, Condition 43	IEA 2018 OFI 048	Request an interim summary report of the monitoring undertaken at the fire trail area to assist in understanding the initial lessons learnt.
SSD 6764, Schedule 3, Condition 43	IEA 2018 OFI 049	Include monitoring of macropods numbers to determine grazing impacts on revegetation especially in drought conditions
SSD 6764, Schedule 3, Condition 48	IEA 2018 OFI 050	Review indicative timing outlined in Table 5 of the ACHMP
SSD 6764, Schedule 3, Condition 62	IEA 2018 OFI 051	Develop contingency plan to address site conditions in context of the extending drought. Special consideration should be given to having to reseed those areas where germination has occurred though seedling failed to survive.
SSD 6764, Schedule 3, Condition 64(d)	IEA 2018 OFI 052	Whilst a range of inspections and reports are undertaken it would be good to see that implementation of these actions captured via the site GIS and in turn be linked to the GDP process and overall operation of the mine
SSD 6764, Schedule 3, Condition 64(e)	IEA 2018 OFI 053	Monitoring program data is to be reviewed to ensure that adequate data is being collected on weed species diversity and density ( groundcover), in doing so ensuring that information is available to inform weed control programs and the management of topsoil form areas which were weed infested pre mining
SSD 6764, Schedule 3, Condition 64(f)	IEA 2018 OFI 054	Update MOP to align with the biometric vegetation types (BVT) performance and completion criteria once they are finalised to the satisfaction of DPE

Reference	OFI #	OFI
SSD 6764, Schedule 3, Condition 64(g)	IEA 2018 OFI 055	S3.3 – Consider rewording parts of this section related to the management of the PAF to reflect that the PAF is to be located either 2m below overburden and where it is placed in the EWR then it is to be placed at 5m depth'
SSD 6764, Schedule 3, Condition 64(g)	IEA 2018 OFI 056	S 5.3.4 – Ecosystem Establishment Phase should include revegetation of the native plant community. This Section of the MOP currently focuses on the soil preparation and techniques required for pasture species. Details could include the seeding mix for each BVT, fertilisers / soil ameliorants for BVT/ woodland areas, delineation of those species which would be targeted for establishment via tubestock planting rather than direct seeding and approaches to tubestock planting and ongoing maintenance to ensure that these planting reach the next phase, and the location of patch areas for iconic plant species.
SSD 6764, Schedule 5, Condition 5	IEA 2018 OFI 057	To assist with verifying future compliance it is recommended that WCPL implement a means of tracking when a review is conducted but a revision is not required.
SSD 6764, Schedule 5, Condition 12	IEA 2018 OFI 058	Upload the current version of the HHMP to the Peabody Energy Public Website.
EPL 12425, Condition R4.1	IEA 2018 OFI 059	With the next EPL variation request that the completed conditions are removed from the EPL

## 10.0 Limitations

AECOM Australia Pty Limited (AECOM) has prepared this report in accordance with the usual care and thoroughness of the consulting profession for the use of WCPL and only those third parties who have been authorised in writing by AECOM to rely on this Report.

It is based on generally accepted practices and standards at the time it was prepared. No other warranty, expressed or implied, is made as to the professional advice included in this Report.

It is prepared in accordance with the scope of work and for the purpose outlined in AECOM's proposal (OPP-820883) dated 24 June 2018. Where this report indicates that information has been provided to AECOM by third parties, AECOM has made no independent verification of this information except as expressly stated in the Report. AECOM assumes no liability for any inaccuracies in or omissions to that information.

This Report was prepared between 27 August 2018 and 12 October 2018 and is based on the conditions encountered and information reviewed at the time of preparation. AECOM disclaims responsibility for any changes that may have occurred after this time.

This report should be read in full. No responsibility is accepted for use of any part of this report in any other context or for any other purpose or by third parties. This report does not purport to give legal advice. Legal advice can only be given by qualified legal practitioners.

Except as required by law, no third party may use or rely on this report unless otherwise agreed by AECOM in writing. Where such agreement is provided, AECOM will provide a letter of reliance to the agreed third party in the form required by AECOM.

To the extent permitted by law, AECOM expressly disclaims and excludes liability for any loss, damage, cost or expenses suffered by any third party relating to or resulting from the use of, or reliance on, any information contained in this report. AECOM does not admit that any action, liability or claim may exist or be available to any third party. Except as specifically stated in this section, AECOM does not authorise the use of this report by any third party. It is the responsibility of third parties to independently make inquiries or seek advice in relation to their particular requirements and proposed use of the Site.

# Appendix A

## Compliance Matrix

## Appendix A1 Audit Checklist Development Consent SSD 6764

APPENDIX A AUDIT CHECKLIST					
Reference	Condition	Evidence	Comments	Audit Finding	Recommendation
<b>Schedule 2 ADMINISTRATIVE CONDITIONS</b>					
<b>OBLIGATION TO MINISE HARM TO THE ENVIRONMENT</b>					
1	In addition to meeting the specific performance criteria established under this consent, the Applicant must implement all reasonable and feasible measures to prevent and/or minimise any material harm to the environment that may result from the construction, operation, or rehabilitation of the development.	<ul style="list-style-type: none"> <li>Annual Return (08.02.2017 – 07.02.2018)</li> <li>PEA ERM WRAC Environmental Risk Register WCPL (08.08.2018)</li> <li>EPA Incident 10000086877 08.06.2017</li> <li>EPA Incident 10000099892 17.07.2017</li> <li>EPA Incident 10000134852 08.02.2018</li> <li>Complaints Register 01.04.2017 – 23.07.2018</li> <li>WCPL Annual Review 2017</li> <li>Site Inspection</li> <li>Air Quality Data</li> <li>Water Quality Reports</li> <li>Noise Monitoring Reports</li> </ul>	<p>The auditors and specialists conducted a review of incident occurrences at the mine during the audit period, complaints received, as well as a review of the general environmental performance of the site with WCPL's various environmental management plans.</p> <p>No exceedances of performance criteria established under this consent were recorded by WCPL.</p> <p>No reportable incidents were recorded which were considered to have caused or had the potential to cause material harm to the environment.</p> <p>WCPL received a total of 48 complaints in the audit period relating to noise, blasting, air quality odour and infrastructure. The number of complaints recorded during the reporting period is comparable to that reported in the 2017 Annual Review and is consistent with the downward trend in complaints received from 2006 to 2018.</p> <p>Based on the audit team's assessment of implementation with the various environmental management plans, the site appears to be implementing reasonable and feasible measures to minimise any material harm to the environment.</p>	Compliant	
<b>TERMS OF CONSENT</b>					
2	<p>The Applicant must carry out the development:</p> <p>(a) generally in accordance with the EIS and the Wilpinjong Coal Project EIS; and</p> <p>(b) in accordance with the conditions of this consent.</p> <p><i>Note: The general layout of the development is shown in Appendix 2.</i></p>	<ul style="list-style-type: none"> <li>Project EIS</li> <li>WEP EIS (2015)</li> <li>Ulan-Road realignment detailed design</li> <li>WCPL Management Plans</li> </ul>	<p>(a) The EMS and associated management plans were revised prior to commencement of operations. This involved incorporation of the controls detailed in the WEP EIS (2015) into the respective management plans.</p> <p>WCPL amended the site management plans to address commitments made as a result of responses to comments from the EIS review.</p> <p>The auditors note that the Ulan-Road relocation has not been constructed exactly as is detailed in the EIS. This is due to the fact that the alignment has been constructed in accordance with the detailed design of the project and is located marginally different to the drawings provided in the EIS. Following review of the detailed design documents, the WEP EIS and the updated drawings it is considered</p>	Compliant	

APPENDIX A AUDIT CHECKLIST					
Reference	Condition	Evidence	Comments	Audit Finding	Recommendation
			that the alignment is in general accordance with the WEP EIS. It is further noted that the area where the alignment has been constructed is within the area which was previously surveyed for environmental impacts including cultural heritage.  (b) refer assessment made against each Condition of Consent within this		
3	If there is any inconsistency between documents listed in condition 2(a) above, the most recent document shall prevail to the extent of the inconsistency. However, the conditions of this consent shall prevail to the extent of any inconsistency.		Noted	Noted	
4	The Applicant must comply with any reasonable requirement/s of the Secretary arising from the Department's assessment of:  (a) any strategies, plans, programs, reviews, reports, audits or correspondence that are submitted in accordance with this consent (including any stages of these documents);  (b) any reviews, reports or audits commissioned by the Department regarding compliance with this consent; and  (c) the implementation of any actions or measures contained in these documents.	<ul style="list-style-type: none"> <li>Website Letter to WCPL from DPE titled "WCM Approval – Historic Heritage Management Plan", dated 12.07.2018.</li> <li>2017 Annual Review</li> </ul>	All evidence reviewed indicated compliance with all DPE requirements. This included the revised 2017 Annual Review which was requested to be resubmitted by both DPE and the DRG.	Compliant	
<b>LIMITS ON CONSENT</b>					
<b>Mining Operations</b>					
5	The Applicant may carry out mining operations on site until the 31 December 2033. <i>Note: Under this consent, the Applicant is required to rehabilitate the site and perform additional undertakings to the satisfaction of the Secretary. Consequently, this consent will continue to apply in all respects other than the right to conduct mining operations, until the rehabilitation of the site and these additional undertakings have been carried out satisfactorily.</i>		Noted	Noted	
<b>Coal Extraction and Transportation</b>					
6	The Applicant must not extract more than 16 million tonnes of ROM coal from the site in a calendar year.	<ul style="list-style-type: none"> <li>ROM Coal Tracking Spreadsheet (July 2018)</li> <li>2017 Annual Review (WCPL, 30.03.2018)</li> </ul>	Tracking of ROM Coal quantities was being managed by the Tech Services Department. The auditors reviewed the ROM Coal tracking spreadsheet which monitors ROM coal extracted. As of July 2018, 8.4 million tonnes of ROM coal had been extracted in 2018. Predicted tracking for the remainder of 2018 anticipates approximately 15 million tonnes of ROM coal to be extracted.  ROM coal extracted in the 2017 calendar year was recorded at 13.68 million tonnes. This was also reported in Section 4.0 of the 2017 Annual Review.	Compliant	
7	The Applicant must ensure that:				
7(a)	(a) all product coal is transported from the site by rail;	<ul style="list-style-type: none"> <li>Site Inspection</li> </ul>	Site inspection and data reviewed indicated that all coal was being transported from site by rail east to the Port of Newcastle for export and for domestic supply.	Compliant	
7(b)	(b) no more than 10 laden trains leave the site on any one day; and	<ul style="list-style-type: none"> <li>WCPL Coal Plan Spreadsheet (Managed by</li> </ul>	Tracking of train movements is managed by the Coal Handling and Preparation Plant (CHPP) Team. The auditors reviewed the WCPL Coal Plan Spreadsheet which details train movements to and from	Compliant	

APPENDIX A AUDIT CHECKLIST					
Reference	Condition	Evidence	Comments	Audit Finding	Recommendation
		CHPP)	site. Cumulative trains leaving site are calculated in the spreadsheet. The auditors reviewed figures recorded for train movements occurring in the audit period. The site did not exceed the consent requirement of 10 trains leaving site each day during the audit period.		
7(c)	(c) not more than 6 laden trains leave the site per day on average when calculated over any calendar year.	<ul style="list-style-type: none"> <li>WCPL Coal Plan Spreadsheet (Managed by CHPP)</li> <li>Appendix 1 Rail Haulage (2017 Annual Review)</li> <li>Section 4.1 2017 Annual Review</li> </ul>	In 2017 an average of 4 train movements occurred per day (Annual Review 2017). The auditors reviewed the WCPL Coal Plan Spreadsheet which details train movements to and from site. At the time of the audit an average of 5.6 trains had left site per day for the period January – August 2018.	Compliant	
NOTIFICATION OF COMMENCEMENT					
8	Prior to commencing any development under this consent, the Applicant must notify the Department in writing of the date on which it will commence the development permitted under this consent.	<ul style="list-style-type: none"> <li>Letter from WCL to DPE titled "Notification of Commencement" dated 18.09.17</li> </ul>	<p>WCL initially notified the DPE on 09.08.17 of their intention to commence development on 10.08.17 however commencement of development under consent SSD-6764 did not occur "as WCPL was unable to complete the required survey satisfying Condition 41 of SSD-6764 prior to 10.08.17".</p> <p>WCM's Project Development and Approvals Manager sent a letter to the DPE on 18.09.17 notifying the DPE of their intention to commence development on 19.09.17.</p>	Compliant	
SURRENDER OF EXISTING PROJECT APPROVAL					
9	<p>Within 6 months of the commencement of development under this consent, or as otherwise agreed by the Secretary, the Applicant must surrender the existing project approval (MP 05-0021) for the Wilpinjong Coal Project in accordance with Section 8P of the EP&amp;A Regulation. Following the commencement of development under this consent, and prior to the surrender of the project approval (MP 05-0021), the conditions of this consent shall prevail to the extent of any inconsistency with the conditions of MP 05-0021.</p> <p><i>Notes: Any existing management and monitoring plans/strategies/programs/protocols/committees under the existing approval for the Wilpinjong Coal Project will continue to apply until the approval of the comparable plan/strategy/program/protocol/committee under this consent. This requirement does not extend to the surrender of construction and occupation certificates for existing and proposed building works under Part 4A of the EP&amp;A Act. Surrender of a consent should not be understood as implying that works legally constructed under a valid consent can no longer be legally maintained or used.</i></p>	<ul style="list-style-type: none"> <li>Letter from WCPL titled "Wilpinjong Coal Mine – Surrender of Part 3A Approval" dated 15.09.17</li> <li>Letter from DP&amp;E titled "Wilpinjong Coal Mine (MP 05_0021 and SSD 6764) Surrender of Project Approval" dated 21.09.17</li> </ul>	<p>WCPL sent a letter to the DPE on 15.09.17 requesting an extension to the deadline for WCPL to surrender Development Consent MP 05-0021 from 24 March 2018 until 31 December 2018. The extension was requested due to the judicial review proceedings occurring between August 2017 and June 2018. The proceedings challenged the validity of the SSD-6764 approval and as a result WCPL stated that:</p> <p><i>"it would be unreasonable for WCPL to be required to surrender the Part 3A Approval. If there is a declaration of invalidity by the Court and a period of time is needed by the PAC to re-determine the SSD DA, WCPL needs to have the fallback option of being able to rely on the Part 3A Approval".</i></p> <p>The DPE responded on 21.09.17 stating that <i>they recognise that WCPL may need to continue operating the mine under the original project approval until these matters are determined by the court.</i> DPE approved the extension for the surrender of Consent MP05-0021 until 31 December 2018 in their letter dated 21.09.17.</p>	Not-Triggered	

APPENDIX A AUDIT CHECKLIST					
Reference	Condition	Evidence	Comments	Audit Finding	Recommendation
<b>STRUCTURAL ADEQUACY</b>					
10	The Applicant must ensure that all new buildings and structures, and any alterations or additions to existing buildings and structures, are constructed in accordance with the relevant requirements of the BCA. <i>Notes: Under Part 4A of the EP&amp;A Act, the Applicant is required to obtain construction and occupation certificates proposed building works; and Part 8 of the EP&amp;A Regulation sets out the requirements for the certification of the development.</i>		It was reported that no new buildings or structures had been constructed during the audit period. No alterations or additions to existing buildings had occurred at the time of the audit.  New facilities which will be required as a result of the WEP will occur in the future.	Not Triggered	
<b>DEMOLITION</b>					
11	The Applicant must ensure that all demolition work is carried out in accordance with Australian Standard AS 2601-2001: The Demolition of Structures, or its latest version.	<ul style="list-style-type: none"> <li>Demolition certificate 617 for DP755425 dated 20.01.2017</li> <li>Demolition 717 and 917 for DP755425 dated 30.01.2017</li> <li>Demolition Certificate 817 and 1017 for DP703225 dated 20.01.2017 and 30.01.2017</li> <li>Demolition Certificate 1117 for DP755454 dated 30.01.2017</li> <li>Asbestos Removal Control Plan for Mittaville – 1434 Ulan-Wollar Rd, Wilpinjong, NSW, Blue Chip Specialist Services, 21 March 2017.</li> </ul>	In Pit vacated house named the 'Mittaville house', which is located on 1434 Ulan-Wollar Road, is planned to be demolished in September 2018. At the time of the audit the house had undergone asbestos removal (Blue Chip, 21.03.2017) in preparation for demolition in September 2018.  It is noted that a number of vacated in pit houses were demolished in early 2017, prior to the audit period commencing. Demolition certificates from Whithall building were sighted by the auditors which cited compliance with SEPP (Exempt and Complying Development Codes) 2008 which references Australian Standard AS 2601-2001.  At the time of the audit this condition had not been triggered as no demolition had occurred during the audit period.	Not Triggered	
<b>PROTECTION OF PUBLIC INFRASTRUCTURE</b>					
12	Unless the Applicant and the applicable authority agree otherwise, the Applicant must: <i>Note: This condition does not apply to any to damage to roads caused as a result of general road usage.</i>				
12(a)	(a) repair, or pay the full costs associated with repairing, any public infrastructure that is damaged the development; and		This had not occurred at the time of the audit	Not Triggered	



APPENDIX A AUDIT CHECKLIST					
Reference	Condition	Evidence	Comments	Audit Finding	Recommendation
12(b)	(b) relocate, or pay the full costs associated with relocating, any public infrastructure that needs be relocated as a result of the development.	<ul style="list-style-type: none"> <li>MWRC Ulan-Wollar Road Realignment Stage 1 Drawing (22-19199-C1001)</li> <li>Transmission Line Relocation – Mine Site; TransGrid and WCPL Agreement, dated 28.09.2017</li> <li>Letter to MWRC from WCPL outlining the Ulan-Wollar road re-alignment design and process, dated 07.06.2017</li> </ul>	<p>A number of infrastructure relocations were required as part of the WEP approval. This includes the following which will be funded by WCPL:</p> <ul style="list-style-type: none"> <li>Ulan-Wollar Road relocation – The auditors reviewed consultation between Mid-Western Regional Council (MWRC) and WCPL regarding the Ulan-Wollar road realignment/relocation. Correspondence sighted references WCPL funding allocated to the road relocation project. WCPL provide funding for the relocation of the road which is to be managed by RMS.;</li> <li>330kV Powerline relocation – relocation of a section of TransGrid's existing transmission line located at WCM (Transmission Line79). The auditors reviewed the Transmission line agreement between WCPL and TransGrid regarding WCPL funding the relocation. This was completed at the time of the audit.</li> <li>Essential Energy 33kV Powerline relocation – relocation is planned to occur however had not been commenced at the time of the audit.</li> </ul>	Compliant	
OPERATION OF PLANT AND EQUIPMENT					
13	The Applicant must ensure that all plant and equipment used on site, or to monitor the performance of the development, is:				
13(a)	(a) maintained in a proper and efficient condition; and	<ul style="list-style-type: none"> <li>Wilpinjong Week 34 Maintenance Plan email 17.08.2018</li> <li>Wilpinjong Week 24 Maintenance Plan email 08.06.2018</li> <li>Light vehicle maintenance plan Week 24, 12.06.2018</li> <li>Site Inspection of CHPP and Maintenance Workshop</li> <li>Rigcom Access GMT annual inspection report dated 23.08.2017</li> <li>Annual Return 2017/18</li> </ul>	<p>The site has in place a Computer Maintenance Management System (CMMS) which is managed by Workshop and CHPP maintenance staff. The system is used to manage maintenance requirements for all equipment and plant at the mine. Each piece of equipment and plant has a unique asset number which links to maintenance schedules and Original Equipment Manufacturer (OEM) manuals.</p> <p>The auditors conducted a review of maintenance of equipment relating to environmental management of the site. This included the following:</p> <ul style="list-style-type: none"> <li>Samples of maintenance work orders generated from the CMMS were sighted by the auditors during the audit site inspection.</li> <li>Two oily water separators were observed on site. The auditors reviewed the maintenance schedule for the site's main oily water separator.</li> <li>Spill containment and clean up equipment was maintained by waste contractor JR Richards.</li> <li>The WCPL weather monitoring station (the tri-truss guyed mast tower (GMT)), is serviced annually by external contractors Novecom and Rigcom Access.</li> <li>There were some instances where equipment issues were identified resulting in continuous monitoring not occurring. WCPL reported that in response to these failures the site replaced HV1 while repairs were made to the unit, in addition the site is checking TEOM3 and TEOM 4 monthly as well as immediately following an equipment failure. Meteorological equipment is to be</li> </ul>	Compliant	

APPENDIX A AUDIT CHECKLIST					
Reference	Condition	Evidence	Comments	Audit Finding	Recommendation
			checked remotely each day and as soon as possible when equipment issues are identified.  On the basis that WCPL have a stringent maintenance program in place, along with observed corrective actions being implemented following equipment failure, this condition is considered to be compliant.		
13(b)	(b) operated in a proper and efficient manner.	<ul style="list-style-type: none"> <li>Plant and Equipment Operator Qualifications (examples)</li> </ul>	<p>WCPL has real time vehicle monitoring on all mine based light vehicles.</p> <p>Only qualified and inducted personnel are permitted to operate specific plant and equipment on site. WCPL maintains a stringent training and approval process with regards to operating light vehicles in the pit area and operation of mine specific vehicles and plant i.e. dozers, excavators, trucks etc.</p>	Compliant	
PLANNING AGREEMENT					
14	Within 6 months of the commencement of development under this consent, unless the Secretary agrees otherwise, the Applicant shall amend the current planning agreement with Council under Division 6 of Part 4 of the EP&A Act to reflect the terms outlined in Appendix 4.	<ul style="list-style-type: none"> <li>Wilpinjong Coal Mine – Deed of amendment of Planning Agreement (McCullough Robertson) and date stamped by MWRC on 09.09.2016'</li> <li>Letter from WCPL to MWRC titled "Payment due under Planning Agreement" dated 25.06.2018</li> <li>Tax Invoice from MWRC dated 25.07.2018 for the VPA contribution fee</li> <li>Tax Invoice from Lynch's Civil Services Pty Ltd dated 12.04.2018 for lawn maintenance services in the Wollar Village.</li> </ul>	<p><b><u>Amendment of Planning Agreement</u></b></p> <p>The Planning Agreement was initially entered into in March 2013 to satisfy the requirements of Project Approval MP 05-0021. WCPL lodged a development application for the WEP in January 2016. On 5.04.2016 WCPL offered to enter into a revised agreement with MWRC to provide additional commitments to take account of the WEP. The Planning Agreement was amended and signed by WCPL and MWRC (date stamp 09.09.2016).</p> <p><b><u>Requirements of Appendix 4:</u></b></p> <p>1i) MWRC issued a tax invoice to WCPL on 25 July 2018 for the annual payment sum of \$334,251.61 (based on 603 permanent employees) which was required to be paid to MWRC before 25 July 2018 (Invoice from MWRC sighted).</p> <p>1ii) This had not been triggered at the time of the audit.</p> <p>2i) WCPL has provided lighting and 24/7 access for the toilets at the back of the Wollar General Store. The auditors sighted the facilities and confirmed they were accessible after hours and were signposted by WCPL.</p> <p>2ii) WCPL has an agreement where they pay the Wollar General Store worker to clean the ablution facilities at the rear of the store.</p> <p>2iii) WCPL pay a local contractor, Lynch's Civil Services' to conduct grounds keeping services in Wollar Village. Invoice from the contractor sighted for April 2018.</p>	Compliant	

APPENDIX A AUDIT CHECKLIST									
Reference	Condition	Evidence	Comments	Audit Finding	Recommendation				
<b>SUPPLY OF OVERBURDEN</b>									
15	<p>With the approval of the Secretary and in consultation with Council, the Applicant may supply small quantities of overburden material to regional infrastructure projects in the vicinity of the site.</p> <p><i>Note: The use of this material in the regional infrastructure project must be approved prior to the supply of any material</i></p>		It was reported that this had not occurred at the time of the audit.	Not triggered					
<b>Schedule 3 SPECIFIC ENVIRONMENTAL CONDITIONS</b>									
<b>ACQUISITION UPON REQUEST</b>									
1	<p>Upon receiving a written request for acquisition from the owner of the land listed in Table 1, the Applicant must acquire the land in accordance with the procedures in conditions 5 and 6 of schedule 4.</p> <p><i>Table 1: Land subject to acquisition upon request</i></p> <table border="1"> <thead> <tr> <th>Residence</th> </tr> </thead> <tbody> <tr> <td>102, 903, 908, 933, and 959</td> </tr> </tbody> </table> <p><i>Note: To interpret the land referred to in Table 1, see the applicable figures in Appendix 5.</i></p>	Residence	102, 903, 908, 933, and 959		It was reported that no acquisition requests from the property owners with acquisition rights had occurred during the audit period	Not Triggered			
Residence									
102, 903, 908, 933, and 959									
<b>MITIGATION UPON REQUEST</b>									
2	<p>Upon receiving a written request from the owner of any residence on the land listed in Table 2, the Applicant must implement additional noise mitigation measures at or in the immediate vicinity of the residence in consultation with the landowner. These measures must be consistent with the measures outlined in the Voluntary Land Acquisition and Mitigation Policy. They must also be reasonable and feasible and proportionate with the level of predicted impact.</p> <p>If within 3 months of receiving this request from the owner, the Applicant and the owner cannot agree on the measures to be implemented, or there is a dispute about the implementation of these measures, then either party may refer the matter to the Secretary for resolution.</p> <p><i>Table 2: Land subject to additional mitigation upon request</i></p> <table border="1"> <thead> <tr> <th>Mitigation Basis</th> <th>Residence</th> </tr> </thead> <tbody> <tr> <td>Noise</td> <td>102, 903, 908 and 933</td> </tr> </tbody> </table> <p><i>Note: To interpret the land referred to in Table 2, see the applicable figures in Appendix 5.</i></p>	Mitigation Basis	Residence	Noise	102, 903, 908 and 933	<ul style="list-style-type: none"> <li>Letters from WCPL to landowners titled "WCM – Landowner notification under schedule 4 of development consent SSD 6764", dated 22.05.2017</li> </ul>	It was reported that mitigation had not been requested by property owners with mitigation request rights during the audit period. Letters were sent to Property ID 102, 903, 908 and 933 on the 22.05.17 informing them of their noise mitigation rights.	Not Triggered	
Mitigation Basis	Residence								
Noise	102, 903, 908 and 933								

APPENDIX A AUDIT CHECKLIST																																												
Reference	Condition	Evidence	Comments	Audit Finding	Recommendation																																							
<b>NOISE</b>																																												
<b>Noise Criteria</b>																																												
3	<p>The Applicant must ensure that the noise generated by the development does not exceed the criteria in Table 3 at any residence on privately-owned land or at the other specified locations. Noise generated by the development is to be measured in accordance with the relevant requirements of the NSW Industrial Noise Policy (as may be updated from time to time). Appendix 6 sets out the meteorological conditions under which these criteria apply along with any modifications to the NSW Industrial Noise Policy and the requirements for evaluating compliance with these criteria. However, these criteria do not apply if the Applicant has an agreement with the owner/s of the relevant residence of land to generate higher noise levels, and the Applicant has advised the Department in writing of the terms of this agreement</p> <p><i>Table 3: Noise criteria dB(A)</i></p> <table border="1"> <thead> <tr> <th rowspan="2">Location</th> <th>Day</th> <th>Evening</th> <th colspan="2">Night</th> </tr> <tr> <th>L<sub>Aeq</sub>(15 minute)</th> <th>L<sub>Aeq</sub>(15 minute)</th> <th>L<sub>Aeq</sub>(15 minute)</th> <th>L<sub>A1</sub>(1 minute)</th> </tr> </thead> <tbody> <tr> <td>102</td> <td>36</td> <td>36</td> <td>38</td> <td>45</td> </tr> <tr> <td>Wollar Village – Residential</td> <td>36</td> <td>37</td> <td>37</td> <td>45</td> </tr> <tr> <td>All other privately owned land</td> <td>35</td> <td>35</td> <td>35</td> <td>45</td> </tr> <tr> <td>901 – Wollar School</td> <td></td> <td>35 (internal) 45 (external) When in use</td> <td></td> <td>-</td> </tr> <tr> <td>150A – St Luke’s Anglican Church</td> <td></td> <td>40 (internal) When in use</td> <td></td> <td>-</td> </tr> <tr> <td>900 – St Laurence O’Toole Catholic Church</td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table> <p><i>Note: To interpret the locations referred to in Table 3, see the applicable figures in Appendix 5.</i></p>	Location	Day	Evening	Night		L <sub>Aeq</sub> (15 minute)	L <sub>Aeq</sub> (15 minute)	L <sub>Aeq</sub> (15 minute)	L <sub>A1</sub> (1 minute)	102	36	36	38	45	Wollar Village – Residential	36	37	37	45	All other privately owned land	35	35	35	45	901 – Wollar School		35 (internal) 45 (external) When in use		-	150A – St Luke’s Anglican Church		40 (internal) When in use		-	900 – St Laurence O’Toole Catholic Church					<ul style="list-style-type: none"> <li>Monthly Environmental Noise Monitoring Reports, Global Acoustics, January – July 2018</li> <li>2017 Annual Return</li> <li>2017 Annual Review</li> <li>EPA letter dated 23.08.17 – Noise Complaint Advisory Letter</li> <li>EPA letter dated 7.06.17 – Unannounced Noise and Odour Surveys</li> </ul>	<p>WCPL engaged Global Acoustics to undertake monthly attended noise monitoring at eight locations (including ones that correlate with the specified locations) to assess compliance with the criteria. It is noted the two Churches are owned by WCPL and both buildings have been deconsecrated and are no longer places of worship.</p> <p>The attended noise monitoring results indicated the noise criteria were being met during the audit period.</p> <p>As detailed in the NMP, attended monitoring is used by WCPL to determine compliance with the criteria whilst unattended real-time noise monitoring is used as a noise management tool to proactively manage noise by modifying mining operations as required when trigger levels are reached.</p> <p>The approach to using attended noise monitoring for assessing compliance with criteria and unattended real time monitoring as a management tool is widely accepted and used by industry. In addition, this approach is clearly documented within the NMP which the EPA was consulted on and was approved by the DPE. Additionally, Appendix 6 of the Development Consent: Noise Compliance Assessment. States under item 3 that “<i>Attended monitoring is to be used to evaluate compliance with the relevant conditions of this consent</i>” and under item 4 “<i>This monitoring must be carried out at least 12 times a year, unless the Secretary directs otherwise</i>”.</p>	Compliant	
Location	Day		Evening	Night																																								
	L <sub>Aeq</sub> (15 minute)	L <sub>Aeq</sub> (15 minute)	L <sub>Aeq</sub> (15 minute)	L <sub>A1</sub> (1 minute)																																								
102	36	36	38	45																																								
Wollar Village – Residential	36	37	37	45																																								
All other privately owned land	35	35	35	45																																								
901 – Wollar School		35 (internal) 45 (external) When in use		-																																								
150A – St Luke’s Anglican Church		40 (internal) When in use		-																																								
900 – St Laurence O’Toole Catholic Church																																												
<b>Operating Conditions</b>																																												
4	<p>The Applicant must:</p> <p>(a) implement all reasonable and feasible measures to minimise the construction, operational, low frequency, road and rail noise of the development;</p>	<ul style="list-style-type: none"> <li>Car-pooling memo and form</li> <li>SLR Sound Power Testing Report, 14.08.18</li> <li>General Induction April 2017</li> <li>Trainee Presentation</li> <li>Interviews with Dispatch Operators</li> </ul>	<p>Measures to minimise noise from operations are included in the Noise Management Plan. The following measures described in the plan have been implemented:</p> <ul style="list-style-type: none"> <li>Promoting car-pooling to reduce traffic volumes and traffic noise by providing a cash incentive per annum for each vehicle removed from the road through car-pooling (sighted Memo to staff outlining initiative)</li> <li>Sound power level surveys of Peabody owned plant and equipment was being undertaken on an annual basis (sighted May 2018 testing by SLR). SLR monitored sound power levels of operating plant and compared them to the noise levels used in SLR’s predictive mine noise modelling for WCM and presented in Appendix 3 of the NMP. The survey concluded that the Peabody owned plant and equipment was performing generally in accordance with the sound power levels presented in the NMP.</li> <li>General induction raises awareness of noise pollution (all people inducted on site, including contractors). Trainee Presentation (rolled out to new trainee operators) provides further detail about noise</li> <li>The previous 24 hours noise levels are reported by exception to Senior Leadership Team and Superintendents at the daily meetings.</li> </ul>	Compliant																																								

APPENDIX A AUDIT CHECKLIST					
Reference	Condition	Evidence	Comments	Audit Finding	Recommendation
			<ul style="list-style-type: none"> <li>Dedicated resources have been employed for monitoring real time noise levels during the day and night (interviewed Dispatch Operator)</li> </ul>		
4(b)	Operate a comprehensive noise management system that uses a combination of predictive meteorological forecasting and real-time noise monitoring data to guide the day to day planning of mining operations, and the implementation of both proactive and reactive noise mitigation measures to ensure compliance with the relevant conditions of this consent	<ul style="list-style-type: none"> <li>Interviews with Dispatch Operators</li> <li>Completed Noise &amp; Dust Assessment Forms</li> </ul>	<p>WCPL operates a comprehensive Noise Management System (NMS) that uses a combination of predictive meteorological forecasting and real-time noise monitoring data to guide the day to day planning of mining operations. The auditors sighted examples of the daily weather briefing which includes thunderstorm risk, overpressure/ noise forecast, inversion risk, dust risk.</p> <p>Interviews with the Dispatch Operators that were on duty during the site inspection indicated the NMS was well understood. Operators were able to explain what to do if a noise alarm, elevated noise level or noise complaint was received. The Dispatch Operators explained that they log their notes on the "Noise &amp; Dust Assessment Form". A sample of completed forms were viewed by the auditors and observed to include notes of the elevated noise level or alarm, a review of the audio and what the contributing noises were and communication with the Mine Manager on whether a change of operations is required.</p>	Compliant	
4(c)	minimise the noise impacts of the development during meteorological conditions when the noise limits in this consent do not apply (see Appendix 6)	<ul style="list-style-type: none"> <li>Interviews with Dispatch Operators</li> <li>Sighted daily weather forecasting message sent to E&amp;C Manager</li> </ul>	WCPL monitor weather conditions via the on-site meteorological station and have engaged a third party provider to provide a daily weather forecasting service to assist operations in the prediction of likely adverse meteorological conditions that have the potential to exacerbate noise levels. When adverse conditions are forecast the notification will alert key operational personnel that the NMS may need to be implemented in the next 24 hour period.	Compliant	
4(d)	only use locomotives and rolling stock that are approved to operate on the NSW rail network in accordance with the noise limits in ARTC's EPL		ARTC manages the locomotives and rolling stock in accordance with its EPL. Wilpinjong has limited influence over ARTC's operations.	Compliant	
4(e)	co-ordinate noise management at the site with the noise management at Moolarben and Ulan mines to minimise cumulative noise impacts; and	<ul style="list-style-type: none"> <li>Email to MCO and UCML dated 20.12.17 consulting on proposed shift changes</li> <li>Proposed Shift Times Schedule</li> </ul>	<p>WCPL works with MCO and UCML to minimise cumulative noise impacts. For example:</p> <ul style="list-style-type: none"> <li>Coordinating shift changes with MCO and UCML. Sighted email to MCO and UCML providing details of proposed shift changes for CHPP (dated 20.12.17). Also sighted Proposed Shift Times Schedule showing all three mines' shifts and school bus times. This schedule was circulated between all three mines to ensure mines have staggered shift changes.</li> <li>Coordinating blasting with MCO (UCML no longer blasting). Send blasting notification to Moolarben Coal Operations (MCO) (cc them in on notifications).</li> <li>A data sharing agreement is in place between WCPL, MCO and UCML (executed in 2014)</li> </ul>	Compliant	

APPENDIX A AUDIT CHECKLIST					
Reference	Condition	Evidence	Comments	Audit Finding	Recommendation
4(f)	carry out regular monitoring to determine whether the development is complying with the relevant conditions of this consent.	<ul style="list-style-type: none"> <li>Monthly Attended Noise Monitoring Reports, Global Acoustics Jan – Jul 2018</li> </ul>	WCPL utilise a combination of operator attended and unattended noise monitoring to assess performance of the mine (refer discussion under Schedule 3, Condition 3 above).	Compliant	<b>2018 IEA OFI 033</b> Include within the monthly attended noise monitoring reports, a list of equipment operating at the Mine during the noise monitoring period.
<b>Noise Management Plan</b>					
5	Prior to carrying out any development under this consent, unless the Secretary agrees otherwise, the Applicant must prepare a Noise Management Plan for the development to the satisfaction of the Secretary. This plan must:	<ul style="list-style-type: none"> <li>Noise Management Plan (June 2017)</li> <li>Letter from DPE to WCPL titled "Wilpinjong Coal Mine (05_0021) Management Plans" and dated 20.03.17.</li> </ul>	<p>The Noise Management Plan (NMP) (WI-ENV-MNP-0011_June 2017, was developed originally in 2006 for the initial development phase of the project and under the previous project approval (05-0021).</p> <p>The NMP was revised in June 2017 in order for it to align with the requirements of the new consent SSD-6764 and WEP EIS. DPE approved the revised NMP on 20.03.17.</p>	Compliant	
5(a)	be prepared in consultation with the EPA;	<ul style="list-style-type: none"> <li>Letter from EPA to WPL titled "Wilpinjong Coal Mine, Revised Management Plans" dated 22.06.17</li> <li>NMP, Section 1.4, 2.4 and Appendix 2</li> </ul>	<p>The NMP was prepared in consultation with a variety of regulators including the NSW EPA. Records of consultation were provided to the auditors for review and are also detailed in Section 1.4, 2.4 and Appendix 2 of the NMP.</p> <p>WCPL submitted the revised NMP to the EPA on 01.06.17. The EPA notified WCPL on 22.06.17 that they will not be reviewing or endorsing the management plans submitted to the EPA.</p>	Compliant	
5(b)	describe the measures that would be implemented to ensure compliance with the noise criteria and operating conditions in this consent;	<ul style="list-style-type: none"> <li>NMP, Section 4</li> </ul>	<p>Section 4.0 of the NMP outlines the Noise Compliance requirements including the noise criteria nominated in Development Consent SSD-6764.</p> <p>This section includes a description of the performance indicators which will be used when assessing the noise performance of WCM.</p>	Compliant	
5(c)	describe the proposed noise management system in detail; and	<ul style="list-style-type: none"> <li>NMP, Section 5</li> </ul>	<p>Section 5.0 of the NMP outlines noise management and control measures that WCMP will implement to ensure best management practice to minimise the operational, road and rail noise of the WCM. Controls include:</p> <ul style="list-style-type: none"> <li>Planning controls i.e. amending shift changes and undertaking noise modelling,</li> <li>Operational Controls i.e. plant maintenance and operation of equipment,</li> <li>Engineering Controls i.e. noise attenuation of mobile equipment;</li> <li>Meteorological Forecasting;</li> <li>Cumulative Noise Management;</li> <li>Continuous Improvement; and,</li> <li>Mobile Equipment and Fixed Plant Sound Power Levels.</li> </ul>	Compliant	

APPENDIX A AUDIT CHECKLIST																				
Reference	Condition	Evidence	Comments	Audit Finding	Recommendation															
5(d)	include a monitoring program that: ~ evaluates and reports on: - the effectiveness of the noise management system; - compliance against the noise criteria in this consent; and - compliance against the noise operating conditions; ~ includes a program to calibrate and validate the real-time noise monitoring results with the attended monitoring results over time (so the real-time noise monitoring program can be used as a better indicator of compliance with the noise criteria in this consent and trigger for further attended monitoring); and ~ defines what constitutes a noise incident, and includes a protocol for identifying and notifying the Department and relevant stakeholders of any noise incidents.	<ul style="list-style-type: none"> <li>NMP, Section 6</li> </ul>	<p>Section 6.0 of the NMP details the Noise Monitoring program to be implemented at WCM. This section outlines the monitoring locations, Meteorological monitoring, Operator-attended noise monitoring as well as the monitoring methodology to be employed. Real time noise monitoring is outlined in section 6.4 and includes a monitoring methodology and real-time response protocol.</p> <p>Section 6.0 also outlines how WCPL will evaluate compliance against development consent SSD-6764 and how the site will respond to non-compliances or exceedances.</p>	Compliant																
6	The Applicant must implement the approved Noise Management Plan for the development.	Refer Schedule 3, Condition 4	<p>In general, it was considered that the NMP was being implemented. This included implementing planning and operational measures to minimise noise, implementing a noise monitoring program and comprehensive noise management system incorporating real time monitoring and meteorological forecasting. Refer to discussion under Schedule 3, Condition 4 for evidence.</p> <p>Observation made during loading of haul tracks in Pit No.3, indicated the use of audible horn by the loader operator to alert haul truck drivers of position for loading and then when loading was completed. Subjectively, the audible horn was deemed to be loud and could potential impact on nearby residential receivers (depending on location of mining activities).</p> <p>AECOM was advised by WCM personnel that all mine loaders and haul trucks are fitted with "silent horns" and at the time of the observations during the truck loading operations, both the audible horn and silent horns were being used by the mining operators.</p>	Compliant	<p><b>2018 IEA OFI 020</b></p> <p>Subject to safety requirements, AECOM recommends the use of "silent horn" at all times to minimise potential noise emissions from mine operations, especially when working closer to the surface and on mine pits closer to residential receivers.</p>															
<b>BLASTING</b>																				
<b>Blast Criteria</b>																				
7	<p>The Applicant must ensure that blasting on the site does not cause exceedances of the criteria in Table 4.</p> <p><i>Table 4: Blasting criteria</i></p> <table border="1"> <thead> <tr> <th>Location</th> <th>Airblast overpressure (dB(Lin Peak))</th> <th>Ground vibration (mm/s)</th> <th>Allowable exceedance</th> </tr> </thead> <tbody> <tr> <td rowspan="2">Residence on privately owned land</td> <td>115</td> <td>5</td> <td>5% of the total number of blasts over a rolling period of 12 months</td> </tr> <tr> <td>120</td> <td>10</td> <td>0%</td> </tr> <tr> <td>All public infrastructure</td> <td>-</td> <td>50 <i>(or a limit determined by the structural design methodology in AS 2187.2-2006, or its latest version, or other alternative limit for public infrastructure, to the satisfaction of the Secretary)</i></td> <td>0%</td> </tr> </tbody> </table> <p>However, these criteria do not apply if the Applicant has a written agreement with the relevant owner to exceed these criteria, and has advised the Department in writing of the terms of this agreement.</p>	Location	Airblast overpressure (dB(Lin Peak))	Ground vibration (mm/s)	Allowable exceedance	Residence on privately owned land	115	5	5% of the total number of blasts over a rolling period of 12 months	120	10	0%	All public infrastructure	-	50 <i>(or a limit determined by the structural design methodology in AS 2187.2-2006, or its latest version, or other alternative limit for public infrastructure, to the satisfaction of the Secretary)</i>	0%	<ul style="list-style-type: none"> <li>Wilpinjong Blast Tracking Spreadsheet 24.04.2017 – 23.08.2018</li> <li>Site Inspection</li> </ul>	<p>AECOM auditors conducted an interview with the WCPL Drill and Blast Engineer from the Tech Services Department. Blasting preparation and operations are coordinated and managed by Tech Services. WCPL have contracted Dynamaster to set up and maintain vibration and noise monitors at the locations specified in Figure 9 of the Blast Management Plan, a sample of which were sighted during the site inspection. Automated monitoring is conducted at all blast monitoring locations when a blast is registered. The data is available for viewing in an online system and can be interrogated in the Wilpinjong Blast Tracking Spreadsheet which is maintained by Tech Services. In addition following each monitoring event the results are sent as a text message to relevant personnel in Tech Services, Operations and Environment.</p> <p>A blast occurred on 22.08.2018 (day 1 of the audit) and was witnessed by the auditors. Monitoring results were viewed on the E&amp;C Managers phone immediately following the blast.</p> <p>The auditors viewed an extract from the Wilpinjong Blast Tracking Spreadsheet for the period 24.04.2017 to 23.08.2018. Results indicated the following:</p>	Compliant	
Location	Airblast overpressure (dB(Lin Peak))	Ground vibration (mm/s)	Allowable exceedance																	
Residence on privately owned land	115	5	5% of the total number of blasts over a rolling period of 12 months																	
	120	10	0%																	
All public infrastructure	-	50 <i>(or a limit determined by the structural design methodology in AS 2187.2-2006, or its latest version, or other alternative limit for public infrastructure, to the satisfaction of the Secretary)</i>	0%																	

APPENDIX A AUDIT CHECKLIST					
Reference	Condition	Evidence	Comments	Audit Finding	Recommendation
			<ul style="list-style-type: none"> <li>0.4% of blasts during the audit period exceeded 115 dB (Lin Peak). This was below the criteria of 5% allowable exceedance.</li> <li>No exceedances of the 120 dB (Lin Peak) criteria were recorded during the audit period.</li> <li>No exceedances of ground vibration criteria were recorded during the audit period.</li> </ul>		
<b>Blast Hours</b>					
8	The Applicant must only carry out blasting on the site between 9am and 5pm Monday to Saturday inclusive. No blasting is allowed on Sundays, public holidays, or at any other time without the written approval of the Secretary.	<ul style="list-style-type: none"> <li>Wilpinjong Blast Tracking Spreadsheet 24.04.2017 – 23.08.2018</li> </ul>	<p>The auditors viewed an extract from the Wilpinjong Blast Tracking Spreadsheet for the period 24.04.2017 to 23.08.2018. No blasts were identified to have occurred before 9am or after 5pm.</p> <p>The earliest blast recorded during the audit period occurred at 09:24am, the latest blast recorded during the audit period occurred at 03:38pm.</p> <p>No blasts were identified to have occurred on a Sunday.</p>	Compliant	
<b>Blast Frequency</b>					
9	<p>The Applicant may carry out a maximum of:</p> <p>(a) 2 blasts a day; and</p> <p>(b) 5 blasts a week, averaged over a calendar year, at the site.</p> <p>This condition does not apply to blasts that generate ground vibration of 0.5 mm/s or less at any residence on privately-owned land, blast misfires or blasts required to ensure the safety of the mine or its workers.</p> <p><i>Notes: For the purposes of this condition, a blast refers to a single blast event, which may involve a number of individual blasts fired in quick succession in a discrete area of the mine. For the avoidance of doubt, should an additional blast be required after a blast misfire, this additional blast and the blast misfire are counted as a single blast. In circumstances of recurring unfavourable weather conditions (following planned but not completed blast events), to avoid excess explosive sleep times and minimise any potential environmental impacts, the Applicant may seek agreement from the Secretary for additional blasts to be fired on a given day.</i></p>	<ul style="list-style-type: none"> <li>Wilpinjong Blast Tracking Spreadsheet 24.04.2017 – 23.08.2018</li> </ul>	<p>The auditors viewed an extract from the Wilpinjong Blast Tracking Spreadsheet for the period 24.04.2017 to 23.08.2018. An Average of 4.79 blasts occurred per week during the audit period. No exceedances to the blast occurrence requirements were identified.</p>	Compliant	



APPENDIX A AUDIT CHECKLIST					
Reference	Condition	Evidence	Comments	Audit Finding	Recommendation
<b>Property Inspections</b>					
10	<p>If the Applicant receives a written request from the owner of any privately-owned land within 3 kilometres of any approved open cut mining pit/s on site for a property inspection to establish the baseline condition of any buildings and/or structures on his/her land, or to have a previous property inspection updated, then within 2 months of receiving this request the Applicant must:</p> <p>(a) commission a suitably qualified, experienced and independent person, whose appointment is acceptable to both parties to:</p> <ul style="list-style-type: none"> <li>- establish the baseline condition of any buildings and other structures on the land, or update the previous property inspection report; and</li> <li>- identify reasonable and feasible measures that should be implemented to minimise the potential blasting impacts of the development on these buildings and/or structures; and</li> </ul> <p>(b) give the landowner a copy of the new or updated property inspection report.</p> <p>If there is a dispute over the selection of the suitably qualified, experienced and independent person, or the Applicant or the landowner disagrees with the findings of the property inspection report, either party may refer the matter to the Secretary for resolution.</p>	<ul style="list-style-type: none"> <li>• Letters from WCPL to landowners titled "WCM – Landowner notification under schedule 4 of development consent SSD 6764", dated 22.05.2017</li> </ul>	<p>It was reported that no requests for inspections had occurred at the time of the audit Letters were sent to property owners 903, 908 and 933 on the 22.05.17 informing them of their right for inspection.</p>	Not Triggered	
<b>Property Investigations</b>					
11	<p>If any owner of privately-owned land within 3 kilometres of any approved open cut mining pit/s on site, or any other landowner where the Secretary is satisfied an investigation is warranted, claims that buildings and/or structures on his/her land have been damaged as a result of blasting associated with the development, then within 2 months of receiving this request, the Applicant must:(a) commission a suitably qualified, experienced and independent person, whose appointment is acceptable to both parties to investigate the claim; and(b) give the landowner a copy of the property investigation report.If this independent property investigation confirms the landowner's claim, and both parties agree with these findings, then the Applicant must repair the damages to the satisfaction of the Secretary.If there is a dispute over the selection of the suitably qualified, experienced and independent person, or the Applicant or the landowner disagrees with the findings of the independent property investigation, either party may refer the matter to the Secretary for resolution.</p>		<p>It was reported that this had not occurred at the time of the audit.</p>	Not Triggered	

APPENDIX A AUDIT CHECKLIST					
Reference	Condition	Evidence	Comments	Audit Finding	Recommendation
<b>Operating Conditions</b>					
12	During mining operations on the site, the Applicant must:				
12(a)	<p>implement reasonable and feasible measures to:</p> <ul style="list-style-type: none"> <li>- protect the safety of people and livestock in the area surrounding blasting operations;</li> <li>- protect public or private infrastructure/property and heritage items in the area surrounding blasting operations from blasting damage;</li> <li>- minimise blasting impacts on the Shale Oil Mine Adit containing the Eastern Bentwing-bat roost site located adjacent to Pit 8; and</li> <li>- minimise the dust and fume emissions from blasting at the development;</li> </ul>	<ul style="list-style-type: none"> <li>• Shotfirer Blast Checklist (WI-WIN-FRM-0199) for Shot Number 1993 dated 17.08.2018.</li> <li>• Blast Controller Checklist (WI-MIN-FRM-0210) for Shot Number 1994 dated 21.08.2018.</li> <li>• Blast Exclusion Map sent to landowners during notification for Shot Number 1993 dated 17.08.2018</li> <li>• Wilpinjong Blast Tracking Spreadsheet 24.04.2017 – 23.08.2018</li> </ul>	<p>WCPL has developed a Blasting Protocol which outlines the measures to protect the safety of people and livestock, including internal WCPL personnel. The Protocol includes the following:</p> <ul style="list-style-type: none"> <li>• Notifications to residence, the public and workers (sighted example landowner notifications)</li> <li>• Exclusion zone during blasting operations;</li> <li>• Shotfirer Checklist which confirms shot has been walked and inspected, all personnel are clear of the area and all explosives have been accounted for (sighted completed examples).</li> <li>• WCPL reported that it would postpone blasting during adverse weather conditions when there is the potential to cause dust and fume impacts to travel outside the Mine boundary. Adverse weather conditions are defined in the Blast Management Plan as westerly winds at speeds greater than 7 m/sec. The Blast checklist which is completed by the Blast Controller includes a review of meteorological conditions to ensure they do not exceed trigger values which would halt a blast occurring. (sighted completed examples).</li> </ul> <p>The WCPL Blast Management Plan outlines the blast criterion which is required to be complied with. This criteria includes those limits specified in Consent SSD-6764, EPL 12425 as well as the following additional specific criteria:</p> <ul style="list-style-type: none"> <li>• Tailings Dams (limit of 50mm/s)</li> <li>• Railway lines (limit of 200 mm/s when blasting within 100m)</li> <li>• Railway Culverts (limit of 100 mm/s when blasting within 350m)</li> <li>• Archaeological sites (limits of 80mm/s performance criteria and 250 mm/s damage indicator)</li> <li>• Livestock landholder (Airblast overpressure limits of 125dB and 200mm/s)</li> <li>• Historical Mine Adit (Shale Oil Mine Adit ) (Limit of 80 mm/s)</li> </ul> <p>Blast monitoring locations are shown in Figure 9 of the Blast Management Plan, a sample of which were sighted during the site inspection.</p> <p>Blast monitoring results for noise and vibration from 24 April 2017 to 23 August 2018 were reviewed by the auditors. No exceedances of monitoring criteria were identified during the audit period.</p>	Compliant	

APPENDIX A AUDIT CHECKLIST					
Reference	Condition	Evidence	Comments	Audit Finding	Recommendation
12(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;	<ul style="list-style-type: none"> <li>• Wilpinjong Blast Tracking Spreadsheet 24.04.2017 – 23.08.2018</li> <li>• Blast Management Plan (June 2017)</li> <li>• Site Inspection</li> <li>• Aboriginal Cultural Heritage Management Plan</li> <li>• WCM Aboriginal Cultural Heritage Clearance Works (NOHC, Oct 2017)</li> <li>• WCPL Environment Site Inspections</li> <li>• RAPCC Presentation 5 June 2018</li> </ul>	<p>WCPL has identified the damage vibration criteria of 250 mm/s applicable to archaeological / geological structures. In addition, it has adopted performance criteria for ground vibration at the identified Aboriginal rock shelter (Castle Rock etc.) for sites with art of 80 mm/s.</p> <p>As per the Blast Management Plan, blast monitoring sites are located at Archaeological Sites WE7, WE10, WE76, WE77 and WCP535 in the Munghorn Gap Nature Reserve. These sites are monitored during each blast within 1km of the sites.</p> <p>At the time of the audit site inspection a blast was observed in Pit 5. It is noted that the nearest rock shelter in the Munghorn Gap Nature Reserve is within 100m to the mining area to Pit 5. Monitoring results were observed on the WCPL E&amp;C Managers phone following the blast and were below the applicable limits.</p> <p>The auditors also inspected Castle Rock (Rock Shelter) heritage site during the audit site inspection. No noticeable damage was observed. It was reported that there had been no damage identified or recorded at any rock shelter. The blast vibration monitor was sighted at Castle Rock.</p> <p>Monitoring of archaeological sites is conducted as part of archaeological inspections required under the Aboriginal Cultural Heritage Management Plan. This includes a requirement to inspect the condition of either all or a representative sample of the relevant identified rock shelter sites to identify if any perceptible physical impacts have occurred that may relate to blasting (ACHMP, Section 6.4). In addition archaeological sites are also monitored as part of the Ground Disturbance Permit (GDP) process.</p> <p>Baseline recording of the rock shelters was conducted in 2006 to enable future assessment of blast impacts to these sites. Inspection reports of the archaeological sites were viewed by the auditors. Results of these inspections and surveys are reported to RAPs in the RAPCCC meetings.</p> <p>As detailed above (Condition 12(a)), no exceedances of blast monitoring criteria were identified during the audit period. This included results recorded at monitoring locations near heritage items.</p>	Compliant	
12(c)	limit temporary blasting-related road closures to 1 per day;	<ul style="list-style-type: none"> <li>• Wilpinjong Blast Tracking Spreadsheet 24.04.2017 – 23.08.2018</li> </ul>	A review of the blasts conducted during the audit period indicated that no more than one road closure per day occurred due to blasting operations.	Compliant	
12(d)	co-ordinate the timing of blasting on site with the timing of blasting at the adjoining Moolarben and Ulan coal mines to minimise the potential cumulative blasting impacts of the three mines;	<ul style="list-style-type: none"> <li>• Email from Moolarben Coal Drill and Blast Engineer to WCPL 03.08.2018</li> </ul>	<p>Prior to a blast occurring a notification process is conducted which includes notification to MCO and UCML. It was reported that MCO also includes WCPL in its notification list prior to conducting a blast.</p> <p>UCML has not operated an open cut mine during the audit period.</p>	Compliant	

APPENDIX A AUDIT CHECKLIST					
Reference	Condition	Evidence	Comments	Audit Finding	Recommendation
12(e)	operate a suitable system to enable the public to get up-to-date information on the proposed blasting schedule on site; and	<ul style="list-style-type: none"> <li>Site Inspection</li> <li>Website Notification Phone Call List</li> </ul>	<p>The auditors sighted signs on Ulan-Wollar Road which detailed upcoming road-closures due to blasting operations at WCPL. WCPL also maintains a Blasting Information Hotline - 1800 649 783. The hotline is managed by the Tech Services Department. The auditors called the blasting hotline and were informed of the next scheduled blast to occur on site.</p> <p>In addition to the public notifications the Tech Services Department also calls / texts a list of local landowners and business to notify them of an upcoming blast. The list includes seven people, the local public school, Mudgee Police, Mudgee Fire Department and Dubbo Ambulance Department.</p>	Compliant	
12(f)	carry out regular monitoring to determine whether the development is complying with the relevant conditions of this consent.	Wilpinjong Blast Tracking Spreadsheet 24.04.2017 – 23.08.2018	<p>Monitoring during blasting is conducted in accordance with the Blast Management Plan. Refer evidence against Condition 12(a), Schedule 3.</p> <p>Blast monitoring results for noise and vibration from 24 April 2017 to 23 August 2018 were reviewed by the auditors. No exceedances of monitoring criteria were identified during the audit period.</p>	Compliant	
13	<p>The Applicant must not undertake blasting on site within 500 metres of any public road or railway, or any land outside the site not owned by the Applicant, unless the Applicant has:</p> <p>(a) a written agreement with the relevant infrastructure owner or landowner to allow blasting to be carried out closer to the infrastructure or land, and the Applicant has advised the Department in writing of the terms of this agreement; or</p> <p>(b) demonstrated to the satisfaction of the Secretary that the blasting can be carried out closer to the infrastructure or land without compromising the safety of people or livestock or damaging the infrastructure and/or other buildings and structures, and updated the Blast Management Plan to include the specific mitigation measures that would be implemented while blasting is being carried out within 500 metres of the infrastructure or land.</p>	<ul style="list-style-type: none"> <li>Executed Blasting Deed between WCPL and ARTC, dated 08.09.2006.</li> <li>Letter from MWRC to WCPL titled "Blasting within 500m of a public road" dated 12.07.2006</li> <li>Road Closure Management Plan</li> <li>Blast Management Plan (Road Closure Management Plan)</li> <li>Blast notification emails (07/08/2018 and 21/08/2018)</li> </ul>	<p>WCPL updated the Blast Management Plan to include a protocol to follow when blasting is planned to occur within 500m of council infrastructure or the ARTC rail line. Specifically, road closures for blasting within 500 metres of a public road is conducted in accordance with the road closure management plan which is included in the Blast Management Plan.</p> <p>The auditors sighted a letter from MWRC (12 July 2006) which approved the Blast Management Plan and also outlined that MWRC wish to be contacted at least 24 hours prior to any proposed blasting within 500m of a public road.</p> <p>The executed agreement with ARTC for rail blasting (dated 08.09.2006) was reviewed by the auditors and also stipulates requirements for conducting blasting within proximity of the Gulgong-Sandy Hollow railway line.</p> <p>The auditors sighted a sample of blasting notification emails sent out by the WCPL Drill and Blast Engineer. Where blasting occurs within 500m of a public road or railway MWRC and ARTC are included in the notification email.</p>	Compliant	
<b>Blast Management Plan</b>					
14	Prior to carrying out any development under this consent, unless the Secretary agrees otherwise, the Applicant must prepare a Blast Management Plan for the development to the satisfaction of the Secretary. This plan must:	<ul style="list-style-type: none"> <li>Blast Management Plan Version 3, June 2017</li> <li>DPE management plan approval letter dated 4.08.17</li> </ul>	The Blast Management Plan (BMgtP) was originally approved by DPE on 2 May 2006. The previous version of the Plan (Version 2, dated October 2016) was approved by DPE on 20 March 2017. The current version of the Blast Management Plan (Version 3, dated June 2017), updated to satisfy Development Consent (SSD-6764) and the WEP EIS, was approved DPE on 4 August 2017.	Compliant	

APPENDIX A AUDIT CHECKLIST					
Reference	Condition	Evidence	Comments	Audit Finding	Recommendation
14(a)	be prepared in consultation with the EPA and OEH;	<ul style="list-style-type: none"> <li>Blast Management Plan Section 1.4 and Appendix 3</li> </ul>	Appendix 3 of the BMgtP includes evidence of consultation with EPA and OEH.	Compliant	
14(b)	describe the measures that would be implemented to ensure compliance with the blast criteria and operating conditions of this consent;	Blast Management Plan Section 5.0	Section 5.0 of the BMgtP describes blast management and control measures	Compliant	
14(c)	include a Eastern Bentwing-bat Management Plan that: <ul style="list-style-type: none"> <li>establishes preliminary blasting ground vibration thresholds of no more than 80mm/s to protect the Shale Oil Mine Adit and minimise disturbance to the Eastern Bentwing-bat roosting site;</li> <li>evaluates and reports on blast vibration and overpressure at the Shale Oil Mine Adit and monitors disturbance of the Eastern Bentwing-bat roosting site;</li> <li>includes an annual program for reviewing and revising blasting thresholds; and</li> <li>describes other measures to minimise impacts consistent with the Biodiversity Management Plan (see condition 42 of this schedule).</li> </ul>	Blast Management Plan Section 5.5	Section 5.5 of the BMgtP discusses Eastern Bentwing-bat management strategies and also refers to the Biodiversity Management Plan. At the time of the audit mining was yet to commence in Slate Gully (proposed Pit 8) which is in the vicinity of the Shale Oil Mine Adit.	Compliant	
14(d)	propose and justify any alternative ground vibration limits for public infrastructure in the vicinity of the site (if relevant); and	Blast Management Plan Section 4.1	Alternative ground vibration limits for railway infrastructure (railway lines and railway culverts) have been adopted following consultation with ARTC. The general blasting criteria for public infrastructure presented in Table 4 of Schedule 3, Condition 7 has been adopted for other public infrastructure.	Compliant	
14(e)	include a road closure management plan for blasting within 500 metres of a public road, that has been prepared in consultation with Council;	Blast Management Plan Section 5.3.2	Section 5.3.2 of the BMgtP discusses blasting adjacent to public roads. This section also refers to a Road Closure Plan that was prepared in consultation with MWRC as being included in Appendix 3. Appendix 3 included the consultation but not the actual Road Closure Plan.	Compliant	<b>2018 IEA OFI 034</b> Include the Road Closure Plan as an appendix to the Blast Management Plan as indicated in the Plan.
14(f)	include a monitoring program located on or representative of privately-owned land for evaluating and reporting on compliance with the blasting criteria and operating conditions of this consent.	Blast Management Plan Section 6.0	Section 6.0 of the BMgtP describes the blast monitoring program	Compliant	
15	The Applicant must implement the approved Blast Management Plan for the development.	Refer to referenced Conditions	<p>In general, the Blast Management Plan was being implemented. Evidence of this included:</p> <ul style="list-style-type: none"> <li>Blasting hours were being adhered to (refer Schedule 3, Condition 8)</li> <li>Blasting frequency was being adhered to (refer Schedule 3, Condition 9)</li> <li>Blast monitoring was being undertaken (refer Schedule 3, Condition 7)</li> <li>Blast notifications were being implemented and the Blasting Hotline was operational (refer Schedule 3, Condition 12)</li> <li>Blasting design and control procedures were being implemented such as completion of Shotfirer Checklist and Blast Controller Checklist (refer Schedule 3, Condition 12)</li> <li>Blasting criteria were being met (refer Schedule 3, Condition 7)</li> </ul>	Compliant	

APPENDIX A AUDIT CHECKLIST																								
Reference	Condition	Evidence	Comments	Audit Finding	Recommendation																			
<b>AIR QUALITY</b>																								
<b>Odour</b>																								
16	The Applicant must ensure that no offensive odours are emitted from the site, as defined under the POEO Act.	<ul style="list-style-type: none"> <li>Complaints register</li> <li>AQMP, Section 5.2</li> <li>AQMP, Section 5.2</li> <li>Site inspection</li> <li>EPA formal warning letter dated 07.06.17</li> </ul>	<p>Controls to manage the release of odour from WCM are detailed in Section 5.2 of the Air Quality Management Plan (AQMP) and in the Spontaneous Combustion Management Plan (Appendix 3 of the AQMP).</p> <p>At the time of the audit site inspection no odours were observed beyond the boundary of the mine. Some intermittent odours were detected on the site.</p> <p>A detailed review of complaints received during the reporting period was conducted as part of the IEA. A total of 4 complaints were received from two complainants relating to odour in the audit period.</p> <p>WCPL received a number of complaints and a formal warning letter from the EPA relating to spontaneous combustion odour outside the audit period. The majority of the concerns relating to spontaneous combustion were in proximity to the Keylah Dump area which has since been removed.</p> <p>The audit verified that WCPL implement management measures for spontaneous combustion with the aim of preventing the occurrences of spontaneous combustion events rather than managing its existence. WCPL also have in place an inspection and monitoring program for the management of spontaneous combustion. This is discussed further in Section 8.5.3.1 of the main report.</p>	Compliant																				
<b>Air Quality Criteria</b>																								
17	<p>The Applicant must ensure that all reasonable and feasible avoidance and mitigation measures are employed so that particulate matter emissions generated by the development do not cause exceedances of the criteria listed in Table 5 at any residence on privately-owned land.</p> <p><i>Table 5: Air quality criteria</i></p> <table border="1"> <thead> <tr> <th>Pollutant</th> <th>Averaging period</th> <th colspan="2"><sup>d</sup>Criterion</th> </tr> </thead> <tbody> <tr> <td rowspan="2">Particulate matter &lt; 10 µm (PM<sub>10</sub>)</td> <td>Annual</td> <td colspan="2"><sup>a</sup> 30 µg/m<sup>3</sup></td> </tr> <tr> <td>24 hour</td> <td colspan="2"><sup>a</sup> 50 µg/m<sup>3</sup></td> </tr> <tr> <td>Total suspended particulate (TSP) matter</td> <td>Annual</td> <td colspan="2"><sup>a</sup> 90 µg/m<sup>3</sup></td> </tr> <tr> <td><sup>c</sup> Deposited dust</td> <td>Annual</td> <td><sup>b</sup> 2 g/m<sup>2</sup>/month</td> <td><sup>a</sup> 4 g/m<sup>2</sup>/month</td> </tr> </tbody> </table> <p><i>Notes:</i>  <sup>a</sup> Total impact (i.e. incremental increase in concentrations due to the development plus background concentrations due to all other sources).  <sup>b</sup> Incremental impact (i.e. incremental increase in concentrations due to the development on its own).  <sup>c</sup> Deposited dust is to be assessed as insoluble solids as defined by Standards Australia, AS/NZS 3580.10.1:2003: Methods for Sampling and Analysis of Ambient Air - Determination of Particulate Matter - Deposited Matter - Gravimetric Method.  <sup>d</sup> Excludes extraordinary events such as bushfires, prescribed burning, dust storms, fire incidents or any other activity agreed by the Secretary.</p>	Pollutant	Averaging period	<sup>d</sup> Criterion		Particulate matter < 10 µm (PM <sub>10</sub> )	Annual	<sup>a</sup> 30 µg/m <sup>3</sup>		24 hour	<sup>a</sup> 50 µg/m <sup>3</sup>		Total suspended particulate (TSP) matter	Annual	<sup>a</sup> 90 µg/m <sup>3</sup>		<sup>c</sup> Deposited dust	Annual	<sup>b</sup> 2 g/m <sup>2</sup> /month	<sup>a</sup> 4 g/m <sup>2</sup> /month	<ul style="list-style-type: none"> <li>AQMP, Section 5.1</li> <li>Air quality monitoring data June 2015-July 2018</li> <li>Site inspection</li> </ul>	<p>Mitigation measures listed in Section 5.1 of the AQMP are being appropriately applied and the monitoring program is showing that the air quality conditions are good overall with exceedances likely due to regional impacts rather than mine dust generation.</p>	Compliant	<p><b>IEA 2018 OFI 029</b></p> <p>Although the PM<sub>10</sub> criteria are defined by the approval consents, consideration should be given to modifying the PM<sub>10</sub> annual criteria from 30µg/m<sup>3</sup> to 25µg/m<sup>3</sup>. The NSW EPA approved method document change in late 2016 / early 2017 to adopt the lower criteria and it would be a good idea to proactively consider this criterion as it is likely that it will change as part of any future approvals or changes.</p>
Pollutant	Averaging period	<sup>d</sup> Criterion																						
Particulate matter < 10 µm (PM <sub>10</sub> )	Annual	<sup>a</sup> 30 µg/m <sup>3</sup>																						
	24 hour	<sup>a</sup> 50 µg/m <sup>3</sup>																						
Total suspended particulate (TSP) matter	Annual	<sup>a</sup> 90 µg/m <sup>3</sup>																						
<sup>c</sup> Deposited dust	Annual	<sup>b</sup> 2 g/m <sup>2</sup> /month	<sup>a</sup> 4 g/m <sup>2</sup> /month																					

APPENDIX A AUDIT CHECKLIST					
Reference	Condition	Evidence	Comments	Audit Finding	Recommendation
<b>Mine-owned Land</b>					
18	The Applicant must ensure that all reasonable and feasible avoidance and mitigation measures are employed so that particulate matter emissions generated by the development do not cause exceedances of the criteria listed in Table 5 at any occupied residence on mine-owned land (including land owned by another mining company) B112 unless:	<ul style="list-style-type: none"> <li>AQMP, Section 4.3</li> <li>Air Quality monitoring data</li> </ul>	WCPL commit to this condition in Section 4.3 of the AQMP. A review of air quality monitoring data was conducted at offsite receptor locations. The review concluded that no exceedances of air quality criteria had occurred during the audit period which resulted from WCPL operations including mine owned land.	Compliant	N/A
18(a)	the tenant and landowner (if the residence is owned by another mining company) have been notified of any health risks associated with such exceedances in accordance with the notification requirements under schedule 4 of this consent;	<ul style="list-style-type: none"> <li>Tenant Notification Letters dated 23.05.2017</li> </ul>	WCPL provided a letter to tenants or landholders on 23 May 2017 which informed residence of their general rights under condition 18, Schedule 3 and Condition 1, Schedule 4 of SSD6764. WCPL also enclosed a copy of the NSW health's <i>Mine Dust and You Factsheet</i> with the letter. This letter was provided to 43 tenants or landholders	Compliant	
18(b)	the tenant of any land owned by the Applicant can terminate their tenancy agreement without penalty at any time, subject to giving reasonable notice;		WCPL made tenants aware of this right in letter dated 23.05.2017	Compliant	
18(c)	air mitigation measures such as air filters, a first flush roof water drainage system and/or air conditioning) are installed at the residence, if requested by the tenant or landowner (if the residence is owned by another mining company);		It was reported that air mitigation measures had not been installed at any residence.	Not Triggered	
18(d)	air quality monitoring is regularly undertaken to inform the tenant or landowner (if the residence is owned by another mining company) of particulate emissions in the vicinity of the residence; and	<ul style="list-style-type: none"> <li>Air quality Monitoring Results Summaries (April 2017 – July 2018)</li> <li>Annual Review 2017</li> <li>CCC Meeting presentation (June 2018)</li> <li>Air Monitoring results (Sentinex data viewed 23.08.2018)</li> </ul>	Air quality monitoring, depositional dust, PM <sub>10</sub> and TSP is conducted at a number of locations as outlined in Table 11 of the AQMP including mine-owned land. Air monitoring results are summarised and uploaded to the WCPL website each month as required by the EPL. Results are also summarised in the CCC meeting presentations and Annual Reviews.	Compliant	
18(e)	data from this monitoring is presented to the tenant and landowner in an appropriate format for a medical practitioner to assist the tenant and landowner in making informed decisions on the health risks associated with occupying the property.		It was reported that this has not been required.	Not Triggered	

APPENDIX A AUDIT CHECKLIST					
Reference	Condition	Evidence	Comments	Audit Finding	Recommendation
<b>Operating Conditions</b>					
19	The Applicant shall:				
19(a)	implement all reasonable and feasible measures to minimise the off-site odour, fume, spontaneous combustion and dust emissions of the development;	<ul style="list-style-type: none"> <li>• AQMP Section 5.1-5.6</li> <li>• Evidence against Schedule 3, Condition 21</li> <li>• Appendix 3 SCMP</li> <li>• Site inspection</li> <li>• Letter from EPA to WCPL titled "Formal Warning – WCM Dust Emissions" dated 08.02.2018</li> </ul>	<p>Management measures were observed for the reduction of dust and spontaneous combustion during the audit site inspection. Refer Schedule 3, Condition 21, for discussion of spontaneous combustion measures identified. Refer to Schedule 3, Condition 16 for discussion of odour.</p> <p>Controls relating to dust include dust monitors, water sprays on conveyors, water carts and operational cameras visible by the WCPL E&amp;C department and dispatch room for dust monitoring, among other purposes.</p> <p>With regards to the generation of dust WCPL received a formal warning letter on 08 February 2018 from the EPA following an unannounced visit to site on 17 January 2018. The EPA officer identified excessive dust emissions from the mine as a result of activities being undertaken in Pit 7 and Pit 4. The inspection also identified a dust haze in the area around the mine when compared to that of the Ulan area.</p> <p>The EPA contacted the WCPL E&amp;C Manager at the time of the observations and as a result WCPL ceased activities in the areas of concern and increased the use of water carts.</p> <p>The EPA considered the event to be a breach of the sites EPL conditions (Condition O3.1) and as a result issued the site with a formal warning.</p> <p>This condition was found to be non-compliant on the basis that the EPA found WCPL to be in breach of EPL 12425 requirements O3.1 which requires the following, "All operations and activities occurring at the premises must be carried out in a manner that will minimise the emission of dust from the premises".</p> <p>Management measures in place at the time of the audit site inspection were reasonable and feasible and as such no recommendation has been made.</p>	Non-compliant	



APPENDIX A AUDIT CHECKLIST					
Reference	Condition	Evidence	Comments	Audit Finding	Recommendation
19(b)	implement all reasonable and feasible measures to minimise the release of greenhouse gas emissions from the site;	<ul style="list-style-type: none"> <li>• AQMP</li> <li>• Site Inspection</li> </ul>	<p>An exploration drilling program has been undertaken within WCPL's mining tenements to test methane levels in the coal seams.</p> <p>WCPL's greenhouse gas emissions are reported and tracked each year in the Annual Review. The site records and tracks greenhouse gas contributor sources for the purpose of the National Greenhouse Gas Reporting Scheme (NGERS). The primary source of greenhouse gas emissions from WCPL is carbon dioxide as a result of combustion of diesel and fuel during mining operations.</p> <p>WCPL have in place controls to help minimise the amount of greenhouse gasses emitted from site. These include optimisation of haul road design to reduce distance travelled between the pit and CHPP, minimising the re-handling of material as well as maintaining a fleet in good operating order.</p> <p>Measures were deemed to be reasonable at the time of the audit.</p>	Compliant	
19(c)	minimise any visible air pollution generated by the development;	<ul style="list-style-type: none"> <li>• Site Inspection</li> <li>• Interviews with Dispatch Operators</li> </ul>	<p>High resolution operational camera's had been installed at strategic locations across the site to monitor site operations. The cameras were being used by the Dispatch Operators and E&amp;C Department as a visual aid to check on visible air pollution amongst other things. The air quality specialist observed the dispatch room in operation and the methods for management of air quality complaints or elevated levels of dust. The specialist considered the controls to be adequate at minimising visible air pollution.</p>	Compliant	
19(d)	operate a comprehensive air quality management system that uses a combination of predictive meteorological forecasting and real-time air quality monitoring data to guide the day to day planning of mining operations and the implementation of both proactive and reactive air quality mitigation measures to ensure compliance with the relevant conditions of this consent;	<ul style="list-style-type: none"> <li>• Air Quality monitoring data</li> <li>• Site inspection</li> <li>• Interviews with Dispatch Operators</li> <li>• Completed Noise and Dust Assessment Forms (e.g. 22.08.18)</li> </ul>	<p>Figure 8 of the AQMP outlines the air quality management system monitoring locations. The locations of a sample of TEOMs and depositional dust gauges were inspected by the audit team air quality specialist.</p> <p>WCPL utilise Sentinex to store the data recorded from the real time air quality monitors. The WCPL E&amp;C department and the dispatch room receive text message and email alerts when dust levels are elevated but not yet exceeding the criteria. This enables WCPL to implement management measures i.e. ceasing operations or additional water carts, to prevent dust levels from exceeding the criteria specified in the consent and EPL 12425.</p>	Compliant	
19(e)	minimise the air quality impacts of the development during adverse meteorological conditions and extraordinary events (see Note d to Table 5);	<ul style="list-style-type: none"> <li>• Daily briefing notes</li> </ul>	<p>Daily briefing notes for start of shift were observed to take into account weather conditions for the day. This includes blasting operations as well as general mining operations.</p>	Compliant	
19(f)	co-ordinate the air quality management on site with the air quality management at the Moolarben and Ulan mines to minimise cumulative air quality impacts; and	<ul style="list-style-type: none"> <li>• Shift roster;</li> <li>• AQMP section 5.5</li> <li>• Blasting Schedule August 2018</li> <li>• Data Sharing Deed executed 22.01.14</li> </ul>	<p>WCPL, MCO and UCML have entered into a data share agreement (executed on 22 .01.14) which enables them to access monitoring data and assists in reducing cumulative dust impacts.</p> <p>The auditors saw evidence of the mines coordinating shift times with the shift changes times from the other mines as well as coordinating the timing of blasting.</p>	Compliant	

APPENDIX A AUDIT CHECKLIST					
Reference	Condition	Evidence	Comments	Audit Finding	Recommendation
19(g)	carry out regular monitoring to determine whether the development is complying with the relevant conditions of this consent.	<ul style="list-style-type: none"> <li>AQMP</li> <li>Air Quality monitoring data</li> </ul>	WCPL operate an air quality monitoring program in accordance with Section 6 of the AQMP. The air quality specialist reviewed monitoring locations as well as monitoring data and confirmed the monitoring conducted was in accordance with the AQMP.	Compliant	
<b>Air Quality Management Plan</b>					
20	Prior to carrying out any development under this consent, unless the Secretary agrees otherwise, the Applicant must prepare an Air Quality Management Plan for the development to the satisfaction of the Secretary. This plan must:	<ul style="list-style-type: none"> <li>Peabody Air Quality Management Plan (June 2017)</li> <li>Letter from WCPL to DPE titled "Notification of Commencement" dated 18.09.17</li> <li>Letter from DPE titled "Wilpinjong Coal Mine (05_0021) Management Plans" dated 20.03.17</li> <li>Letter from DPE titled "Wilpinjong Coal Mine (PA 05_0021) Approval of Management Plans dated 05.04.16</li> </ul>	The Air Quality Management Plan (AQMP) was originally developed in 2006 to address the requirements of PA 05-0021. In June 2017 the plan was updated following approval of the Wilpinjong Extension Project (WEP) and associated consent SSD-6764. As per letter from WCPL to DPE dated 18.09.17, WCPL commenced development on 19.09.17. DPE approved the AQMP on 4.08.17. The AQMP was updated following submission of the Annual Return in June 2018. At the time of the audit site inspection the AQMP was undergoing review by DPE.	Compliant	
20(a)	be prepared in consultation with the EPA;	<ul style="list-style-type: none"> <li>Letter from EPA titled "Wilpinjong Coal Mine – Revised Management Plans" dated 22.06.17</li> <li>AQMP, Section 2.4 and Appendix 2</li> </ul>	The AQMP was prepared in consultation with DPE, the EPA and NSW Health. Records of consultation are detailed in Section 2.4 and Appendix 2 of the AQMP.  WCPL submitted the revised AQMP to the EPA on 01.06.17. The EPA notified WCPL on 22.06.17 that they will not be reviewing or endorsing the management plans submitted to the EPA.	Compliant	
20(b)	describe the measures that would be implemented to ensure compliance with the relevant air quality criteria and operating conditions of this consent;	<ul style="list-style-type: none"> <li>AQMP, Section 4.0 &amp; 5.0</li> </ul>	Section 4.0 of the AQMP outlines the Air Quality compliance requirements specific to the WCM and includes the measures that would be implemented to comply with the specific performance criteria specified in SSD-6764 as well as to ensure, so far as is practicable, any material harm to the environment is prevented and/or minimised as a result of air quality impacts.  Specific air quality management and control measures are detailed in Section 5.0 of the AQMP.	Compliant	

APPENDIX A AUDIT CHECKLIST					
Reference	Condition	Evidence	Comments	Audit Finding	Recommendation
20(c)	describe the air quality management system in detail;	<ul style="list-style-type: none"> <li>AQMP, Section 6.0</li> </ul>	Section 6.0 of the AQMP outlines the Air Quality Monitoring Program for the WCM.	Compliant	
20(d)	include a protocol for notifying NSW Health and any affected residents of any exceedance of the air quality criteria;	<ul style="list-style-type: none"> <li>AQMP, Section 6.7.5</li> </ul>	Section 6.14 of the AQMP details WCPL's response to exceedances. This section references Figure 11, Compliance Review and Evaluation Process, and states that <i>where an exceedance of the AQ criteria has occurred WCPL will notify DPE and relevant agencies including NSW health immediately, upon confirming the exceedance in accordance with Figure 11.</i>	Compliant	
20(e)	include a review of all air quality management measures against best practice guidelines;	<ul style="list-style-type: none"> <li>AQMP Section 5.1</li> </ul>	<p>Section 5.1 of the AQMP outlines that management measures for air quality at WCM are generally consistent with those best practice controls identified in the <i>NSW Coal Mining Benchmarking Study (Katestone Environmental Pty Ltd, 2011).</i></p> <p>Best practice management measures have also been identified based on the WEP EIS, as well as the results of the dust pollution reduction programs.</p> <p>WCPL commit to conducting a review of all air quality management measures against best practice guidelines in accordance with Section 10 of the AQMP.</p>	Compliant	
20(f)	include an air quality monitoring program that: ~ adequately supports the air quality management system; ~ includes PM2.5 monitoring in Wollar Village; ~ evaluates and reports on the: - the effectiveness of the air quality management system; - compliance with the air quality criteria; - compliance with the air quality operating conditions; and	<ul style="list-style-type: none"> <li>AQMP, Sections 6.0, 6.1, 6.3.4, 6.7, 6.7.2, 6.7, 6.7.3</li> </ul>	<p>Section 6.0 of the AQMP outlines the Air Quality Monitoring Program for the WCM.</p> <p>Table 11 includes PM2.5 monitoring in Wollar Village. PM2.5 monitoring is also outlined in Section 6.6 of the AQMP.</p> <p>WCPL operates a real time response protocol which sends out SMS and/or email alerts to the WCPL environmental department. Section 6.0 outlines the process to be followed following an exceedance alert.</p>	Compliant	
20(g)	<p>include a Spontaneous Combustion Management Plan that:</p> <ul style="list-style-type: none"> <li>~ identifies all areas (including stockpiles, waste emplacements, piles, seams and inter-burden) at risk of spontaneous combustion events;</li> <li>~ includes a protocol for ongoing monitoring and management of areas at risk of spontaneous combustion events; and</li> <li>~ includes a protocol for the management of on-site heating and spontaneous combustion events.</li> </ul> <p><i>Note: The air quality monitoring program may incorporate monitoring from any relevant regional monitoring network endorsed by EPA</i></p>	<ul style="list-style-type: none"> <li>Spontaneous Combustion Management Plan June 2017 (Appendix 3 of AQMP)</li> </ul>	<p>The Spontaneous Combustion Management Plan (SCMP) is provided in Appendix 3 of the AQMP. The SCMP contains the following:</p> <ul style="list-style-type: none"> <li>Baseline Data and Background information in Section 3.0. This section defines Spontaneous Combustion and outlines the spontaneous combustion risks associated with the Stratigraphy of WCM. Section 4.0 of the SCMP details the results from a risk assessment undertaken by WCPL to assess the environmental, community and regulatory risks associated with spontaneous combustion onsite at WCM as well as the removal and disposal of Keylah Dump Material.</li> <li>Preventative Management and Control Measures for managing spontaneous combustion at WCM are outlined in Section 6.0. Inspections and monitoring requirements are defined in Section 7.0 and include a spontaneous combustion inspection Program in Table 7.</li> <li>Response to spontaneous combustion events is outlined in Section 8.0. This section includes a Hazard and Incident response flow chart to spontaneous combustion events as well as management of corrective actions following an event. Section 9.0 also includes a Contingency Plan to managing unpredicted impacts.</li> </ul>	Compliant	<p><b>IEA 2018 OFI 030</b></p> <p>It is recommended that the AQMP and SCMP are updated to reflect the current monitoring conducted in relation to spontaneous combustion. Remove reference to monitoring requirements relating to the Keylah Dump Removal.</p>

APPENDIX A AUDIT CHECKLIST					
Reference	Condition	Evidence	Comments	Audit Finding	Recommendation
21	The Applicant must implement the approved Air Quality Management Plan for the development.	<ul style="list-style-type: none"> <li>• Site Inspection</li> <li>• Interviews with Dispatch Operators</li> <li>• Completed Noise and Dust Assessment Forms (e.g. 22.08.18)</li> </ul>	<p><b><u>Air Quality Management Plan</u></b></p> <p>It is considered that the AQMP has been generally implemented as evidenced by the following:</p> <ul style="list-style-type: none"> <li>• Low levels of dust observed during the audit site inspection</li> <li>• Water carts were observed to be wetting down haul roads and light vehicle roads</li> <li>• Water sprays were being used on CHPP feed and product coal stockpiles</li> <li>• Areas were being progressively rehabilitated to minimise exposed areas</li> <li>• The air quality monitoring program including dust deposition, TSP, PM<sub>10</sub> and PM<sub>2.5</sub> monitoring was being implemented</li> <li>• Meteorological monitoring was being conducted</li> <li>• A comprehensive Air Quality Management System (AQMS) involving the use of real time data to proactively manage operational air quality impacts had been established.</li> <li>• Interviews with WCPL personnel including Dispatch Operators indicated the AQMS was well understood. Operators were able to explain for example what to do if a real time response trigger was activated, adverse weather conditions occurred or a dust complaint was received. The Dispatch Operators log their notes on the "Noise &amp; Dust Assessment Form". A sample of completed forms were viewed by the auditors and observed to include notes of the elevated dust levels and communication with the Mine Manager on potential causes and whether a change of operations is required.</li> </ul> <p>A total of 10 complaints were received during the audit period with relation to dust. The complaints received were deemed either to not be a non-compliance based on WCPL operations and dust monitoring data, not associated with mining operations or associated with a regional dust event. The air quality monitoring reports show that overall the air quality in the area surrounding the Wilpinjong coal mine is good with only a small number of PM<sub>10</sub> exceedances noted which were typically due to factors other than mining and were regional events as shown in the monitoring data from Merriwa.</p> <p>While WCPL has not exceeded the sites Approved air quality assessment criteria, records for deposited dust and PM<sub>10</sub> levels have indicated an increasing trend across recorded years. It is also noted that annual average dust deposited results for 2017 have been recorded higher than those predicted in the WEP EIS (1.3g/m<sup>2</sup>/month).</p> <p>Air Quality data shows an upward trend over the past seven years with regards to deposited dust generation. The increasing trend is particularly prominent from the result recorded at DG11. In addition, results for the maximum 24hr average PM<sub>10</sub> at HV5 have revealed an increasing trend since 2007. However it is noted PM10 at HV5 are well below the annual average limit. WCPL attributes the increasing trend at HV5 to the adjacent unsealed Araluen Road.</p> <p>WCPL attribute the elevated recordings from DG11 to the adjacent unsealed section of Ulan-Wollar Road. Dust generated from local traffic on this road were observed during the site inspection (refer</p>	Compliant	

APPENDIX A AUDIT CHECKLIST					
Reference	Condition	Evidence	Comments	Audit Finding	Recommendation
			<p>photos in main report). It was reported that this section of road was planned to be sealed in the near future which should improve dust results.</p> <p>It is also noted that 2017 and 2018 recorded below average annual rainfalls.</p> <p>In response to findings recorded in the Annual Review WCPL reviewed and updated the AQMP June 2018. At the time of the audit site inspection the AQMP was undergoing review by DPE.</p> <p><b>Spontaneous Combustion Management Plan</b></p> <p>The audit verified that WCPL implement management measures for Spon Comb with the aim of preventing the occurrences of Spon Comb events rather than managing its existence. In addition WCPL also have in place an inspection and monitoring program for the management of Spon Comb. This includes the following measures:</p> <ul style="list-style-type: none"> <li>• Inspection of all coal stockpiles each shift,</li> <li>• Inspection of the High wall, active pits and rejects disposal areas daily</li> <li>• Inspection of soil dumps daily</li> <li>• Inspection of rehabilitation areas quarterly</li> <li>• Inspection of the tailings emplacement weekly and formally each year as part of the annual surveillance report undertaken by the tailings engineer.</li> <li>• Weekly stockpile plan is developed;</li> </ul> <p>Gas monitoring was conducted as part of the Keylah dump removal. This involved monitoring from a temporary ambient air quality monitoring station in the Village of Wollar. This was no longer required by WCPL's EPL at the time of the site inspection however monitoring requirements are still stipulated in the management plan.</p> <p>In summary, the procedures for dealing with Spon Comb are spelt out clearly and appeared to be being adequately applied at the time of the site inspection. The WCPL dispatch room was able to show notes on the day-to-day handling and consideration of Spon Com and the auditor sighted the CHPP utilising the weekly stockpile plan for the purpose of Spon Comb management when stockpile planning. The air quality specialist noted detectable spon com odour on the day of the inspection when close to the centre of the site. No odour was detected at the edge of the site.</p>		

APPENDIX A AUDIT CHECKLIST					
Reference	Condition	Evidence	Comments	Audit Finding	Recommendation
<b>METEOROLOGICAL MONITORING</b>					
22	<p>For the life of the development, the Applicant must ensure that there is a meteorological station operating in the vicinity of the site that:</p> <p>(a) complies with the requirements in Approved Methods for Sampling of Air Pollutants in New South Wales guideline; and</p> <p>(b) is capable of continuous real-time measurement of temperature inversions in accordance with the NSW Industrial Noise Policy, unless a suitable alternative is approved by the Secretary following consultation with the EPA.</p>	<ul style="list-style-type: none"> <li>• Calibration report, Ecotech, 18.06.2018</li> <li>• Annual Return 2017/18</li> <li>• Annual Review 2017</li> </ul>	<p>WCPL operates an onsite weather station which is continuously operating in accordance with consent conditions and EPL requirements. The meteorological monitoring results are accessible from the WCPL Sentinex weather page and are also provided in an auto generated summary each morning as well as monthly. In addition to the weather station, WCPL also maintains a 60 m high temperature inversion monitoring tower for the direct measurement of temperature lapse rates at the Wilpinjong Coal Mine</p> <p>Novecom have been contracted to maintain the station and conduct calibration of the weather station in September of each year.</p> <p>In 2017 WCPL reported a non-compliance with EPL condition M4.2 which related to the weather station not continuously monitoring for air temperature, wind speed, lapse rate, rainfall and humidity 1.6% of the time. WCPL has implemented additional inspection requirements for the weather station to ensure continuous monitoring.</p>	Compliant	
<b>WATER</b>					
<b>Water Supply</b>					
23	<p>The Applicant must ensure that it has sufficient water for all stages of the development, and if necessary, adjust the scale of mining operations to match its available water supply.</p> <p><i>Note: Under the Water Act 1912 and/or the Water Management Act 2000, the Applicant is required to obtain the necessary water licences for the development.</i></p>	<ul style="list-style-type: none"> <li>• Water Balance Memo, WRM 09.03.2018</li> <li>• Annual Review 2017</li> </ul>	<p>The water management system for WCPL outlines that water management for the mine is based on the containment and re-use of mine water as well as the control of sediment laden water that may be potentially carried with runoff from disturbed areas.</p> <p>WCPL utilised HydroSimulations groundwater model in 2013 to ensure sufficient water licences are purchased each year for the water required. The Groundwater Model was revised in 2015 for the WEP EIS.</p> <p>WCPL contracted WRM Water &amp; Environmental Pty Ltd (WRM) to prepare a site water balance for the mine to support the 2017 Annual Review. The WCPL water balance is derived based on monitoring data recorded and is supplemented with calculated values produced using the calibrated WCPL water balance software model (OPSIM).</p> <p>A summary review of the site water balance was reported in the 2017 Annual Review and concludes that sufficient water was available for WCPL.</p>	Compliant	

APPENDIX A AUDIT CHECKLIST					
Reference	Condition	Evidence	Comments	Audit Finding	Recommendation
<b>Compensatory Water Supply</b>					
24	The Applicant must provide a compensatory water supply to any landowner of privately-owned land (including the owner of the Wollar Public School land) whose surface water and/or groundwater supply is adversely and directly impacted as a result of the development (other than an impact that is minor or negligible), in consultation with DPI Water, and to the satisfaction of the Secretary. The compensatory water supply measures must provide an alternative long term supply of water that is equivalent to the loss attributable to the development. Equivalent water supply should be provided (at least on an interim basis) as soon as practicable from the loss being identified, unless otherwise agreed with the landowner. If the Applicant and the landowner cannot agree on the measures to be implemented, or there is a dispute about the implementation of these measures, then either party may refer the matter to the Secretary for resolution. If the Applicant is unable to provide an alternative long term supply of water, then the Applicant must provide alternative compensation to the satisfaction of the Secretary. <i>Note: The Water Management Plan (see condition 30) is required to include trigger levels for investigating potentially adverse impacts on water supplies.</i>	<ul style="list-style-type: none"> <li>SWMP 2017</li> <li>GWMP 2017</li> <li>2017 Annual Review – Wilpinjong Coal Mine</li> </ul>	<p>The Surface Water Management Plan provides baseline data for streamflow in Wilpinjong Creek (Section 8) - streamflow is monitored continuously at gauging stations on Wilpinjong Creek (WILGSD, WILGSU) and Cumbo Creek (CCGSD and CCGSU).</p> <p>A Trigger Action Response Plan (TARP) for streamflow impacts to privately owned property is provided (Table 17) with action required in response to a complaint from a local landholder regarding surface water supply. If triggered, the TARP documents appropriate investigations, actions, review and reporting, including: provision of alternate water supply and review of predictive models (surface water balance, groundwater model) and review of mine plan impacts.</p> <p>The auditors were informed that no adverse or direct effects to surface water or groundwater on any privately-owned land occurred as a result of WCPL operations. As such, this condition had not been triggered during the audit period.</p>	Not Triggered	<b>IEA 2018 OFI 035</b> Long term groundwater level monitoring could be undertaken in the Wollar public school bore to provide advanced warning if water levels were to further decline.
<b>Discharge Limits</b>					
25	The Applicant must not discharge any water from the site or irrigate any waste water on site except as may be expressly provided by an EPL, or in accordance with Section 120 of the POEO Act.	<ul style="list-style-type: none"> <li>Site inspection of selected storages, waterways and active mining boundaries.</li> <li>2017 Annual Review – Wilpinjong Coal Mine</li> <li>EPL 12425</li> <li>SWMP 2017</li> <li>SWB 2017</li> <li>Irrigation Design: On-Site Effluent Disposal (Barnson, 2015)</li> <li>Laboratory Certificates of Analysis (COA): <ul style="list-style-type: none"> <li>1/8/2013 Pit 5 Remote Crib Hut Effluent Monitoring (ME1301093)</li> <li>16/07/2015 Admin Treated Effluent Water (ME1510165 &amp; ME1510225)</li> <li>10/07/2014 Soil MU 028 – OLD</li> </ul> </li> </ul>	<p><b>Discharge of any water from the site:</b> WCPL is designed such that water storage overflows are contained on site. Storages on site are sited or designed such that all dirty or contaminated water overflows or drains to Pit 2. A maximum operating volume has been defined for key storages Pit 2 and Pit 1S dam, above which water could be stored in active open pits if required, and the mine would be subjected to the risk of operational disruption.</p> <p>Pit 2 is a former open cut void and based on the site topography there is a low probability of overflow offsite occurring. Surplus water from Pit 2 can be treated via the Water Treatment Plant and discharged to Wilpinjong Creek. Discharge from site to Wilpinjong Creek is licenced under EPL 12425. Discharge to waters can be made at Point No 24. In January 2017 a variation to the EPL was approved increasing discharge from 5ML/day to 15ML/day (reverts to 5ML/day in December 2019). Evidence reviewed by the surface water specialist indicates that discharge was maintained at below 15ML/day throughout the monitoring period. No irrigation of waste water was undertaken by WCPL.</p> <p>A site water balance is in place the mine which was undertaken over a 19 year period for a range of climatic scenarios from very wet (1<sup>st</sup> percentile) to very dry (99<sup>th</sup> percentile). In very wet conditions, forecast projections for required discharge from the water treatment to Wilpinjong Creek are up to 1280ML/ year (3.5 ML/day) which are within EPL discharge limits (currently 15ML/day until December 2019, then 5ML/day).</p> <p>The site inspection of the WCPL boundaries observed that the site perimeter is configured to prevent or avoid runoff from active mining areas, roads and rehab areas from leaving site. Perimeters of disturbed areas with potential to allow runoff downgradient were mitigated through use of earth bunds and sediment fencing or</p>	Compliant	

APPENDIX A AUDIT CHECKLIST					
Reference	Condition	Evidence	Comments	Audit Finding	Recommendation
		<p>(ME1400987)</p> <ul style="list-style-type: none"> <li>- 10/07/2014 Soil MU 028 14-NEW (ME1400988)</li> <li>- 22/05/2017 STP &amp; MU/029/15 Effluent (ME1700716)</li> </ul>	<p>diversion drains. Sediment fencing was in good condition and appeared well maintained. Some minor sediment basins noted on Haul road over Cumbo Creek to capture exposed batter and road runoff and pipes were in place for extraction to dirty water system.</p> <p>The Annual Review 2017 notes one (1) non-compliance with the EPL 12425 occurred during the audit period in relation to water discharged from site. This non-compliance related to an exceedance from water quality analysis of oil &amp; grease concentration (17mg/L) on 28 July 2018. This was attributed to a laboratory error or interference in the analysis method.</p> <p><b>Irrigation of wastewater on site:</b> The WCPL Site Water Balance (SWB), Section 5.3 states: <i>Sewage treatment occurs at a domestic sewage treatment facility located near the mine administration area and at the CHPP (septic system). Treated effluent is used for irrigation in accordance with EPL 12425. The existing sewage treatment facilities and treated/grey water spray areas will continue to be operated in accordance with the Environmental Guidelines: Use of Effluent by Irrigation (NSW DEC, 2004).</i></p> <p>SWB (Section 6.2) notes that <i>A minor portion of treated effluent from remote crib areas may also be trucked off-site by a waste contractor.</i></p> <p>Septic and irrigation system was not physically inspected by the surface water specialist during the IEA.</p> <p>EPL 12425 requires irrigation of water in accordance with DECC 2004.</p> <p>WCPL contracted Barnson (2015) to provide a site suitability assessment and irrigation area design for the upgrade of the onsite water treatment system. The irrigation area nominated is located inside the rail loop.</p> <p>Barnson (2015) referenced other guidelines and criteria, not NSW DEC 2004 (validity of these criteria / comparison was not checked). Laboratory COA providing analysis of STP Effluent and Soil Analysis from locations within the rail loop, in addition to design report for irrigation area, is taken as supporting documentation that review of treatment and irrigation has been previously undertaken.</p>		



APPENDIX A AUDIT CHECKLIST					
Reference	Condition	Evidence	Comments	Audit Finding	Recommendation
<b>Cumbo Creek Relocation</b>					
26	The Applicant must design, construct, maintain, and rehabilitate the proposed relocation of Cumbo Creek, to the satisfaction of the Secretary.	<ul style="list-style-type: none"> <li>Section 1.1 of the Water Management Plan</li> <li>Letter from WCPL to DPE titled "WEP (Development Consent SSD-6764) – Staged Submission of Cumbo Creek Relocation Plan" dated 08.06.17.</li> <li>Letter from DPE to WCPL titled "WEP SSD-6764, Approval of Environmental Management Plans" dated 04.08.17</li> </ul>	<p>WCPL submitted a letter to the DPE on 08.06.17 requesting that the DPE provide approval for the Water Management Plan to not include the Cumbo Creek Relocation Plan.</p> <p>WCPL proposed to the DPE an alternative timeframe for the completion and approval of the Cumbo Creek Relocation Plan. This was outlined in Section 1.1 of the Water Management Plan as being:</p> <ul style="list-style-type: none"> <li>2021 to 2023 – Development of mine planning, engineering and supporting technical advice for the creek relocation;</li> <li>2024 – Preparation of the draft Cumbo Creek Relocation Plan and conduct of associated regulatory consultation; and</li> <li>2025 – Approval of the Cumbo Creek Relocation Plan.</li> </ul> <p>On 04.08.17 the DPE responded to WCPL in a letter titled 'Approval of Environmental Management Plans'. The DPE notes WCPL's request to submit the WMP on a staged basis, specifically deferring the submission of the Cumbo Creek Relocation Plan. The DPE advised in its letter that it is satisfied with the proposed staging of the Cumbo Creek Relocation Plan.</p> <p>At the time of the audit no work had commenced on the Cumbo Creek Relocation, as per the timeline specified in Table 1.1 of the Water Management Plan and the letter dated 08.06.17 from WCPL to DPE.</p>	Not Triggered	
27	Within one month of completing the construction of the Cumbo Creek relocation, the Applicant must submit an as-executed report, certified by a practising registered engineer, to the Secretary.		The Cumbo Creek Relocation had not commenced at the time of the audit.	Not Triggered	
28	Prior to destroying the original creek line, the Applicant must demonstrate that the Cumbo Creek relocation is operating successfully, in consultation with DPI Water, and to the satisfaction of the Secretary.		The Cumbo Creek Relocation had not commenced at the time of the audit.	Not Triggered	
<b>Water Management Performance Measures</b>					

**APPENDIX A AUDIT CHECKLIST**

Reference	Condition	Evidence	Comments	Audit Finding	Recommendation																				
29	<p>The Applicant must comply with the performance measures in Table 6 to the satisfaction of the Secretary.</p> <p><i>Table 6: Water management performance measures</i></p> <table border="1"> <thead> <tr> <th>Feature</th> <th>Performance Measure</th> </tr> </thead> <tbody> <tr> <td>General</td> <td>Maintain separation between clean, dirty and mine water management systems Minimise the use of clean water on site Design, install, operate and maintain water management systems in a proper and efficient manner</td> </tr> <tr> <td>Clean water diversion &amp; storage infrastructure</td> <td>Maximise as far as reasonable and feasible the diversion of clean water around disturbed areas on site</td> </tr> <tr> <td>Sediment dams</td> <td>Design, install and/or maintain sediment dams to ensure no discharges to surface waters, except in accordance with an EPL or in accordance with Section 120 of the POEO Act.</td> </tr> <tr> <td>Mine water storages</td> <td>Design, install and/or maintain mine water storage infrastructure to ensure no discharge of untreated mine water off-site. Discharge treated mine water in accordance with an EPL or in accordance with Section 120 of the POEO Act.</td> </tr> <tr> <td>Wilpinjong, Cumbo and Wollar Creeks</td> <td>No greater impact than predicted for the development for water flow and quality</td> </tr> <tr> <td>Aquatic, riparian and groundwater dependent ecosystems</td> <td>Negligible environmental consequences beyond those predicted for the development</td> </tr> <tr> <td>Flood mitigation measures</td> <td>Ensure all open cut pits, CHPP, coal stockpiles and main mine facilities areas exclude flows for all flood events up to and including the 1 in 100 year ARI. All final voids designed to exclude all flood events up to including the PMF event.</td> </tr> <tr> <td>Overburden, CHPP Reject and Tailings</td> <td>Design, install and maintain emplacements to prevent or minimise the migration of pollutants due to seepage</td> </tr> <tr> <td>Chemical and hydrocarbon storage</td> <td>Chemical and hydrocarbon products to be stored in bunded areas or structures in accordance with relevant Australian Standards</td> </tr> </tbody> </table>	Feature	Performance Measure	General	Maintain separation between clean, dirty and mine water management systems Minimise the use of clean water on site Design, install, operate and maintain water management systems in a proper and efficient manner	Clean water diversion & storage infrastructure	Maximise as far as reasonable and feasible the diversion of clean water around disturbed areas on site	Sediment dams	Design, install and/or maintain sediment dams to ensure no discharges to surface waters, except in accordance with an EPL or in accordance with Section 120 of the POEO Act.	Mine water storages	Design, install and/or maintain mine water storage infrastructure to ensure no discharge of untreated mine water off-site. Discharge treated mine water in accordance with an EPL or in accordance with Section 120 of the POEO Act.	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	Flood mitigation measures	Ensure all open cut pits, CHPP, coal stockpiles and main mine facilities areas exclude flows for all flood events up to and including the 1 in 100 year ARI. All final voids designed to exclude all flood events up to including the PMF event.	Overburden, CHPP Reject and Tailings	Design, install and maintain emplacements to prevent or minimise the migration of pollutants due to seepage	Chemical and hydrocarbon storage	Chemical and hydrocarbon products to be stored in bunded areas or structures in accordance with relevant Australian Standards	<ul style="list-style-type: none"> <li>Site inspection of selected storages, waterways and active mining boundaries.</li> <li>Inspection of MIA and fuel storage.</li> <li>2017 Annual Review – Wilpinjong Coal Mine</li> <li>EPL 12425</li> <li>SWMP (2017)</li> <li>SWB (2017)</li> <li>Wilpinjong Extension Project Surface Water Assessment (WRM 2015)</li> <li>2017 Channel Stability Report, Ecological - March 2018</li> <li>Wilpinjong Stream Health Monitoring – Spring 2017, Ecological, March 18</li> </ul>	<p><b>General</b></p> <p>The site is well designed and operated to ensure potentially dirty or contaminated water is maintained with the mining lease and not released to the environment.</p> <p>Exception being that due to the active extraction with the valleys of contributing catchments and surrounding waterways, clean catchment runoff drains into active mining areas (in some locations) and contributes to overall mine water stored volumes. This is discussed further below.</p> <p><b>Clean water diversion and storage infrastructure</b></p> <p>Mine plan and topography result in upstream water from catchments south Pit 5, Pit 1, and Pit 7 draining into active mining areas and subsequently are contributing to the mine water system. This is not consistent with the Environmental Assessment or Site Water Balance (2017) which proposed diversion or capture and pipeline transfer of clean water prior to discharge downstream. Observations noted that diversions / sumps not constructed east of Pit 3 / Pit 7, south of Pit 1S or south of Pit 5.</p> <p>Review of the 2017 Annual Review, Appendix 3C, Memorandum by WRM (March 2018) regarding review of the site water balance model, does indicate that the upslope / catchment contributions was accounted for in the latest simulation review (based on catchment boundaries depicted in Attachment B2).</p> <p><b>Sediment Dams</b></p> <p>Currently, sediment dams on site largely do not discharge to the environment, with dirty water either drained or pumped to the mine water systems.</p> <p><b>Mine Water Storages</b></p> <p>The design of the site and management of mine water storages appears to present a very low risk of exceeding this performance measure.</p> <p><b>Wilpinjong, Cumbo and Wollar Creeks</b></p> <p>Whilst baseline stream flow data is presented in the SWMP, predicted impacts on streamflow is not referenced. Streamflow gauging is undertaken at upstream and downstream locations on Wilpinjong and Cumbo Creek, however the only triggers identified for streamflow impacts is complaint by landholder. Water quality monitoring, triggers and response is well defined.</p> <p><b>Aquatic, riparian and groundwater dependent ecosystems</b></p> <p>SWMP includes performance measures, triggers and response plan for this aspect.</p> <p>The GWMP identifies Wilpinjong Creek as a groundwater dependent ecosystem.</p> <p>A stream health monitoring program has been developed to detect any changes in biology in Wilpinjong and Cumbo Creeks. Annual channel stability surveys are also undertaken to monitor the quantity and quality of riparian vegetation along Wilpinjong and Cumbo Creeks. The 2017 Channel Stability Report prepared by Ecological - March 2018 concluded that Wilpinjong Creek remains a highly</p>	Compliant	<p><b>IEA 2018 OFI 036 Clean water diversions</b></p> <p>Review water management strategy, including check that mine is not exceeding harvestable right (based on additional collection of clean water) and potential impact to Site Water Balance due to large catchment / runoff contributing to overall volume of water stored on site</p> <p><b>IEA 2018 OFI 037 Sediment dams</b></p> <p>Sumps alongside Haul Road over Cumbo Creek be reviewed for sizing against Bluebook, inspected daily, with inspections documented.</p>
Feature	Performance Measure																								
General	Maintain separation between clean, dirty and mine water management systems Minimise the use of clean water on site Design, install, operate and maintain water management systems in a proper and efficient manner																								
Clean water diversion & storage infrastructure	Maximise as far as reasonable and feasible the diversion of clean water around disturbed areas on site																								
Sediment dams	Design, install and/or maintain sediment dams to ensure no discharges to surface waters, except in accordance with an EPL or in accordance with Section 120 of the POEO Act.																								
Mine water storages	Design, install and/or maintain mine water storage infrastructure to ensure no discharge of untreated mine water off-site. Discharge treated mine water in accordance with an EPL or in accordance with Section 120 of the POEO Act.																								
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																								
Flood mitigation measures	Ensure all open cut pits, CHPP, coal stockpiles and main mine facilities areas exclude flows for all flood events up to and including the 1 in 100 year ARI. All final voids designed to exclude all flood events up to including the PMF event.																								
Overburden, CHPP Reject and Tailings	Design, install and maintain emplacements to prevent or minimise the migration of pollutants due to seepage																								
Chemical and hydrocarbon storage	Chemical and hydrocarbon products to be stored in bunded areas or structures in accordance with relevant Australian Standards																								

APPENDIX A AUDIT CHECKLIST					
Reference	Condition	Evidence	Comments	Audit Finding	Recommendation
			<p>degraded creek as a result of past land management practices and that there is no visible evidence that mining within the vicinity or discharge of water from the mine has resulted in creek bed lowering or increased erosion. The 2017 Spring Stream Health Monitoring report prepared by Ecological concluded that the riparian zones along Wilpinjong Creek were poor with erosion and sparse vegetation communities. Compared to previous survey rounds the November 2017 results indicated a slight increase in ecological health.</p> <p><b>Flood mitigation measures</b></p> <p>Levees and bunds in vicinity of main creek lines appeared in stable condition. Open cut areas are located outside the extent of flooding in the 1 in 1,000 AEP design event (Wilpinjong Creek) and are designed to be protected from a 1 in 100 AEP Flood (Cumbo Creek).</p> <p><b>Overburden, CHPP, Reject and Tailings</b></p> <p>Sited such that seepage / runoff from these areas is contained on site within the mine water management system.</p> <p><b>Chemical and hydrocarbon storage</b></p> <p>MIA and fuel storage appeared well maintained, and staff had a strong understanding and proactive approach to the management of the environmental risks associated with the infrastructure and handling of fuels, oils and grease.</p>		
<b>Water Management Plan</b>					
30	Prior to carrying out any development under this consent, unless the Secretary agrees otherwise, the Applicant must prepare a Water Management Plan for the development to the satisfaction of the Secretary. This plan must:	<ul style="list-style-type: none"> <li>Water Management Plan (WMP), August 2017</li> </ul>	<p>The Water Management Plan (WMP) (WI-ENV-MN{P-006), August 2017, was originally developed in 2006 to address the requirements of project approval 05-0021. The WMP was revised and updated multiple times to address comments from DPE and modifications to former approval PA 05-0021.</p> <p>In August 2017 the plan, inclusive of Surface Water and Groundwater Management Plans and a Site Water Balance, was updated following approval of the Wilpinjong Extension Project (WEP) and associated consent SSD-6764.</p> <p>On 04.08.17 the DPE responded to WCPL's submission of the WMP in a letter titled 'Approval of Environmental Management Plans', dated 04.08.17. The DPE noted that they were satisfied with the WMP and approved the staged submission of the Cumbo Creek Relocation Plan. DPE approved the WMP on 04.08.17.</p>	Compliant	
30(a)	be prepared in consultation with DPI Water and EPA, by suitably qualified and experienced persons whose appointment has been approved by the Secretary	<ul style="list-style-type: none"> <li>Letter to WCPL from EPA titled "WCM – Revised Management Plans" dated 22.06.2017</li> <li>Email from DPI-water containing feedback on WMP, dated 02.08.2017</li> </ul>	<p>DPI-Water provided comments on the WCPL WMP on 2 August 2017. The EPA was requested to provide comment however stated they would not be providing feedback.</p>	Compliant	

APPENDIX A AUDIT CHECKLIST					
Reference	Condition	Evidence	Comments	Audit Finding	Recommendation
30(b)	include detailed performance criteria and describe measures to ensure that the Applicant complies with the water management performance measures (see Table 6);	<ul style="list-style-type: none"> <li>WMP, Section 3</li> </ul>	Section 3.0 of the WMP outlines the Water Management Performance Measures for the WCM. These measures are further outlined in Table 4 of the WMP.	Compliant	
30(c)	consider the recommendations of the IESC advice (IESC 2016-078), dated 2 September 2016 and the recommendations for management of potentially acid forming (PAF) and sodic materials as identified in the Geochemistry Assessment (Appendix K) completed for the EIS; and	<ul style="list-style-type: none"> <li>IESC 2016-0075 Wilpinjong Extension Project (EPBC 2015/7431, SSD6767) – Expansion SWMP</li> </ul>	<p>Recommendations of the Geochemistry Assessment for handling PAF materials is included in limited detail in SWMP Section 6.4. Further detail is also provided in the MOP (Section 3.3.3). Assessment and recommendations for handling PAF tailings were undertaken in 2015 by Golder &amp; Associates (“Wilpinjong Geochemical Analysis of Tailings”, Golder &amp; Associates, Draft 18 August 2015).</p> <p>The surface water monitoring program has been amended to include monitoring for Mo, Se, and As with trigger values yet to be defined.</p> <p>Trigger levels and TARP for metals in relation to downstream potential impacts to ecosystems are not defined in the SWMP.</p>	Compliant	<b>IEA 2018 OFI 038</b> It is recommended that the SWMP is reviewed and updated to provide clarity on water quality monitoring relating to metals, trigger values and associated TARP. Develop surface water triggers and associated TARP for metals for identification and respond to downstream impacts, as recommended by IESC advice (Item 3c).
30(d)	in addition to the standard requirements for management plans (see condition 3 of schedule 5), this plan must include a:	<ul style="list-style-type: none"> <li>WMP</li> </ul>	<p>The WMP includes the following as per Schedule 5, Condition 3:</p> <ul style="list-style-type: none"> <li>Baseline data in the site water balance, surface and ground water management plan;</li> <li>Relevant statutory requirements and limits are detailed in Section 2 and 3</li> <li>Protocols for managing incidents, complaints, non-compliances and exceedances are outlined in Section 6.1;</li> <li>A protocol for periodic review of the plan is included in Section 7 of the WMP.</li> </ul>	Compliant	
30(d)(i)	<p>(i) Cumbo Creek Relocation Plan that includes:</p> <ul style="list-style-type: none"> <li>a vision statement for the creek relocation;</li> <li>an assessment of the water quality, ecological, hydrological and geomorphic baseline conditions in Cumbo Creek;</li> <li>the detailed design and specifications for the creek relocation; a construction program for the creek relocation, describing how the work would be staged, and integrated with mining operations;</li> <li>a revegetation program for the relocated creek using a range of suitable native species;</li> <li>water quality, ecological, hydrological and geomorphic performance and completion criteria for the creek relocation based on the assessment of baseline conditions; and</li> <li>a program to monitor and maintain the water quality, ecological, hydrological and geomorphic integrity of the creek relocation;</li> </ul>	<ul style="list-style-type: none"> <li>Section 1.1 of the Water Management Plan</li> <li>Letter from WCPL to DPE titled “WEP (Development Consent SSD-6764) – Staged Submission of Cumbo Creek Relocation Plan” dated 08.06.17.</li> <li>- Letter from DPE to WCPL titled “WEP SSD-6764, Approval of Environmental Management Plans” dated 04.08.17</li> </ul>	<p>WCPL submitted a letter to the DPE on 04.08.17 requesting that the DPE provide approval for the Water Management Plan to not include the Cumbo Creek Relocation Plan.</p> <p>WCPL proposed to the DPE an alternative timeframe for the completion and approval of the Cumbo Creek Relocation Plan. That being:</p> <ul style="list-style-type: none"> <li>2021 to 2023 – Development of mine planning, engineering and supporting technical advice for the creek relocation;</li> <li>2024 – Preparation of the draft Cumbo Creek Relocation Plan and conduct of associated regulatory consultation; and</li> <li>2025 – Approval of the Cumbo Creek Relocation Plan.</li> </ul> <p>On 04.08.17 the DPE responded to WCPL in a letter titled ‘Approval of Environmental Management Plans’. The DPE notes WCPL’s request to submit the WMP on a staged basis, specifically deferring the submission of the Cumbo Creek Relocation Plan. The DPE advised in their letter that they are satisfied with the proposed staging of the Cumbo Creek Relocation Plan.</p> <p>The stage progression of the Cumbo Creek Relocation Plan is outlined in Section 1.1 of the Water Management Plan. At the time of the audit no work had commenced on the Cumbo Creek Relocation, as per the timeline specified in Table 1.1 of the WMP and the letter dated 08.06.17 from WCPL to DPE.</p>	Not triggered	

APPENDIX A AUDIT CHECKLIST					
Reference	Condition	Evidence	Comments	Audit Finding	Recommendation
30(d)(ii)	<p>(ii) Site Water Balance that: - includes details of:</p> <ul style="list-style-type: none"> <li>o sources and security of water supply, including contingency planning for future reporting periods;</li> <li>o water use and management on site, including details of water sharing between neighbouring mining operations (if applicable);</li> <li>o any off-site water transfers and discharges;</li> <li>o reporting procedures, including the preparation of a site water balance for each calendar year; and</li> <li>o investigates and implements all reasonable and feasible measures to minimise water use on site;</li> </ul>	<ul style="list-style-type: none"> <li>• WMP, Appendix 1</li> </ul>	<p>The WCPL Site Water Balance is included in Appendix 1 of the WMP. A review of the site water balance confirms that it contains the required information however the details regarding Sediment Basins in the SWB are ambiguous and not clear to the reader.</p> <p>The SWB includes sizing and discussion of Sediment Dams, but the plan is ambiguous / unclear on the procedure or timing for construction of these measures, or how they should then be managed. Sediment Dams are not currently constructed / in operation on site and will not be required until such time that rehabilitated catchments are considered suitably stable and mining progresses to transition these catchments to freely drain to Wilpinjong or Cumbo Creek (under an EPL as required). Description of how this will be managed is considered lacking.</p>	Compliant	<p><b>IEA 2018 OFI 039</b> Review procedures for the implementation of sediment basins and ensure it is clearly defined in the SWB.</p> <p><b>IEA 2018 OFI 040</b> Review calculations of harvestable rights for annual reviews.</p>
30(d)(iii)	<p>(iii) Surface Water Management Plan that includes:</p> <ul style="list-style-type: none"> <li>- detailed baseline data on surface water flows and quality in creeks and other waterbodies that could potentially be affected by the development;</li> <li>- a program to augment the baseline data over the life of the project;</li> <li>- a detailed description of the water management system on site, including the <ul style="list-style-type: none"> <li>o clean water diversions;</li> <li>o sediment dams and associated infrastructure;</li> <li>o mine water management system;</li> <li>o final voids; and</li> <li>o reinstatement of drainage lines on the rehabilitated areas of the site;</li> </ul> </li> <li>- detailed objectives and performance criteria, including trigger levels for investigating any potential or actual adverse impacts associated with the development, for: <ul style="list-style-type: none"> <li>o downstream surface water quality;</li> <li>o stream and riparian vegetation health in Wilpinjong, Cumbo and Wollar Creeks;</li> <li>o channel stability;</li> <li>o design and management for the emplacement of coal reject, tailings materials and saline, sodic and PAF materials;</li> <li>o reinstatement of drainage lines on the rehabilitated areas of the site; and</li> <li>o control of any potential water pollution from the rehabilitated areas of the site;</li> </ul> </li> <li>- a program to monitor and report on: <ul style="list-style-type: none"> <li>o the effectiveness of the mine water management system;</li> <li>o surface flows and water quality, channel stability, stream and riparian vegetation health of Wilpinjong, Cumbo and Wollar creeks, including statistical trend analysis of salinity and other parameters;</li> <li>o The performance measures listed in Table 6;</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• WMP, Appendix 2</li> </ul>	<p>The WCPL Surface Water Management Plan is included in Appendix 2 of the WMP.</p> <p>A detailed review of the SWMP identified that the plan adequately contained the contents required. The following areas could be improved:</p> <ul style="list-style-type: none"> <li>• Previous versions of the SWMP included trigger levels for streamflow monitoring in Wilpinjong Creek however these are not provided in the August 2017 version. Review of the Development Consent considers that whilst performance criteria for stream flow is no longer explicitly required by Condition 30(d)(iii), it can be reasonably considered to form a performance measure for measuring impact to Wilpinjong, Cumbo and Wollar Creeks. Notwithstanding, the SWMP has responded to IESC 2016-078 recommendations that changes to flow regime, particularly characterisation of timing and seasonality of peak and low flows be assessed when updating the WMP so as to fully identify impacts to downstream ecosystems by updating baseline data presented in the SWMP. It is recommended that trigger levels for stream flow be reviewed and defined and incorporated into the SWMP, along with associated response plan.</li> <li>• Response and documentation of the IESC 2016-078 recommendations are not fully addressed, as required by Condition 30 (c). IESC recommendations include (but are not limited to) monitoring monthly and event based for metals and triggers levels and an associated TARP have not been defined.</li> <li>• Timing and procedure for designing and construction of up catchment diversions and sediment basins in rehabilitation areas is not clear</li> <li>• Objectives or performance criteria for investigating any potential or actual adverse impacts on channel stability attributable to WCM activities are not defined in the SWMP. Section 6.3 documents only the parameters to be monitored and does not identify triggers levels (other than 'perceptible impact'). No TARP provided in Section 7 for Channel Stability.</li> </ul>	Compliant	<p><b>IEA 2018 OFI 024</b> It is recommended that trigger levels for streamflow monitoring in Wilpinjong Creek be reviewed and defined and incorporated into the SWMP, along with associated TARP.</p> <p><b>IEA 2018 OFI 025</b> Develop surface water triggers and associated TARP for metals for identification and respond to downstream impacts, as recommended by IESC advice (Item 3c) Monitoring for metals should also be amended to include event based monitoring for metals.</p> <p><b>IEA 2018 OFI 041</b> Include further details within the SWMP of the timing and procedures for designing and constructing up catchment diversions and sediment basins within rehabilitated areas of the site</p> <p><b>IEA 2018 OFI 026</b> Include objectives or performance criteria for investigating potential or actual adverse impacts on channel stability attributable to WCPL activities. Include trigger levels and a TARP</p>

APPENDIX A AUDIT CHECKLIST					
Reference	Condition	Evidence	Comments	Audit Finding	Recommendation
	<ul style="list-style-type: none"> <li>o impacts on water users;</li> <li>- reporting procedures for the results of the monitoring program; and</li> <li>- a plan to respond to any exceedances of the trigger levels/ and or performance criteria, and mitigate and/or offset any adverse surface water impacts of the development, including measures to provide compensatory water supply to any affected downstreamwater use under condition 24 of this schedule;</li> </ul>				for Channel Stability.
30(d)(iv)	<p>(iv) Ground Water Management Plan that includes:</p> <ul style="list-style-type: none"> <li>~ detailed baseline data of groundwater levels, yield and quality in the region that couldbe affected by the development, including privately-owned groundwater bores andgroundwater dependent ecosystems;</li> <li>~ groundwater assessment criteria including trigger levels for investigating anypotentially adverse groundwater impacts; a program for accurately delineating the boundary of the Wilpinjong Creek alluvialaquifer in any areas intersected by mining;</li> <li>~ a program to monitor and report on: <ul style="list-style-type: none"> <li>o impacts of the development on: <ul style="list-style-type: none"> <li>- groundwater supply of potentially affected landowners;</li> <li>- regional and local (including alluvial) aquifers;</li> <li>- groundwater dependent ecosystems and riparian vegetation;</li> </ul> </li> <li>o connectivity and groundwater leakage to/from Cumbo Creek following relocation;</li> <li>o the seepage/ leachate from water storages and emplacements;</li> <li>o groundwater inflows into open cut/ voids and transfers to the water managementsystem;</li> <li>o ground water levels and/or pressure and quality in the alluvial, coal seam, andinter-burden aquifers; and</li> </ul> </li> <li>~ a program to review and validate the groundwater model for the development,including independent expert review; and</li> <li>~ a plan to respond to any exceedances of the trigger levels and/or performance criteria, and mitigate and/or offset any adverse groundwater impacts of the development,including measures to provide compensatory water supply to any affected groundwaterusers under condition 24 of this schedule;</li> </ul>	<ul style="list-style-type: none"> <li>• WMP, Appendix 3</li> </ul>	<p>The WCPL Ground Water Management Plan is included in Appendix 3 of the WMP.</p> <p>The groundwater management plan (GWMP) was prepared by WCPL, Resource Strategies and AGE consultants in February 2006 and has subsequently been amended nine times following agency comments, project modifications and updated development consent conditions.</p> <p>Throughout the evolution of the document the report has been reviewed by AGE consultants, Resource Strategies, Evans &amp; Peck, HydroSimulations, Palaris, DP&amp;I, NOW, OEH and DP&amp;E.</p> <p>For the most recent version of the GWMP, dated August 2017 the Secretary of DP&amp;E approved Dr Noel Merrick as a suitably qualified and experienced person to prepare and review the GWMP.</p> <p>In summary it is considered that the GWMP has been prepared by suitable and qualified persons and has been reviewed by reputable consultants and the appropriate agencies. A review of the contents of the GWMP confirms that the plan includes the information required by condition 30(d)(iv), Schedule 3.</p>	Compliant	

APPENDIX A AUDIT CHECKLIST																																	
Reference	Condition	Evidence	Comments	Audit Finding	Recommendation																												
31	<p>The Applicant must implement the approved Water Management Plan for the development.</p> <p><i>Note: The Department accepts that the initial Site Water Management Plan may not include the detailed plans for the proposed relocation of Cumbo Creek. However, if this occurs, the Applicant will be required to seek approval from the Secretary for an alternative timetable for completion and approval of the Cumbo Creek Relocation Plan.</i></p>	<ul style="list-style-type: none"> <li>Site inspection, interviews</li> <li>WMP, GWMP SWMP and SWB.</li> </ul>	<p>A review of the implementation of the WMP, and associated sub plans was conducted as part of the IEA.</p> <p>As part of the consultation requirements for the WMP DPI-Water reviewed the WMP and provided a number of recommendations to conduct additional investigations as part of the SWMP. The 2017 Annual Review noted that three of the five recommendations made by DPI-Water had not been completed. This was due to the data requirements required to address the recommendations which included:</p> <ul style="list-style-type: none"> <li>Development of a salinity assessment strategy that considers geomorphic influences on salt migration and expression to surface waters in infilled and incised phases of Wilpinjong creek.</li> <li>Preparation of a detailed drainage line and rehabilitation plan for the project area.</li> <li>A review of stream health monitoring methodology to identify any recommendations for future stream health monitoring to detect potential changes due to mine expansion.</li> </ul> <p><b>Groundwater Management Plan</b></p> <p>The audit teams Groundwater specialist reviewed the WCPL implementation of the GWMP on site and concluded that the GWMP was being implemented adequately at the time of the audit.</p> <p><b>Surface Water Management Plan</b></p> <p>The audit team's surface water specialist reviewed management measures in place on site at WCPL during the audit site inspection. The surface water specialist concluded that there are some discrepancies between the approved SWMP, and its implementation on site. In particular relating to sediment basins and up-stream diversions that are depicted in the SWMP but have not been constructed. Operations on site appeared to manage water effectively with minimal risk for offsite transport of water, however on the basis that the approved SWMP did not reflect the current operations, this Condition has been assessed as non-compliant.</p>	Non-compliant	<p><b>IEA 2018 REC 001</b></p> <p>Update the SWMP and SWB to reflect measures being implemented on site.</p> <p>Refer to OFI's under Condition 30 of Schedule 3</p>																												
<b>BIODIVERSITY</b>																																	
<b>Land Based Offsets</b>																																	
32	<p>The Applicant must implement the biodiversity offset strategy as summarised in Table 7 and shown conceptually in Appendix 7, to the satisfaction of the Secretary.</p> <p><i>Table 7: Biodiversity Offset Strategy</i></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 20%;">Area</th> <th style="width: 40%;">Offset</th> <th style="width: 40%;">Minimum Size (hectares)</th> </tr> </thead> <tbody> <tr> <td rowspan="2">Existing Offsets</td> <td>Enhancement and Conservation Areas</td> <td style="text-align: center;">480</td> </tr> <tr> <td>Biodiversity Offset Areas D and E</td> <td style="text-align: center;">211</td> </tr> <tr> <td rowspan="5">Additional Offsets</td> <td>Offset Area 1</td> <td style="text-align: center;">199</td> </tr> <tr> <td>Offset Area 2</td> <td style="text-align: center;">416.5</td> </tr> <tr> <td>Offset Area 3</td> <td style="text-align: center;">124.5</td> </tr> <tr> <td>Offset Area 4</td> <td style="text-align: center;">38</td> </tr> <tr> <td>Offset Area 5</td> <td style="text-align: center;">218</td> </tr> <tr> <td>Regeneration areas</td> <td></td> <td style="text-align: center;">148</td> </tr> <tr> <td>Rehabilitation Areas</td> <td></td> <td style="text-align: center;">2,906</td> </tr> <tr> <td colspan="2" style="text-align: center;"><b>TOTAL</b></td> <td style="text-align: center;"><b>4,741</b></td> </tr> </tbody> </table>	Area	Offset	Minimum Size (hectares)	Existing Offsets	Enhancement and Conservation Areas	480	Biodiversity Offset Areas D and E	211	Additional Offsets	Offset Area 1	199	Offset Area 2	416.5	Offset Area 3	124.5	Offset Area 4	38	Offset Area 5	218	Regeneration areas		148	Rehabilitation Areas		2,906	<b>TOTAL</b>		<b>4,741</b>	<ul style="list-style-type: none"> <li>Biodiversity Management Plan (Section 4.0 &amp; Table 7)</li> <li>MOP Figure 5</li> <li>Signed Deed of Variation of Conservation Agreement 23 March 2018</li> <li>Email from OEH dated 13 Jan 2016 approving transfer</li> </ul>	<p>Section 4.0 of the Biodiversity Management Plan describes the Biodiversity Offset Strategy. Table 7 of the Plan provides a summary of the Biodiversity Offset Strategy which is consistent with Schedule 3, Condition 32 of the Development Consent. The Biodiversity Management Plan was approved by the DPE by letter dated 4.08.17. In addition, Figure 5 of the MOP is consistent with the Biodiversity Offset presented in Appendix 7 of the Consent.</p> <p>At the time of the audit implementation of the Biodiversity Offset Strategy was as follows:</p> <p><b>Existing Offsets</b></p> <ul style="list-style-type: none"> <li>Enhancement and Conservation Areas (EACAs): Conservation Agreement entered into with OEH (sighted Variation to the Agreement signed 23.03.18)</li> </ul>	Compliant	
Area	Offset	Minimum Size (hectares)																															
Existing Offsets	Enhancement and Conservation Areas	480																															
	Biodiversity Offset Areas D and E	211																															
Additional Offsets	Offset Area 1	199																															
	Offset Area 2	416.5																															
	Offset Area 3	124.5																															
	Offset Area 4	38																															
	Offset Area 5	218																															
Regeneration areas		148																															
Rehabilitation Areas		2,906																															
<b>TOTAL</b>		<b>4,741</b>																															

APPENDIX A AUDIT CHECKLIST					
Reference	Condition	Evidence	Comments	Audit Finding	Recommendation
		<ul style="list-style-type: none"> <li>Email from NPWS dated 18 June 2017 relating to transfer</li> </ul>	<ul style="list-style-type: none"> <li>Biodiversity Offset Areas D and E: Transferred to NPWS other than a parcel of land awaiting subdivision (sighted email from OEH approving transfer dated 13.01.16)</li> </ul> <p><u>Additional Offsets</u></p> <ul style="list-style-type: none"> <li>Offset Areas 1-5: In the process of negotiating cost with NPWS for the transfer of land. The preparation of Areas 1-5 for transfer had commenced with the following activities undertaken: general weed and pest control, removal of internal fences, houses / buildings on Areas 1, 2 and 4 had been demolished.</li> </ul>		
33	Within one year of the commencement of development under this consent, unless the Secretary agrees otherwise, the Applicant must amend the Conservation Agreement for the Enhancement and Conservation Areas to remove the areas proposed to be incorporated into the re-alignment of the Transmission Line and include an additional area to ensure that the total area of the Enhancement and Conservation Area remains at 480 hectares.	<ul style="list-style-type: none"> <li>Email dated 30.08.17 from to OEH attaching VCA amendment application pack inclusive of cover letter (dated 30.08.17) and VCA application form</li> <li>Signed Deed of Variation of Conservation Agreement 23 March 2018</li> </ul>	The Conservation Agreement between Wilpinjong and OEH was amended to exclude the relocated electricity transmission line easement corridor where it crosses ECA-A and ECA-B (approximately 5 ha) and to add a compensatory additional area (approximately 17 ha) to the west of ECA-B. The Deed of Variation of the Conservation Agreement was executed on the 23 March 2018.	Compliant	
<b>Long Term Security</b>					
34	Within one year of the commencement of development under this consent, unless the Secretary agrees otherwise, the Applicant must make suitable arrangements to protect the Enhancement and Conservation Areas and Offset Areas D and E in Table 7 in perpetuity to the satisfaction of the Secretary. In relation to protecting Biodiversity Offset Areas D and E, the Applicant must use its best endeavours to add the relevant land to the adjoining National Park, in consultation with OEH.	<ul style="list-style-type: none"> <li>Email from OEH dated 13 Jan 2016 approving transfer</li> </ul>	Biodiversity Offset Areas D and E were transferred to NPWS other than a parcel of land awaiting subdivision (sighted email from OEH approving transfer dated 13.01.16)	Compliant	
35	Within 3 years of the commencement of the development under this consent, unless the Secretary agrees otherwise, the Applicant must secure Offset Areas 1 to 5 by: (a) transferring the land to National Park estate; or (b) entering into a Biobanking Agreement; or (c) a combination of (a) and (b). The Applicant must use its best endeavours to secure Offset Areas 1 to 5 by transferring the land to adjoining National Park estate, in consultation with OEH.	<ul style="list-style-type: none"> <li>Email from NPWS dated 18 June 2017 relating to transfer</li> </ul>	At the time of the audit, WCPL was in the process of negotiating costs with NPWS for the transfer of Offset Areas 1-5. Required by 19.09.20.	Not triggered	
<b>Rehabilitation Offsets</b>					
36	Within 10 years of the completion of mining operations under this consent, unless otherwise agreed by the Secretary, the Applicant must demonstrate that there are sufficient biodiversity credits of a number and class specified in Tables 8 and 9 below.		Mining operations had not yet been completed at the time of the audit. WCPL was planning for achieving these vegetation communities.	Not triggered	



**APPENDIX A AUDIT CHECKLIST**

Reference	Condition	Evidence	Comments	Audit Finding	Recommendation																																								
	<p><i>Table 8: Ecosystem Credit Requirements</i></p> <table border="1"> <thead> <tr> <th>Vegetation Community</th> <th>Code (BVT)</th> <th>Biometric Vegetation Type</th> <th>Area (hectares)</th> <th>Credits Required</th> <th>BVTs that can be used to meet credits</th> </tr> </thead> <tbody> <tr> <td>Fuzzy Box Woodland</td> <td>HU547</td> <td>Fuzzy Box Woodland on alluvial brown loam soils mainly in the NSW South</td> <td>9</td> <td>37</td> <td>HU547</td> </tr> <tr> <td></td> <td></td> <td>Western Slopes Bioregion.</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Rough Barked Apple Woodland</td> <td>HU981</td> <td>Rough-barked Apple grassy tall woodlands of the Brigalow Belt South</td> <td>880</td> <td>3,716</td> <td>HU981 HU732</td> </tr> <tr> <td>Whitebox Woodland Shrubby</td> <td>HU824</td> <td>White Box-Black Cypress Pine shrubby woodland of the Western Slopes</td> <td>575</td> <td>2,417</td> <td>HU824</td> </tr> </tbody> </table> <p><i>Table 9: Species Credit Requirements</i></p> <table border="1"> <thead> <tr> <th>Species</th> <th>Code (BVT) <sup>1</sup></th> <th>Biometric Vegetation Type</th> <th>Area (ha)</th> <th>Credits Required<sup>2</sup></th> </tr> </thead> <tbody> <tr> <td>Regent Honeyeater</td> <td>HU697, HU732, HU824 or additional BVT's as otherwise agreed by the Secretary in consultation with OEH</td> <td>Mugga Ironbark-Black Cypress Pine shrub/ grass open forest of the upper Hunter Valley  Yellow Box grassy woodland on lower hillslopes and valley flats in the southern NSW Brigalow Belt South Bioregion.  White Box-Black Cypress Pine shrubby woodland of the Western Slopes</td> <td>2,897</td> <td>8,650</td> </tr> </tbody> </table> <p><i>Notes: 1. The BVT's are required to be planted as Regent Honeyeater habitat. 2. The following rehabilitation types may generate up to 3.55 Regent Honeyeater credits / hectare:~Wilpinjong Extension Project open cut and ancillary areas rehabilitated to woodland~Wilpinjong Coal Project approved agricultural areas rehabilitated to woodlandThe following rehabilitation types may generate up to 1.775 Regent Honeyeater credits / hectare:~Wilpinjong Coal Project approved area woodland rehabilitated to BVT woodland</i></p>	Vegetation Community	Code (BVT)	Biometric Vegetation Type	Area (hectares)	Credits Required	BVTs that can be used to meet credits	Fuzzy Box Woodland	HU547	Fuzzy Box Woodland on alluvial brown loam soils mainly in the NSW South	9	37	HU547			Western Slopes Bioregion.				Rough Barked Apple Woodland	HU981	Rough-barked Apple grassy tall woodlands of the Brigalow Belt South	880	3,716	HU981 HU732	Whitebox Woodland Shrubby	HU824	White Box-Black Cypress Pine shrubby woodland of the Western Slopes	575	2,417	HU824	Species	Code (BVT) <sup>1</sup>	Biometric Vegetation Type	Area (ha)	Credits Required <sup>2</sup>	Regent Honeyeater	HU697, HU732, HU824 or additional BVT's as otherwise agreed by the Secretary in consultation with OEH	Mugga Ironbark-Black Cypress Pine shrub/ grass open forest of the upper Hunter Valley  Yellow Box grassy woodland on lower hillslopes and valley flats in the southern NSW Brigalow Belt South Bioregion.  White Box-Black Cypress Pine shrubby woodland of the Western Slopes	2,897	8,650				
Vegetation Community	Code (BVT)	Biometric Vegetation Type	Area (hectares)	Credits Required	BVTs that can be used to meet credits																																								
Fuzzy Box Woodland	HU547	Fuzzy Box Woodland on alluvial brown loam soils mainly in the NSW South	9	37	HU547																																								
		Western Slopes Bioregion.																																											
Rough Barked Apple Woodland	HU981	Rough-barked Apple grassy tall woodlands of the Brigalow Belt South	880	3,716	HU981 HU732																																								
Whitebox Woodland Shrubby	HU824	White Box-Black Cypress Pine shrubby woodland of the Western Slopes	575	2,417	HU824																																								
Species	Code (BVT) <sup>1</sup>	Biometric Vegetation Type	Area (ha)	Credits Required <sup>2</sup>																																									
Regent Honeyeater	HU697, HU732, HU824 or additional BVT's as otherwise agreed by the Secretary in consultation with OEH	Mugga Ironbark-Black Cypress Pine shrub/ grass open forest of the upper Hunter Valley  Yellow Box grassy woodland on lower hillslopes and valley flats in the southern NSW Brigalow Belt South Bioregion.  White Box-Black Cypress Pine shrubby woodland of the Western Slopes	2,897	8,650																																									

APPENDIX A AUDIT CHECKLIST					
Reference	Condition	Evidence	Comments	Audit Finding	Recommendation
37	<p>Within 6 months of the commencement of development under this consent, or as otherwise agreed by the Secretary, the Applicant must, in consultation with OEH, the Department and DoEE and to the satisfaction of the Secretary, develop suitable rehabilitation performance and completion criteria for:</p> <p>(a) the BVTs in Tables 8 and 9; and (b) Regent Honeyeater habitat.</p> <p>The performance and completion criteria must include consideration of the effect of climatic conditions, such as drought, and the NSW Biodiversity Offsets Policy for Major Projects 2014 and the associated Fact sheet: Mine Site Rehabilitation (OEH, 2014).</p> <p><i>Note: The rehabilitation offset performance and completion criteria form a component of the Rehabilitation Management Plan required under condition 64 of this schedule.</i></p>	<ul style="list-style-type: none"> <li>Letter to OEH re BVT Performance and Completion Criteria dated 19.02.18.</li> <li>Letter from OEH providing comments dated 14.03.18</li> <li>Email from DoEE dated 13.03.18</li> </ul>	<p>WCPL submitted Draft BVT Performance and Completion Criteria for the BVTs listed in Tables 8 and 9 of the Development Consent and Regent Honeyeater Habitat to OEH, DoEE for consultation on the 19.02.18.</p> <p>DoEE responded by email dated 13.03.18 that it was not commenting on the Draft Performance and Completion Criteria at this time.</p> <p>OEH provided comments on the Draft Performance and Completion Criteria including recommendations by letter dated 14.03.18.</p> <p>WCPL made amendments to its Proposed BVT Performance and Completion Criteria and provided this together with its response to each of the OEH comments to the DPE by letter dated 19.03.18. At the time of writing (October 2018) the DPE was yet to respond.</p> <p>On the basis that confirmation of the satisfaction of the DPE was not received within 6 months of the commencement of the development (March 2018), this condition is considered non-compliant. It is noted that the DPE has had the revised Draft Criteria for seven months and has not provided further feedback or approval of the Criteria and this has led to the timeframe not being met. WCPL personnel indicated they believed the intent of this Condition was to submit the Draft BVT Performance and Completion Criteria within six months of the commencement of development.</p>	Non-compliant	<p><b>IEA 2018 REC 002</b></p> <p>Continue to work with DPE and OEH to finalise the BVT Performance and Completion Criteria.</p>
38	<p>If at the end of 10 years after landform establishment the rehabilitation does not meet the performance criteria to the satisfaction of the Secretary or 10 years after completion of mining operations the rehabilitation does not meet the completion criteria to the satisfaction of the Secretary, the Applicant must retire the relevant number of credits in accordance with the NSW Biodiversity Offsets Policy for MajorProject 2014 to the satisfaction of OEH and can be achieved by:(a) acquiring or retiring credits under the Biobanking Scheme;(b) making payments into an offset fund that has been established by the NSW Government; or(c) providing supplementary measures.</p> <p><i>Notes:Landform establishment is a recognised stage of rehabilitation when the final land shape has been developed prior to growth medium development and ecosystem development.Landform establishment stage will progressively occur across the mine site, the performance criteria for new areas progressing into landform establishment stage will need to be assessed by the Secretary on a regular basis, for example every 3 years, to determine whether the requirements of the condition are met.The rehabilitation offset performance and completion criteria form a component of the Rehabilitation Management Plan required under condition 64 of this schedule.In accordance with the NSW Biodiversity Offsets Policy for Major Projects, additional biodiversity credits can be generated for the ongoing management of the rehabilitation area to ensure its biodiversity values are continually improved. Any additional credits could be secured through a Biobanking Agreement and used to offset future developments.</i></p>		Not triggered	Not triggered	

APPENDIX A AUDIT CHECKLIST											
Reference	Condition	Evidence	Comments	Audit Finding	Recommendation						
<b>Additional Regent Honeyeater Measures</b>											
39	<p>The Applicant must contribute funds to OEH towards the Regent Honeyeater Recovery Plan captive breeding and release programs, or alternative Regent Honeyeater recovery initiative agreed by OEH, in accordance with the payment schedule in Table 10.</p> <p><i>Table 10: Contributions to the Regent Honeyeater Recovery Plan - Payment Schedule</i></p> <table border="1"> <thead> <tr> <th>Timeframe</th> <th>Funds Allocated</th> </tr> </thead> <tbody> <tr> <td>Within 1 year from the commencement of development under this consent</td> <td>\$120,000</td> </tr> <tr> <td>Annually thereafter for 9 years</td> <td>\$60,000 per year</td> </tr> </tbody> </table>	Timeframe	Funds Allocated	Within 1 year from the commencement of development under this consent	\$120,000	Annually thereafter for 9 years	\$60,000 per year	<ul style="list-style-type: none"> <li>Email to OEH dated 29.06.18</li> <li>Email from OEH dated 11.07.18</li> </ul>	<p>WCPL contacted OEH and requested a meeting to discuss the recovery program to which the funds would contribute to and finalise the payment process (sighted email to OEH dated 29.06.18). OEH responded by providing a summary of the Regent Honeyeater Program and committed to a meeting on the 11.07.18.</p> <p>OEH provided WCPL with a tax invoice dated 20.08.2018. WCPL paid the invoice on the 19.09.18 (sighted screen shot from SAP system indicating payment was made on the 19.09.18).</p>	Compliant	
Timeframe	Funds Allocated										
Within 1 year from the commencement of development under this consent	\$120,000										
Annually thereafter for 9 years	\$60,000 per year										
<b>Munghorn Gap Nature Reserve</b>											
40	<p>The Applicant must ensure that the edge of all open cut pits for the development are setback at least 20 metres from the boundary of the Munghorn Gap Nature Reserve.</p> <p><i>Note: It is accepted that some ancillary infrastructure would need to be retained for access and water management.</i></p>	<ul style="list-style-type: none"> <li>GDP-15-18 P3_S10-11_16-21 Scanned signed copy 09082018</li> <li>Observations</li> <li>Reported by WCPL</li> <li>MGNP Map – mining and rehab in relation to MGNP (23.08.18)</li> </ul>	<p>WCPL was implementing the following measures to maintain the 20 metre setback from the boundary of the Munghorn Gap Nature Reserve:</p> <ul style="list-style-type: none"> <li>A Ground Disturbance Process (GDP) for managing ground disturbance activities. The mining lease boundary, Munghorn Nature Reserve boundary, disturbance boundary and pit limit boundary have been delineated in Geographic Information System (GIS) and are used to overlay the proposed disturbance through the GDP process. The auditors reviewed an example of a completed GDP form which included maps of the proposed disturbed area overlaid onto a map which included the MOP extraction boundary and MOP disturbance limit. It is noted the 20 meter Munghorn Gap Nature Reserve boundary is outside these boundaries (i.e. further from mining activities).</li> <li>The disturbance boundary and pit limit have been included on GPS coordinate system for machinery on site.</li> <li>Every month overlay boundaries (including MOP disturbance, MOP extraction boundary) are assessed. WCPL maintain a GPS database which enables them to track the edge of all open cut pits against the Mughorn Gap Nature Reserve and rehabilitation area. The map generated for the auditors showed no instances of mining reaching the 20m mining limit line for Munghorn Gap Nature Reserve.</li> <li>The Section of the reserve that interfaces with mine is delineated by tape (observed during site inspection)</li> </ul>	Compliant							
41	<p>Prior to carrying out any development under this consent, the Applicant must:</p> <p>(a) undertake a survey of the boundary of the Munghorn Gap Nature Reserve where it adjoins operational mining areas;</p> <p>(b) ensure that the boundary is clearly delineated in the field and in Geographic Information Systems(GIS); and</p> <p>(c) provide relevant Geographic Information System data to the Department and OEH.</p>	<ul style="list-style-type: none"> <li>Email to DPE and OEH dated 09.08.18 attaching GIS file 'ML1573 with barrier'</li> <li>Email to DPE 'Munghorn Gap Information for submission' dated 09.08.17</li> <li>Observations</li> </ul>	<p>WCPL undertook a survey of the boundary of the Munghorn Gap Nature Reserve and provided the GIS file to the DPE and OEH by email dated 09.08.17.</p> <p>The section of the reserve that interfaces with the mine has been delineated in the field.</p>	Compliant							

APPENDIX A AUDIT CHECKLIST					
Reference	Condition	Evidence	Comments	Audit Finding	Recommendation
<b>Biodiversity Management Plan</b>					
42	Prior to carrying out any development under this consent, the Applicant must prepare a Biodiversity Management Plan for the development to the satisfaction of the Secretary. <i>Notes: The Biodiversity Management Plan would not apply to offset areas if they are transferred into National Park Estate, in accordance with conditions 34 and 35 of this schedule. A bond for the rehabilitation offsets within the Mining Lease will be required under the Mining Act 1992. With the approval of the Secretary, the Biodiversity Management Plan may exclude offset areas secured under a Biobanking Agreement. The Biodiversity Management Plan and Rehabilitation Management Plan need to be substantially integrated for achieving biodiversity objectives for the rehabilitated mine site. This plan must:</i>	<ul style="list-style-type: none"> <li>Biodiversity Management Plan (BMP) (WI-ENV-MNP-0035), August 2017</li> </ul>	<p>The Biodiversity Management Plan (BMP), August 2017, was initially developed in September 2014 to address the requirements of Project Approval 05-0021. The BMP has been amended multiple times since 2014, most recently it was amended in August 2017 to meet the requirements of the Wilpinjong Extension Project (WEP) approved consent SSD-6764. The revised BMP was approved by DPE on 04 August 2017</p> <p>A review of the adequacy of the BMP is provided in the front section of this audit report.</p>	Compliant	
42(a)	be prepared in consultation with OEH and DoEE;	<ul style="list-style-type: none"> <li>Email from DoEE providing comments on Draft BMP dated 30.06.17</li> <li>Email and letter from OEH providing comments on the Draft BMP dated 27.06.17</li> </ul>	<p>Section 1.6 of the Plan states that it was prepared in consultation with OEH and Department of the Environment and Energy (DoEE) and refers to Appendix 2 for copies of key correspondence. Appendix 2 does not include this and includes DPE approval of the original BMP. Evidence was sighted confirming the DoEE and OEH were consulted on the BMP.</p>	Compliant	<b>IEA 2018 OFI 042</b> Update Appendix 2 to include key consultation records for the updated BMP.
42(b)	describe the short, medium, and long term measures that would be implemented to: ~ manage the remnant vegetation and fauna habitat on the site; and ~ implement the biodiversity offset strategy;	<ul style="list-style-type: none"> <li>Section 7, BMP</li> </ul>	<p>Section 7.0 of the BMP outlines the Biodiversity Management Measures and Strategies to be implemented at WCM.</p>	Compliant	
42(c)	include detailed performance and completion criteria for evaluating the performance of the biodiversity offset strategy, and triggering remedial action (if necessary);	<ul style="list-style-type: none"> <li>Section 6, BMP</li> </ul>	<p>Section 6.0 outlines Completion Criteria and Interim Performance Targets for WCM.</p>	Compliant	
42(d)	include a detailed description of the measures that would be implemented to: ~ minimise the impacts on fauna, including undertaking pre-clearance surveys; ~ maximise the salvage of resources within the disturbance area; ~ collect and propagate seed to be used for site rehabilitation, including the threatened species <i>Ozothamnus tessellatus</i> ; ~ undertake germination and propagation trials for <i>Ozothamnus tessellatus</i> for potential planting in rehabilitation and regeneration areas; ~ protect vegetation and fauna habitat outside the approved disturbance area on-site including targeted measures to minimise impacts on the Eastern Bentwing-bat roost site, including detailed information on proposed engineering works at the adit entry; ~ minimise lighting impacts on the Eastern Bentwing-bat roost site, including measures to prioritise the use of non-ultra violet lighting; ~ ensure that open cut setback distances to the Munghorn Gap Nature Reserve are met; ~ enhance the quality of existing vegetation and fauna habitat in the biodiversity offset areas; ~ manage any potential conflicts between the proposed enhancement works in the biodiversity offset strategy areas and any Aboriginal heritage values (both cultural and archaeological) in these areas, as informed by the Aboriginal cultural heritage survey required under condition 46 of this schedule;	<p>Section 7.0 of BMP</p>	<p>Section 7.0 of the BMP outlines the Biodiversity Management Measures and Strategies to be implemented at WCM.</p> <p>The review of Section 7 of the BMP by the rehabilitation specialist highlighted a range of issues that require further attention. These are discussed as part of the adequacy review of the BMP in Section 8.1.5 of the main report</p>	Compliant	Refer to adequacy review in the main report (Section 8.1.5)

APPENDIX A AUDIT CHECKLIST					
Reference	Condition	Evidence	Comments	Audit Finding	Recommendation
	<ul style="list-style-type: none"> <li>~ manage salinity;</li> <li>~ avoid and mitigate the spread of <i>Phytophthora cinnamomi</i> (<i>P. cinnamomi</i>) with consideration of actions identified in relevant threat abatement plans;</li> <li>~ control weeds and feral pests;</li> <li>~ control erosion;</li> <li>~ control access; and</li> <li>~ manage bushfire risk;</li> </ul>				
42(e)	include a program to monitor and report on the effectiveness of these measures, and progress against the detailed performance and completion criteria including:~ a monitoring program for the implementation of the biodiversity offset strategy;~ monitoring programs for the Eastern Bentwing-bat roost site to assess impacts from blasting and lighting;~ targeted monitoring of cave dwelling bats within offset areas to inform potential for roost/maternity sites; and	<ul style="list-style-type: none"> <li>• Section 9, BMP</li> </ul>	<p>Section 9 outlines the Biodiversity Monitoring Program and includes annual monitoring of flora and fauna and a range of landscape function indicators.</p> <p>The review of Section 9 of the BMP by the rehabilitation specialist highlighted a range of issues that require further attention:</p> <ul style="list-style-type: none"> <li>• Section 9.1 - The use of Biometric and more recently Biobanking assessment methodology (NSW OEH, 2014) which has been used across the mining industry to assess woodland rehabilitation contains a number gaps and limitations, particularly in terms of assessing ground cover levels and composition. Following recent legislative updates and the introduction of the NSW Biodiversity Conservation Act 2016 the Biodiversity Assessment Method (BAM) (NSW OEH, 2017) is recognised as being more robust and to provide greater levels of detail in collected datasets. In addition, it is intended for the BAM to be applicable to mine rehabilitation monitoring. Therefore, it is recommended that the BAM is adopted as the basis method in the annual rehabilitation monitoring program.</li> <li>• Section 9.4 – discusses monitoring of unexplained vegetation dieback by focussing on identifying the known signs of <i>Phytophthora cinnamomi</i>. It is noted that <i>Phytophthora</i> Pocket Diagnostic Test Kits are available to facilitate testing for <i>Phytophthora</i>.</li> </ul>	Compliant	<p><b>IEA 2018 OFI 043</b> Consider adopting the Biodiversity Assessment Method for the annual rehabilitation monitoring program in consultation with OEH</p> <p><b>IEA 2018 OFI 044</b> Consider acquiring a <i>Phytophthora</i> Pocket Diagnostic Test Kit</p>
42(f)	include details of who would be responsible for monitoring, reviewing, and implementing the plan.	<ul style="list-style-type: none"> <li>• Section 15, BMP</li> </ul>	Table 29, Section 15 of the BMP outlines the management plan roles and responsibilities.	Compliant	

APPENDIX A AUDIT CHECKLIST					
Reference	Condition	Evidence	Comments	Audit Finding	Recommendation
43	The Applicant must implement the approved Biodiversity Management Plan for the development.	<ul style="list-style-type: none"> <li>GDP-15-18 P3_S10-11_16-21 Scanned signed copy 09082018</li> <li>Pre-clearing Survey – Powerline Easement (Niche Environment and Heritage 6.06.18)</li> <li>Pre-clearance survey – Pit 3 (Niche Environment and Heritage 25.05.18)</li> <li>2017 Weed spaying map</li> <li>2017 Annual biodiversity monitoring report, Ecological 14.03.18</li> <li>2018 Biodiversity Management Annual Works Program 14.03.18</li> <li>Seed Collection Species</li> <li>Masterfile Seed Bank</li> </ul>	<p>It was considered that the BMP was generally being implemented. Evidence of this included:</p> <ul style="list-style-type: none"> <li>The GDP process was being used to manage disturbance activities. Examples of well completed GDP forms (including maps, attachments and signatures) were sighted.</li> <li>Pre-clearance surveys were being undertaken. For example a pre-clearance survey for the new powerline easement was undertaken by Niche Environment and Heritage. The survey identified potential habitat trees which were marked with flagging tape and surveyor paint, photographed and the GPS location recorded. The report provided by Niche Environment and Heritage included a map of the habitat tree locations, photographs and GPS coordinates. A Pre-clearance Survey was also sighted for the clearance of an identified habitat tree within Pit 3.</li> <li>WCPL had established a seed collection Excel workbook database (Seed Collection Species) which identified the species, seed rate, project seedling quantities and project area to be seeded for each community. A second excel workbook titled 'Masterfile Seed Bank' included the amount of seed collected in 2018 in kilograms.</li> <li>Annual biodiversity monitoring was being undertaken by Ecological (reviewed 2017 report). The 2017 report provided a review of monitoring results and recommendations (summarised in Table 4-1). In addition Ecological provided a 2018 Annual Works Program to provide specific management actions to be considered in response to the findings of this report. This included continued monitoring of vegetation biannually, monitoring of future over-storey species diversity and cover / abundance to assess whether seeding or tubestock planting is required, fauna monitoring and developing local site specific benchmark targets.</li> <li>Weed control was being undertaken (sighted 2017 weed spraying map). Weed and vertebrate pest management is also discussed in the 2018 Annual Works Program prepared by Ecological. Vertebrate pest management focuses on deer, fox, pig, rabbit and wild dogs. It is recommended that macropod numbers are also monitored to gauge grazing pressure in light of recent drought conditions.</li> <li>The fire trial area was inspected during the site inspection, however the monitoring report had not been submitted by the specialist consultant. It is understood that this report is not due to be provided until Q1 2019. An interim summary report will be valuable in terms of the initial lessons learnt.</li> </ul>	Compliant	<p><b>IEA 2018 OFI 045</b> Update weed control records in accordance with best practice to include all weather data</p> <p><b>IEA 2018 OFI 046</b> Develop and implement a Weed Management Plan.</p> <p><b>IEA 2018 OFI 047</b> Undertake a review of the seeding species mix – using historical monitoring data to define which species have occurred on the revegetated area vs. those species that were used in the seeding mix. Also review which species of seed may be required from iconic species.</p> <p><b>IEA 2018 OFI 048</b> Request an interim summary report of the monitoring undertaken at the fire trail area to assist in understanding the initial lessons learnt.</p> <p><b>IEA 2018 OFI 049</b> Include monitoring of macropods numbers to determine grazing impacts on revegetation especially in drought conditions</p>

APPENDIX A AUDIT CHECKLIST					
Reference	Condition	Evidence	Comments	Audit Finding	Recommendation
<b>Conservation Bond</b>					
44	<p>Within two years of commencing development under this consent, unless otherwise agreed by the Secretary, the Applicant must lodge a revised Conservation Bond with the Department to ensure that the Biodiversity Offset Strategy is implemented in accordance with the performance and completion criteria in the Biodiversity Management Plan. The sum of the bond shall be determined by:</p> <p>(a) calculating the full cost of implementing the biodiversity offset strategy (other than land acquisition costs) for the land in Table 7 identified as "Existing offsets" and "Additional offsets"; and</p> <p>(b) employing a suitably qualified quantity surveyor to verify the calculated costs, to the satisfaction of the Secretary.</p> <p>If the offset strategy is completed in accordance with the completion criteria in the Biodiversity Management Plan the Secretary will release the bond.</p> <p>If the offset strategy is not completed in accordance with the completion criteria in the Biodiversity Management Plan, the Secretary will call in all, or part of, the conservation bond, and arrange for the completion of the relevant works.</p> <p><i>Notes:</i>  ~Existing bonds which have been paid for the existing Enhancement and Conservation Areas remain current and are satisfactory to fulfil the requirements of this condition for those areas.  ~Alternative funding arrangements for long-term management of the Biodiversity Offset Strategy, such as provision of capital and management funding as agreed by OEHL as part of a Biobanking Agreement or transfer to National Park Estate can be used to reduce the liability of the conservation and biodiversity bond.  ~The sum of the bond may be reviewed in conjunction with any revision to the Biodiversity Offset Strategy and/or the Biodiversity Management Plan.</p>	Letter to DP&E 5.10.17	WCPL hand delivered a cheque on 15.09.2017 to DPE's offices for the agreed conservation bond amount of \$2,759,573.97. This was followed up by a letter to DPE dated 5.10.17 confirming the lodgement.	Compliant	
<b>HERITAGE</b>					
<b>Protection of Aboriginal Heritage Items</b>					
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.	<ul style="list-style-type: none"> <li>Letter to OEHL from WCPL titled "Wilpinjong Coal Aboriginal Cultural Heritage Management Plan", dated 09.06.2017</li> <li>Annual Review 2017</li> </ul>	<p>There were no instances recorded within the audit period of a direct or indirect impact on identified Aboriginal items outside the approved disturbance area of the development.</p> <p>WCPL reported in the 2017 Annual Review that it informed the OEHL on the 9 June 2017 of the unintentional collection of a single artefact outside of the project approval boundary by WCPL's contract archaeologist and member from the RAPs while carrying out a Aboriginal cultural heritage survey. The auditors were informed that no response from OEHL was received with regards to the unintentional collection. WCPL reported in the 2017 Annual Review that the artefact was recorded and replaced back insitu at the original GPS position on the 26 July 2017. The incident occurred on 08.06.2017 and is outside the audit period.</p>	Compliant	

APPENDIX A AUDIT CHECKLIST					
Reference	Condition	Evidence	Comments	Audit Finding	Recommendation
<b>Additional Cultural Heritage Survey - Offset Areas</b>					
46	<p>Within 12 months of the commencement of development under this consent, unless the Secretary agrees otherwise, the Applicant shall carry out an investigation into the Aboriginal cultural heritage values in Offset Areas 1 to 5 to the satisfaction of the Secretary. This investigation must:</p> <p>(a) be undertaken by suitably qualified and experienced persons whose appointment has been endorsed by the Secretary;</p> <p>(b) be undertaken in consultation with OEH and RAPs;</p> <p>(c) focus the survey effort to identifying areas of moderate to high significance, such as rock shelter/ art sites;</p> <p>(d) include a detailed report on the findings; and</p> <p>(e) describe how the outcomes would be incorporated into the Biodiversity Management Plan and Aboriginal Cultural Heritage Plan required under this consent.</p>	<ul style="list-style-type: none"> <li>Letter to DPE from WCPL titled "Endorsement of Experts", dated 21.05.2017</li> <li>Letter from DPE to WCPL approving expert, titled "WEP Endorsement of Experts", dated 18.06.2018</li> <li>Letter from DPE to WCPL titled "WCM Extension – Aboriginal Cultural Heritage Survey", dated 03.08.2018</li> </ul>	<p>WCPL requested endorsement from DPE of a suitably qualified and experienced person on 21 May 2017. DPE approved the appointment of the person from South East Archaeology (SEA) to undertake the investigation on 18 June 2018.</p> <p>WCPL requested an extension to the conduct the investigation in the Offset Areas 1-5. This was due to the fact that the appointed heritage expert from SEA was not available to undertake the survey until late 2018. WCPL highlighted the extensive experience SEA has at Wilpinjong Coal Mine as well as the established long term relationships with the local RAPs.</p> <p>On 3 August 2018 DPE approved an extension of time to complete the heritage investigation until 31 March 2019.</p>	Not Triggered	
<b>Aboriginal Cultural Heritage Management Plan</b>					
47	<p>Prior to carrying out any development under this consent, unless the Secretary agrees otherwise, the Applicant must prepare an Aboriginal Cultural Heritage Management Plan for the development to the satisfaction of the Secretary. This plan must:</p>	<ul style="list-style-type: none"> <li>Letter from DPE to WCPL titled "WEP Approval of Environmental Management Plans", dated 04.08.2017</li> </ul>	<p>The Aboriginal and Cultural Heritage Management Plan (ACHMP) was originally developed in 2006 to address the requirements of project approval 05-0021. The ACHMP was revised and updated multiple times to address comments from DPE and modifications to PA 05-0021.</p> <p>In August 2017 the plan was updated following approval of the Wilpinjong Extension Project (WEP) and associated consent SSD-6764.</p> <p>On 04.08.17 the DPE responded to WCPL's submission of the WMP in a letter titled 'Approval of Environmental Management Plans', dated 04.08.17. The DPE noted that they were satisfied with the ACHMP and subsequently approved the ACHMP on 04.08.17.</p>	Compliant	
47(a)	<p>be prepared by suitably qualified and experienced persons whose appointment has been endorsed by the Secretary;</p>	<ul style="list-style-type: none"> <li>Letter from WCPL to DPE titled "WEP Management Plans", dated 17.05.2017</li> <li>Letter from DPE to WCPL titled "WEP Management Plans", dated 24.05.2017</li> </ul>	<p>WCPL sought approval from the DPE on 17 May 2017 for the appointment of qualified and experienced persons to prepare the ACHMP.</p> <p>The DPE, satisfied that the nominated person was suitably qualified and experienced, approved the experts to develop the plan on 24 May 2017.</p>	Compliant	



APPENDIX A AUDIT CHECKLIST					
Reference	Condition	Evidence	Comments	Audit Finding	Recommendation
47(b)	be prepared in consultation with OEH and the RAPs;	<ul style="list-style-type: none"> <li>Email to OEH from WCPL requesting feedback on the ACHMP, dated 14.06.2017</li> <li>RAP Consultation June 2017</li> </ul>	<p>Consultation occurred with the following parties during preparation of the ACHMP:</p> <ul style="list-style-type: none"> <li>DPE;</li> <li>RAPs; and</li> <li>OEH</li> </ul> <p>WCPL provided a draft version of the revised ACHMP to the RAPs and OEH for their review and comments. As evidenced by letters to the RAPs and OEH from WCPL on 14 June 2017.</p> <p>A summary of the RAPs and OEHs comments is provided in Appendix 3 of the ACHMP.</p>	Compliant	
47(c)	<p>include the following for the management of Aboriginal heritage:</p> <ul style="list-style-type: none"> <li>ensure any workers on site receive suitable heritage inductions prior to carrying out any project on site, and that suitable records are kept of these inductions;</li> <li>a program and description of the measures/procedures that would be implemented for: <ul style="list-style-type: none"> <li>where reasonable and feasible, designing, constructing and operating ancillary infrastructure to avoid direct impacts on the Aboriginal sites identified in the EIS as being potentially impacted, with particular consideration for the 15 sites classified as moderate, low-moderate or low-possibly moderate significance;</li> <li>protecting, monitoring and/or managing (including any proposed archaeological investigations and/or salvage measures) Aboriginal cultural heritage on site, including monitoring of ground vibration and dust deposition at sites WCP72, WCP152 and WCP153;</li> <li>protecting, monitoring and/or managing the impacts of blasting on potentially affected Aboriginal cultural heritage sites located outside of the disturbance area including rock shelters in the Munghorn Gap Nature Reserve in accordance with condition 12 of this schedule;</li> <li>undertaking test and salvage excavation at sites within the disturbance boundary as having high scientific significance and representative sites identified as potential archaeological deposits (PADs) and undertaking detailed recording of the ochre quarry evidence and rock art associated with WCP578 and WCP579, to inform the archaeological research program described in the Aboriginal Cultural Heritage Assessment in Appendix G of the EIS;</li> <li>managing the discovery of any new Aboriginal objects or skeletal remains during the development;</li> <li>maintaining and managing reasonable access for relevant Aboriginal stakeholders to heritage items on site and within offset areas;</li> <li>ongoing consultation and involvement of RAPs in the conservation and/or management of Aboriginal cultural heritage on the site; and</li> </ul> </li> <li>a strategy for the storage of heritage items salvaged on site, both during the development and in the long term.</li> </ul>	ACHMP (August 2017)	<p>The ACHMP was reviewed by the auditors during the IEA document review process. The auditors confirm the ACHMP includes the required information as specified by Condition 47(c), Schedule 3. Specifically the ACHMP addresses the requirements of the condition by including the following:</p> <ul style="list-style-type: none"> <li>Section 3.4 outlines Cultural Heritage Induction and training Requirements for WCPL. This section outlines that prior to commencing work at WCPL all contractors and employees will receive a general induction to cultural heritage as part of their standard induction package.</li> <li>Section 5.0 outlines the management and control measures for aboriginal cultural heritage.</li> <li>Section 5.2.1 outlines the Ancillary Infrastructure Works or Exploration Drilling in previously unsurveyed areas of the development application area. This section outlines an Ancillary Disturbance Area Protocol which includes; 1. Pre-clearance archaeological survey (conducted with the assistance of Aboriginal representatives), and avoidance of the identified Aboriginal object/sites by realigning or adjusting infrastructure/disturbance area if practicable.</li> <li>Section 5.1.3 – 5.1.8 outline the measures in place to manage surface salvage, surface scrapes of open artefact sites, test excavation of open area and PADs, Management of Castle Rock WCP72 and management of rocky hill in slate gully and WCP118/WCP119.</li> <li>Section 6.3 outlines the monitoring requirements for rock art sites WCP152, WCP 153 and WCP72 (Castle Rock).</li> <li>Sections 5.2.3 outlines measures for the discovery of previously unidentified Aboriginal places and/or objects and Section 5.2.5 outlines measures for the discovery of skeletal remains.</li> <li>Section 5.3 outlines the management measures in place for the temporary keeping place at WCPL. Section 5.3.3 is titled Aboriginal Community Access to the Temporary Keeping Place and outlines that <i>visitation to the Temporary Keeping Place (and therefore access to any salvaged Aboriginal objects) by the RAPs is permissible upon written request addressed to the ECM, provided at least 10 working days' notice of the requested visit is given.</i></li> <li>Section 5.4 outlines the measures in place for long-term curation options.</li> </ul>	Compliant	

APPENDIX A AUDIT CHECKLIST					
Reference	Condition	Evidence	Comments	Audit Finding	Recommendation
48	The Applicant must implement the approved Aboriginal Cultural Heritage Management Plan for the development.	<p>Environmental induction Records (sample)</p> <p>Site Inspection</p> <p>Heritage Clearance Survey Report, NOHC Oct 2017</p> <p>RAPCC Presentation Slides 05.06.2018</p> <p>Heritage dust impact Study, NOHC 2016</p> <p>Annual Review 2017 (Section 6.3)</p>	<p>Implementation of the ACHMP was reviewed by the auditors. The auditors reviewed the management measures and monitoring requirements specified in the plan and confirmed if they had been implemented accurately onsite.</p> <p><b>Inductions:</b></p> <p>The auditors reviewed the standard induction package and confirmed it contained adequate information with regards to aboriginal heritage. In addition the following were also noted:</p> <ul style="list-style-type: none"> <li>Heritage signage at the site entrance.</li> <li>Aboriginal heritage is included in the visitor induction, which is completed at the log in points;</li> <li>Records of employee and contractor inductions were sighted by the auditors.</li> <li>A quarterly safety training day was occurring on day 2 of the site inspection. This training day included the delivery of the heritage training program to WCPL employees.</li> <li>WCPL has a Native Title Liaison Office (NTLO) onsite who conducts fortnightly training sessions with workers. This is an interactive training session in which the NTLO brings in artefacts to familiarise their appearance with workers.</li> </ul> <p><b>Clearance Surveys:</b></p> <p>A number of clearance surveys were conducted during the audit period. A sample of reports from NOHC were reviewed by the auditors. The surveys include consideration of the archaeological and cultural heritage values associated with the site and the potential value of conducting subsurface salvage.</p> <p>Specifically the results of a pre-clearance archaeological survey and surface salvage of the Powerline and Areas 35, 34, 33, 31, 30, 29, 27, 26, 25, and Part of 12 inside the project approval boundary were reviewed. The survey identified previously recorded sites as well as new sites identified in the current assessment. Photos of all sites identified are provided in the report. The report concludes by providing recommendations for example – newly recorded site should be entered on the WCPL site database.</p> <p>The clearance reports are conducted in consultation with the eight RAPs. For the September clearance survey, for example, NOHC contacted the RAPs on 6<sup>th</sup> September 2017 inviting a representative of each group to be involved with the assessment. As a result one representative accepted the invitation and attended the fieldwork.</p> <p><b>New Finds:</b></p> <p>During heritage clearance surveys conducted by WCPL's heritage consultants NOHC a number of new unidentified aboriginal items have been discovered. These items are reported in the clearance report, reported and logged in the WCPL site register and also reported to the RAPs via the RAPCCC. The RAPCC presentation slides reported the new finds, from the October 2017 survey, to the RAPs and included reference to the following new sites:</p> <ul style="list-style-type: none"> <li>two new sites in area 12,</li> </ul>	Compliant	<p><b>IEA 2018 OFI 050</b></p> <p>Review indicative timing outlined in Table 5 of the ACHMP</p>

APPENDIX A AUDIT CHECKLIST					
Reference	Condition	Evidence	Comments	Audit Finding	Recommendation
			<ul style="list-style-type: none"> <li>• four new sites in area 24,</li> <li>• three new sites in Area 25b,</li> <li>• one new site in area 39,</li> <li>• three new sites in the exploration area</li> </ul> <p>The October survey was conducted on the 25 – 27<sup>th</sup> October 2017 and was attended by 5 representatives from various RAPs and two NOHC field personnel.</p> <p><b>Managing Dust Impacts:</b></p> <p>WCPL informed the auditors that they are aware of the concerns and impacts associated with dust around Castle Rock (WCP72). In June 2016 an investigation was undertaken into dust and other surface deposits associated with the rock art site. As a result a number of management measures were in place and verified by the auditors during the IEA:</p> <ul style="list-style-type: none"> <li>• Dust deposition levels are monitored at WCP72, WCP153 and WCP153 (dust monitor sighted by air quality specialist during the site inspection)</li> <li>• Regular inspection of WCP72, WCP153 and WCP152 is conducted by the WCPL environment department. This was conducted by WCPL personnel on day 3 of the site inspection.</li> <li>• WCPL were in the process of contracting NOHC to conduct a pilot study for the removal of dust and dung deposits within WCP72. Table 5 of the ACHMP states the indicative timing for the pilot study to occur in April 2018. At the time of the IEA site inspection WCPL were in the process of reviewing NOHC's proposal and methodology to conduct the pilot study.</li> </ul> <p><b>Performance Indicators</b></p> <p>WCPL state in the ACHMP that they will use the number of complaints and incidents/non-compliances to assess the performance of the mine against the predicted impacts. At the time of the audit no complaints had been received regarding Aboriginal cultural heritage management at WCPL. WCPL reported the unintentional collection of an artefact in the 2017 Annual Review however did not report the event as an incident or non-compliance.</p> <p><b>Consultation with RAPs</b></p> <p>The following information was obtained with regards to consultation conducted with the WCPL RAPs:</p> <ul style="list-style-type: none"> <li>• WCPL has formed a Registered Aboriginal Parties Consultation Committee (RAPCC) which comprises one representative from each RAP. The auditors sighted RAPCC meeting minutes and presentation slides from 12 December 2017, 01 March 2018 and 05 June 2018.</li> <li>• RAPs are invited to attend any clearance surveys conducted by the WCPL contracted archaeologist (refer Clearance Surveys above).</li> <li>• RAPs have been invited to review the ACHMP and ARD.</li> </ul>		

APPENDIX A AUDIT CHECKLIST					
Reference	Condition	Evidence	Comments	Audit Finding	Recommendation
			<p>They have also conducted various site visits to inspect artefacts and discuss concerns regarding dust and dung at Castle Rock.</p> <ul style="list-style-type: none"> <li>Informal communication channels are also in place between various representatives of the RAPs and the WCPL E&amp;C department. This involves ad hoc phone calls, messages and emails. In addition the WCPL appointed aboriginal cultural heritage expert has a long standing relationship with the RAPs.</li> </ul> <p>The audit concludes that overall consultation practices between WCPL and the RAPs appeared to be above standard.</p> <p><b>Other Observations</b></p> <ul style="list-style-type: none"> <li>The temporary keeping place was sighted by the auditors in the WCPL Environment Office.</li> <li>The discovery of human skeletal remains protocol had not been triggered during the audit period.</li> <li>As per Condition 45, Schedule 3 an artefact was unintentionally collected by archaeologists from Navin Officer and member from the RAPs while carrying out a survey within the Project Approval Boundary. Section 6.6 of the ACHMP outlines a contingency plan for unpredicted impacts. Considering the work was being undertaken by a qualified archaeologist when the artefact was unintentionally collected, and based on the evidence reviewed by the auditors, management of the incident appears to have complied with the measures outlined in the ACHMP.</li> </ul> <p><b>Summary</b></p> <p>The ACHMP was considered to be adequately implemented at the time of the audit.</p>		
<b>Historic Heritage Management Plan</b>					
49	Prior to carrying out any development under this consent, unless the Secretary agrees otherwise, the Applicant must prepare an Historic Heritage Management Plan for the development to the satisfaction of the Secretary. The plan must:	<ul style="list-style-type: none"> <li>Letter to DPE from WCPL titled "WEP – Staged Submission of Historic Heritage Management Plan" dated 08.06.2017</li> <li>Letter from DPE to WCPL titled "WEP Approval of Environmental Management Plans" dated 04.08.2017</li> <li>Letter from DPE to WCPL titled "WCM Approval – Historic Heritage Management Plan" Dated 12.07.2018</li> </ul>	<p>On 8 June 2017 WCPL proposed to DPE that the Historic Heritage Management Plan (HHMP) be submitted in a staged submission, in accordance with Condition 6, Schedule 5 of SSD 6764. WCPL proposed to submit an initial HHMP which would not include the Archaeological Research Design (ARD) for the test and salvage excavation required at the potential caretaker's cottage site in Pit 8.</p> <p>On 04.08.2017 DPE approved the HHMP and stated that "<i>The Department is satisfied that the proposed staging of the Historic Heritage Management Plan is reasonable</i>". The DPE subsequently approved the initial HHMP in this letter dated 04.08.2017.</p> <p>WCPL submitted a revised HHMP, which included the ARD, on 20.12.2017 to DPE for approval. DPE approved the revised HHMP on 12.07.2018.</p>	Compliant	

APPENDIX A AUDIT CHECKLIST					
Reference	Condition	Evidence	Comments	Audit Finding	Recommendation
49(a)	be prepared by suitably qualified and experienced persons whose appointment has been endorsed by the Secretary	<ul style="list-style-type: none"> <li>Letter from DP&amp;E to WMP approving heritage specialists to prepare the HHMP, dated 24.05.2017.</li> </ul>	The HHMP was prepared by heritage specialists from Niche Environment and Heritage (Niche). The specialists were approved by the DP&E to prepare the HHMPP on 24 May 2017.	Compliant	
49(b)	be prepared in consultation with the Heritage Division, Council and relevant landowners; and	<ul style="list-style-type: none"> <li>Email requesting consultation/feedback from WCPL on 08.06.2017</li> <li>Email from Heritage Division regarding feedback on ARD, dated 06.12.2017</li> </ul>	<p>Consultation with the Heritage division, MWRC and relevant landowners was sighted by the auditors. WCPL requested the HHMP be reviewed by the Heritage Division, MWRC and relevant landowners on 08 June 2017.</p> <p>Subsequent feedback was also provided by the Heritage division on 6 December 2017 for the revised HHMP including the ARD.</p>	Compliant	
49(c)	<p>include the following for the management of historic heritage:</p> <ul style="list-style-type: none"> <li>ensure any workers on site receive suitable heritage inductions prior to carrying out any project on site, and that suitable records are kept of these inductions;</li> <li>a program and description of the measures/procedures that would be implemented for: <ul style="list-style-type: none"> <li>photographic and archival recording of any impacted heritage items;</li> <li>where reasonable and feasible, designing, constructing and operating ancillary infrastructure to avoid direct impacts on historic heritage items;</li> <li>undertaking test and salvage excavation at the Potential Caretakers Cottage Site (Site 1G);</li> <li>monitoring and managing the effects of blasting on potentially affected heritage items;</li> <li>managing the discovery of any new historic heritage items during the development; and</li> <li>additional archaeological excavation and/or recording of any significant heritage items requiring demolition; and</li> </ul> </li> <li>a strategy for the storage of heritage items salvaged on site, both during the development and in the long term.</li> </ul>	<ul style="list-style-type: none"> <li>HHMP</li> <li>Caretakers Cottage Site, Wilpinjong Mine, Wollar. Archaeological Research Design, Niche August 2017</li> </ul>	<p>The HHMP was reviewed by the auditors during the IEA document review process. The auditors confirm the HHMP includes the required information as specified by Condition 49(c), Schedule 3. Specifically the HHMP addresses the requirements of the condition by including the following:</p> <ul style="list-style-type: none"> <li>Section 4.6 outlines the requirement for a Historic Heritage Component to the site induction.</li> <li>Section 4 outlines the general management measures to be put in place with regards to historic heritage.</li> <li>Section 4.7 outlines the management of historic heritage items in Wollar and wider surrounds.</li> <li>Section 4.1 outlines the specific management measures relating to historic heritage and have been incorporated from the WEP EIS Historic Heritage Assessment (Niche, 2015). This section states that records would include as a minimum, a photographic record with notes and cross-referencing to base plans. The HHMP also references the OEH Heritage Branch stated guidelines 'Photographic Recording of Heritage Items Using Film or Digital Capture' (2006). This section also states that ancillary development at the Wilpinjong Coal Mine is subject to final design, and where practicable, infrastructure would be located to avoid direct impacts to historic heritage items.</li> <li>Section 4.1.1 outlines the management measures associated with the Historic Shale Oil mine Complex, Slate Gully (Site 1). The section outlines that WCPL will engage a suitably qualified heritage consultant to conduct archival recording of all features of the shale oil mine prior to the commencement of any mining works associated with Pit 8. A detailed test and salvage excavation program for the Potential Caretakers Cottage Site (Site 1G) is provided in Appendix 1 of the HHMP (ARD for the Caretakers Cottage Site).</li> <li>Section 4.2 refers to the Blast Management Plan with regards to monitoring heritage items for impacts caused by blasting operations.</li> <li>Section 4.3 outlines the new site recording protocol.</li> </ul>	Compliant	

APPENDIX A AUDIT CHECKLIST					
Reference	Condition	Evidence	Comments	Audit Finding	Recommendation
			<ul style="list-style-type: none"> <li>Section 4.8 outlines the measures in place to manage the storage of heritage items that have been salvaged.</li> </ul>		
50	The Applicant must implement the approved Historic Heritage Management Plan for the development.	<p>Ground Disturbance Permit 09.01.2018 and 18.01.2018</p> <p>Complaints register 01.04.2017 – 22.08.2018</p> <p>Incident register</p> <p>Annual Review 2017</p>	<p>Implementation of the HHMP was reviewed by the auditors. The auditors reviewed the management measures and monitoring requirements specified in the plan and confirmed if they had been implemented accurately onsite.</p> <p><b>Inductions</b></p> <p>The auditors reviewed the standard induction package and confirmed it contained adequate information with regards to historic heritage. In addition the following were also noted:</p> <ul style="list-style-type: none"> <li>Heritage signage at the site entrance.</li> <li>Historic heritage is included in the visitor induction, which is completed at the log in points;</li> <li>Records of employee and contractor inductions were sighted by the auditors.</li> <li>A quarterly safety training day was occurring on day 2 of the site inspection. This training day included the delivery of the heritage training program to WCPL employees.</li> </ul> <p><b>Performance Indicators</b></p> <p>WCPL have in place a number of performance indicators which are used to guide the implementation of the management measures detailed in the HHMP. These indicators include:</p> <ul style="list-style-type: none"> <li>Management of historic heritage items through conduct of an investigation of the potential caretaker's cottage site.</li> <li>Archival recording of all features of the historic shale oil mine complex; and</li> <li>Incident and non-compliances relating to historical heritage at WCPL.</li> </ul> <p>The management of test and salvage excavations of the Potential caretaker's cottage site near Wollar is to be conducted in accordance with the Archaeological Research Design Report (Niche, 2017). WCPL stated that they do no plan to undertake any works in the vicinity of the potential caretaker's cottage site until all necessary heritage management works in accordance with the ARD have been completed. At the time of the audit no work had been conducted in this area.</p> <p>The requirement to undertaken archival recording of all features of the shale oil mine prior had not been triggered at the time of the audit. Mining works associated with Pit 8 had not commenced at the time of the audit.</p> <p>No incidents had been recorded which related to historic heritage at WCPL.</p> <p><b>Other Observations</b></p> <ul style="list-style-type: none"> <li>The auditors reviewed the complaints register and verified that no complaints had been recorded during the audit period in relation to historic heritage.</li> </ul>	Compliant	

APPENDIX A AUDIT CHECKLIST					
Reference	Condition	Evidence	Comments	Audit Finding	Recommendation
			<ul style="list-style-type: none"> <li>Based on evidence provided the contingency plan for unpredicted impacts or finds had not been implemented or required to be implemented during the audit period.</li> <li>Historical heritage items are considered in the GDP process. A sample of GDPs were reviewed by the auditors and confirm that Heritage is assessed.</li> </ul> <p><b>Summary</b></p> <p>It is noted that the major performance indicator for the HHMP is conduct of an investigation of the potential caretaker's cottage site and archival recording of all features of the historic shale oil mine complex. The ARD for the potential caretaker's cottage site had been developed however works in this area had not commenced at the time of the audit. In addition monitoring and archival recordings at the historic shale mine complex had not been triggered based on the status of mining operations at the time of the audit.</p> <p>Based on the information reviewed, the fact that there have been no incidents involving historical heritage, and the actions of those items triggered in the plan, the HHMP is considered to have been adequately implemented at the time of the audit.</p>		
<b>TRANSPORT</b>					
<b>Monitoring of Coal Transport</b>					
51	<p>The Applicant must:</p> <p>(a) keep accurate records of the:</p> <ul style="list-style-type: none"> <li>amount of coal transported from the development in each calendar year (on a monthly basis);</li> <li>number of coal haulage train movements generated by the development (on a daily basis); and</li> </ul> <p>(b) include these records in the Annual Review.</p>	<ul style="list-style-type: none"> <li>ROM Coal Tracking Spreadsheet (July 2018)</li> <li>2017 Annual Review (WCPL, 30.03.2018)</li> </ul>	<p>Tracking of ROM Coal quantities was being managed by the Tech Services Department. The auditors reviewed the ROM Coal tracking spreadsheet and confirmed that the amount of coal transported from the mine each month was being recorded.</p> <p>As of July 2018 8.4 million tonnes of ROM coal had been extracted in 2018. Predicted tracking for the remainder of 2018 anticipates approximately 15 million tonnes of ROM coal to be extracted.</p> <p>Tracking of train movements is managed by the Coal Handling Prep Plant (CHPP) Team. The auditors reviewed the WCPL Coal plan Spreadsheet and confirm that records of the daily coal haulage train movements were being recorded by the mine.</p> <p>The amount of coal transported from the mine and the number of daily coal haulage train movements were reported in the Annual Reviews.</p>	Compliant	
<b>Operating Conditions</b>					
52	<p>The Applicant must:</p> <p>(a) schedule shift changes on site to occur outside of school bus hours; and</p> <p>(b) co-ordinate the shift changes on site with the shift changes of the adjoining Moolarben and Ulan mines to minimise the potential cumulative traffic impacts of shift changes of the three mines.</p>	<ul style="list-style-type: none"> <li>Letter from DPE (then Dep. Planning and infrastructure) titled "WCM: Shift Changes re School Bus Hours" dated 18.03.2013.</li> <li>Letter to DPE from WCPL titled "WCM Traffic and School</li> </ul>	<p>In March 2013 DPE requested WCPL to amend their shift change times for both shift workers and staff to ensure local traffic on roads associated with shift changes occurs outside of the school bus hours. In response WCPL responded to DPE with the following commitments:</p> <ul style="list-style-type: none"> <li>incorporate the need to minimise mine traffic during school bus hours in all contractor and staff site inductions;</li> <li>where practical, scheduled contractor activities would be set such that school bus traffic interaction is minimised; and</li> <li>incorporate school bus times (i.e. to be avoided) in toolbox talks with staff and contractors regarding traffic minimisation and carpooling.</li> </ul>	Compliant	

APPENDIX A AUDIT CHECKLIST					
Reference	Condition	Evidence	Comments	Audit Finding	Recommendation
		<p>Bus Movements. Dated 18.04.2013</p> <ul style="list-style-type: none"> <li>Wilpinjong Shift Times Gantt Chart 23.01.2018</li> <li>Email from WCPL to Ulan and Moolarben coal mines regarding changes in shift times. Dated 23.01.2018</li> </ul>	The auditors reviewed WCPL shift changes and confirmed that they have been scheduled to occur outside of school bus hours. In addition the auditors also reviewed correspondence from and to UCML and MCO which shows co-ordination of shift times between the three mines to minimise cumulative traffic impacts.		
<b>Road Works</b>					
53	<p>The Applicant must prepare a detailed schedule for the re-alignment and upgrade of Ulan-Wollar Road to the satisfaction of Council. This schedule must be submitted to the Secretary for approval within 6 months of the commencement of development or prior to carrying out any roadworks under this consent, whichever comes first.</p> <p><i>Note: The initial approved schedule can be amended following further consultation with Council and subsequent approval by the Secretary.</i></p>	<ul style="list-style-type: none"> <li>Letter to DPE from WCPL titled "Ulan-Wollar Road Schedule" dated 19.03.2018</li> <li>Email from MWRC to WCPL approving the schedule, dated 19.03.2018</li> </ul>	<p>WCPL submitted the schedule for the re-alignment of Ulan-Wollar Road to DPE on 19 March 2018. Development under SSD 6764 commenced on 19 September 2017 and as such the schedule was required to be provided to DPE no later than 19 March 2018.</p> <p>Approval of the re-alignment schedule by MWRC was provided on 19 March 2018 via email. MWRC also stated they have a good working relationship with WCPL.</p>	Compliant	
54	<p>The Applicant shall construct the Ulan-Wollar Road re-alignment and upgrades as described and shown conceptually in the EIS and in accordance with the schedule in condition 53 of this schedule, to the satisfaction of Council.</p> <p><i>Note: These road works must be constructed in accordance with the relevant RMS or Austroads standards, and signposted and lit in accordance AS 1742 – Manual of Uniform Traffic Control Devices and AS/NZS 1158: 2005 – Lighting for Roads and Public Spaces.</i></p>	<ul style="list-style-type: none"> <li>Ulan-Wollar Road realignment design drawing (22-19199-CIVILSET-01082018_REVB</li> <li>Email to MWRC from WCPL regarding Ulan-Wollar road re-alignment design work, dated 07.06.2017</li> <li>Letter to DPE from WCPL titled "Ulan-Wollar Road Schedule" dated 19.03.2018</li> <li>Email from MWRC to WCPL approving the schedule, dated 19.03.2018</li> </ul>	<p>Correspondence between WCPL and MWRC was viewed by the auditors. Correspondence verifies that MWRC were involved and satisfied with the timeline of the road upgrade and also confirmed they were consulted with, with regards to the road design and land swap arrangements associated with the closure of the existing road and opening of proposed road alignment.</p> <p>The schedule for the construction of the road upgrade is specified below:</p> <ul style="list-style-type: none"> <li>Initial road design commenced with consultant GHD on 13 November 2017</li> <li>Final road design by GHD, is planned for completion by 20 April 2018</li> <li>Commencement of road construction of the Western Section is planned for 6 August 2018</li> <li>Commencement of road construction of the Centre Section is planned for 3 December 2018</li> <li>Commencement of road construction of the Eastern Section is planned for 7 January 2019</li> </ul> <p>Ulan-Wollar Road realignment design drawing was reviewed by the auditors and confirms it is generally in accordance with the EIS.</p>	Compliant	



APPENDIX A AUDIT CHECKLIST					
Reference	Condition	Evidence	Comments	Audit Finding	Recommendation
<b>Ulan Road Strategy</b>					
55	The Applicant must make contributions towards the implementation of the Ulan Road Strategy (ARRB Group, December 2011). If there is any dispute about the implementation of the strategy, then any of the parties involved may refer the matter to the Secretary for resolution.	<ul style="list-style-type: none"> <li>Payment Invoice to MWRC 200010750, dated 24.04.2018</li> <li>Ulan deed of agreement 'Funding and Delivery of Ulan Road Upgrade and Maintenance' July 2014</li> </ul>	<p>Construction of the Ulan Road Strategy commenced on 1 April 2014 and was completed in 2018. Maintenance contributions continue to be made in accordance with the Ulan deed of Agreement for the life of the mine.</p> <p>The auditors sighted a remittance advice letter and invoice from MWRC for ongoing contributions for the implementation of the Ulan Road strategy.</p>	Compliant	
56	Prior to carrying out any development under this consent, the Applicant shall write to the owners of the residences that are entitled to additional road noise mitigation works under the Ulan Road Strategy (ARRB Group, December 2011) who have not sought these mitigation measures yet, and remind them that they are entitled to additional road noise mitigation works under the strategy.	<ul style="list-style-type: none"> <li>Letter to residence dated 04.08.2017</li> <li>Section 3.1 Annual Review, 2017</li> </ul>	<p>WCPL sent letters to the 3 residences that had not elected to take up mitigation works under the strategy on 04 August 2017. Responses were:</p> <ul style="list-style-type: none"> <li>1 resident sought mitigation works (920 Ulan Rd) – WCPL still working through this at the time of the audit</li> <li>Resident at 1369 Ulan Road does not wish to receive any form of mitigation works</li> <li>Resident at 1731 was confirmed to be outside the 50m mitigation zone as the house they reside in was outside the boundary.</li> </ul>	Compliant	

APPENDIX A AUDIT CHECKLIST					
Reference	Condition	Evidence	Comments	Audit Finding	Recommendation
<b>VISUAL</b>					
<b>Operating Conditions</b>					
57	<p>The Applicant must:</p> <p>(a) implement all reasonable and feasible measures to minimise the visual and off-site lighting impacts of the development, including establishing and maintain a vegetation screen between Ulan-Wollar Road and the Pit 3 to Pit 8 haul road cutting;</p> <p>(b) ensure no fixed outdoor lights shine above the horizontal;</p> <p>(c) ensure no in-pit mobile lighting rigs shine directly above the pit wall and other mobile lighting rigs do not shine above the horizontal;</p> <p>(d) ensure no lighting shines directly on the Shale Oil Mine Adit; and</p> <p>(e) ensure that all external lighting associated with the development complies with Australian Standard AS4282 (INT) 1997 – Control of Obtrusive Effects of Outdoor Lighting, or its latest version.</p>	<ul style="list-style-type: none"> <li>External Lighting AS4282 Compliant Audit Report, MRA 20.10.2017</li> <li>Email from WCPL to Daracon revegetation Contractor, dated 26.07.2018</li> </ul>	<p>The auditors sighted, during the site inspection, the vegetation screen which is in place between Ulan-Wollar Road and the Pit 3 – Pit 8 haul road. The vegetation screen was dense and blocked majority of the view of the mine from Ulan-Wollar road.</p> <p>On 25 July 2018 the WCPL emailed Daracon re-vegetation Contractors requesting an existing bund be seeded with a hydromulch mixed with native seed mix. This was in the process of being actioned at the time of the audit.</p> <p>WCPL contracted MRA Electrical and Automation Engineering to conduct an external lighting AS4282 Compliant Audit. The audit was conducted on 10 October 2017 and inspected all fixed external lights. The audit did not find any non-compliances with WCPL's external lighting. A number of recommendations were made in relation to the following:</p> <ul style="list-style-type: none"> <li>The most obtrusive light from the site was from floodlights at the RO plant. It was recommended that these floodlights be faced further downward to reduce the glare to motorists, who at this location are directly facing the RO plant.</li> <li>It was recommended that a review of lighting requirements at night be conducted to consider if the amount of lighting is required or can be reduced.</li> </ul> <p>WCPL verbally confirmed that the recommendations from the lighting audit had been actioned. The auditors were unable to quantify if the lights at the RO plant had been faced further down.</p> <p>Lighting in Shale Oil Mine Adit will come into effect when Pit 8 becomes operational</p>	Compliant	
<b>WASTE</b>					
58	<p>The Applicant must:</p> <p>(a) implement all reasonable and feasible measures to minimise waste (including coal rejects and tailings) generated by the development;</p> <p>(b) ensure that the waste generated by the development is appropriately stored, handled and disposed of;</p> <p>(c) manage on-site sewage treatment and disposal in accordance with the requirements of Council;</p> <p>(d) ensure irrigation of treated wastewater is undertaken in accordance with OEH's Environmental Guideline for the Utilisation of Treated Effluent;</p> <p>(e) only dispose of building and demolition wastes and tyres on-site in accordance with an EPL; and</p> <p>(f) monitor and report on effectiveness of the waste minimisation and management measures in the Annual Review.</p>	<ul style="list-style-type: none"> <li>J.R Richards Waste tracking records (sample)</li> <li>Tyre burial register (August 2018)</li> <li>Annual Review 2017</li> <li>Site Inspection</li> <li>WCPL Waste Management Plan</li> <li>Effluent Water Analysis 22.05.17</li> </ul>	<p>a) Waste is managed in accordance with the sites Waste Management Plan. The waste management plan was originally developed to meet the requirements of former PA05-0021. The waste management plan identifies waste streams, waste monitoring and tracking procedures and details management measures to ensure the generation of waste is minimised and recycling of waste is maximised where practicable. WCPL reported that it intends to keep the Waste Management Plan as an internal document.</p> <p>b) J.R. Richards were contracted to manage onsite waste at WCPL. They provide WCPL with waste tracking records which enables WCPL to review waste statistics to ensure compliance with regulatory requirements and to assist with reporting of waste in the Annual Review. Waste oil in the workshop is automatically pumped to the Maintenance Infrastructure Area (MIA) when the level reaches 70% capacity. WCPL utilise the CITEC system to track waste oil levels.</p> <p>c) Management of on-site sewage treatment was reviewed by the auditors and was generally complying with Councils requirements. A detailed review of the sewage treatment plant</p>	Compliant	

APPENDIX A AUDIT CHECKLIST					
Reference	Condition	Evidence	Comments	Audit Finding	Recommendation
			<p>approval conditions was not conducted.</p> <p>d) SWB, Section 5.3 states:</p> <p>e) Sewage treatment occurs at a domestic sewage treatment facility located near the mine administration area and at the CHPP (septic system). Treated effluent is used for irrigation in accordance with EPL 12425. The existing sewage treatment facilities and treated/grey water spray areas will continue to be operated in accordance with the Environmental Guidelines: Use of Effluent by Irrigation (NSW DEC, 2004). Effluent irrigation monitoring analysis records were reviewed by the auditors. ALS (NATA accredited laboratory) conducts analysis of effluent. The auditors confirm general compliance with OEH's Environmental Guideline for the Utilisation of Treated Effluent.</p> <p>f) WCPL maintain a tyre burial register which tracks tyres requiring disposal/burial against the limits specified in the EPL. At the time of the audit WCPL had not exceeded their allowance of tyres to be disposed of onsite. During the 2017 Annual Review reporting period WCPL disposed of 24.27 tonnes of tyres in Pit 7.</p> <p>g) Annual Review reports on waste.</p>		
BUSHFIRE MANAGEMENT					
59	<p>The Applicant must:</p> <p>(a) ensure that the development is suitably equipped to respond to any fires on site; and</p> <p>(b) assist the RFS and emergency services as much as practicable if there is a fire in the vicinity of the site.</p>	<p>Newspaper Article titled "Wilpinjong awarded for RFS assistance" Mudgee Guardian, dated 06.07.2018</p>	<p>WCPL continue to implement the sites Bushfire Management Plan, which was a requirement of the previous project approval PA05-0021 . At the time of the audit WCPL had contracted Kleinfelder to conduct a review of the Bushfire Management Plan. WCPL reported that it intends to keep the Bushfire Management Plan as an internal document.</p> <p>Controls in place at the time of the audit include:</p> <ul style="list-style-type: none"> <li>• Water carts can be used to assist in a fire</li> <li>• Fire drills and emergency training is coordinated by the Safety Department.</li> <li>• Some personnel on site have been trained by RFS and operate the WCPL fire truck.</li> <li>• A fire loss control audit was conducted by Peabody Corporate to identify suitability of the site to manage fire.</li> </ul> <p>WCPL have in place a volunteer support program to assist the NSW RFS should they be required. This program was implemented in 2017 during the Kains Flat and Dir Ivan fires.</p> <p>In July 2018 WCPL was awarded by the NSW Rural Fire Service for their support during the Kains Flat and Dir Ivan fires in February 2017. WCPL provided 34 employee-volunteers and equipment to support the NSW RFS efforts during the bushfires.</p> <p>It is noted that while WCPL have various controls in place to manage fire the auditors are not fire safety engineers and as such are not qualified to determine if a site is equipped to respond to any type of fire on site.</p>	Compliant	

APPENDIX A AUDIT CHECKLIST																					
Reference	Condition	Evidence	Comments	Audit Finding	Recommendation																
<b>REHABILITATION</b>																					
<b>Rehabilitation Objectives</b>																					
60	<p>The Applicant must rehabilitate the site to the satisfaction of the Secretary. This rehabilitation must be consistent with the proposed rehabilitation strategy described in the EIS (and shown conceptually in Appendix 8), and comply with the objectives in Table 11.</p> <p><i>Table 11: Rehabilitation Objectives</i></p> <table border="1"> <thead> <tr> <th>Feature</th> <th>Objective</th> </tr> </thead> <tbody> <tr> <td>Mine site (as a whole)</td> <td> <ul style="list-style-type: none"> <li>Safe, stable and non-polluting</li> <li>Final landforms designed to incorporate micro-relief and integrate with surrounding natural landforms and adjacent mine rehabilitation</li> <li>Final landforms maximise geotechnical performance, stability and hydrological function</li> <li>Constructed landforms maximise surface water drainage to the natural environment (excluding final void catchments)</li> <li>Minimise long term groundwater seepage from the site to ensure negligible environmental consequences beyond those predicted for the development</li> <li>Minimise visual impact of final landforms as far as is reasonable and feasible</li> </ul> </td> </tr> <tr> <td>Final Voids</td> <td> <ul style="list-style-type: none"> <li>Minimise to the greatest extent practicable:                             <ul style="list-style-type: none"> <li>the size and depth of final voids</li> <li>the drainage catchment of final voids</li> <li>any high wall and low wall instability risk</li> <li>risk of flood interaction for all flood events up to and including the PMF</li> </ul> </li> </ul> </td> </tr> <tr> <td>Surface infrastructure</td> <td> <ul style="list-style-type: none"> <li>To be decommissioned and removed, unless the Secretary agrees otherwise</li> </ul> </td> </tr> <tr> <td>Rehabilitation</td> <td> <ul style="list-style-type: none"> <li>Rehabilitate at least 2,906 hectares of self-sustaining woodland ecosystem to the BVTs specified in Tables 8 and 9;</li> <li>Establish self-sustaining ecosystem function in areas of:                             <ul style="list-style-type: none"> <li>aquatic habitat, within diverted and/or re-established drainage lines and retained water features, with consideration of hydro-geomorphological constraints;</li> <li>habitat for threatened flora and fauna species; and</li> <li>habitat for flora and fauna species known to occur in the region.</li> </ul> </li> </ul> </td> </tr> <tr> <td>Cumbo Creek relocation</td> <td> <ul style="list-style-type: none"> <li>Restored in accordance with conditions 26 to 28 of this Schedule.</li> </ul> </td> </tr> <tr> <td>Other reinstated drainage lines</td> <td> <ul style="list-style-type: none"> <li>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)</li> </ul> </td> </tr> <tr> <td>Community</td> <td> <ul style="list-style-type: none"> <li>Ensure public safety</li> <li>Minimise the adverse socio-economic effects associated with mine closure</li> </ul> </td> </tr> </tbody> </table> <p><i>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.</i></p>	Feature	Objective	Mine site (as a whole)	<ul style="list-style-type: none"> <li>Safe, stable and non-polluting</li> <li>Final landforms designed to incorporate micro-relief and integrate with surrounding natural landforms and adjacent mine rehabilitation</li> <li>Final landforms maximise geotechnical performance, stability and hydrological function</li> <li>Constructed landforms maximise surface water drainage to the natural environment (excluding final void catchments)</li> <li>Minimise long term groundwater seepage from the site to ensure negligible environmental consequences beyond those predicted for the development</li> <li>Minimise visual impact of final landforms as far as is reasonable and feasible</li> </ul>	Final Voids	<ul style="list-style-type: none"> <li>Minimise to the greatest extent practicable:                             <ul style="list-style-type: none"> <li>the size and depth of final voids</li> <li>the drainage catchment of final voids</li> <li>any high wall and low wall instability risk</li> <li>risk of flood interaction for all flood events up to and including the PMF</li> </ul> </li> </ul>	Surface infrastructure	<ul style="list-style-type: none"> <li>To be decommissioned and removed, unless the Secretary agrees otherwise</li> </ul>	Rehabilitation	<ul style="list-style-type: none"> <li>Rehabilitate at least 2,906 hectares of self-sustaining woodland ecosystem to the BVTs specified in Tables 8 and 9;</li> <li>Establish self-sustaining ecosystem function in areas of:                             <ul style="list-style-type: none"> <li>aquatic habitat, within diverted and/or re-established drainage lines and retained water features, with consideration of hydro-geomorphological constraints;</li> <li>habitat for threatened flora and fauna species; and</li> <li>habitat for flora and fauna species known to occur in the region.</li> </ul> </li> </ul>	Cumbo Creek relocation	<ul style="list-style-type: none"> <li>Restored in accordance with conditions 26 to 28 of this Schedule.</li> </ul>	Other reinstated drainage lines	<ul style="list-style-type: none"> <li>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)</li> </ul>	Community	<ul style="list-style-type: none"> <li>Ensure public safety</li> <li>Minimise the adverse socio-economic effects associated with mine closure</li> </ul>		<p>The Rehabilitation Objectives outlined in Table 11 have been incorporated into the Rehabilitation Strategy and the MOP. Achievement of these objectives will be assessed in future audits.</p>	Compliant	
Feature	Objective																				
Mine site (as a whole)	<ul style="list-style-type: none"> <li>Safe, stable and non-polluting</li> <li>Final landforms designed to incorporate micro-relief and integrate with surrounding natural landforms and adjacent mine rehabilitation</li> <li>Final landforms maximise geotechnical performance, stability and hydrological function</li> <li>Constructed landforms maximise surface water drainage to the natural environment (excluding final void catchments)</li> <li>Minimise long term groundwater seepage from the site to ensure negligible environmental consequences beyond those predicted for the development</li> <li>Minimise visual impact of final landforms as far as is reasonable and feasible</li> </ul>																				
Final Voids	<ul style="list-style-type: none"> <li>Minimise to the greatest extent practicable:                             <ul style="list-style-type: none"> <li>the size and depth of final voids</li> <li>the drainage catchment of final voids</li> <li>any high wall and low wall instability risk</li> <li>risk of flood interaction for all flood events up to and including the PMF</li> </ul> </li> </ul>																				
Surface infrastructure	<ul style="list-style-type: none"> <li>To be decommissioned and removed, unless the Secretary agrees otherwise</li> </ul>																				
Rehabilitation	<ul style="list-style-type: none"> <li>Rehabilitate at least 2,906 hectares of self-sustaining woodland ecosystem to the BVTs specified in Tables 8 and 9;</li> <li>Establish self-sustaining ecosystem function in areas of:                             <ul style="list-style-type: none"> <li>aquatic habitat, within diverted and/or re-established drainage lines and retained water features, with consideration of hydro-geomorphological constraints;</li> <li>habitat for threatened flora and fauna species; and</li> <li>habitat for flora and fauna species known to occur in the region.</li> </ul> </li> </ul>																				
Cumbo Creek relocation	<ul style="list-style-type: none"> <li>Restored in accordance with conditions 26 to 28 of this Schedule.</li> </ul>																				
Other reinstated drainage lines	<ul style="list-style-type: none"> <li>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)</li> </ul>																				
Community	<ul style="list-style-type: none"> <li>Ensure public safety</li> <li>Minimise the adverse socio-economic effects associated with mine closure</li> </ul>																				

APPENDIX A AUDIT CHECKLIST					
Reference	Condition	Evidence	Comments	Audit Finding	Recommendation
<b>Rehabilitation Strategy</b>					
61	<p>Within 6 months of the commencement of development under this consent, unless the Secretary agrees otherwise, the Applicant must prepare a Rehabilitation Strategy to the satisfaction of the Secretary. This strategy must:</p> <p><i>Note: The strategy should build on the proposed rehabilitation strategy shown in Appendix 8.</i></p> <p>(a) in consultation with the proponent of the Moolarben Coal Mine, investigate options to integrate the final landform with the Moolarben Coal Mine, including options to integrate final voids and minimise the sterilisation of land post-mining;</p> <p>(b) include an assessment of partially backfilling voids 2 and 6 above the groundwater equilibrium level having regard to the final void rehabilitation objectives in Table 11, including consideration of downstream water quality and the objectives in Table 6;</p> <p>(c) include a revised final landform plan which builds on the rehabilitation objectives in Table 11, including incorporation of micro-relief, landform stability, hydrological and ecological function; and</p> <p>(d) include detailed justification for proposed changes to the final landform, having regard to the approved post-mining land use</p>		<p>A Rehabilitation Strategy (March 2018) was prepared and submitted to the DPE for approval on the 19 March 2018. At the time of writing, (October 2018) WCPL was yet to receive confirmation from the DPE that the Strategy was prepared to its satisfaction and on this basis, this Condition has been assessed as non-compliant. WCPL personnel indicated they believed the intent of this Condition was to submit the Draft Rehabilitation Strategy within six months of the commencement of development.</p> <p>a) Section 1.2 of the Strategy outlines WCPL's consultation with MCO. The results of the consultation were incorporated into Section 3.0 "Integration of Final Landform with Moolarben Coal Complex" Key correspondence with MCO is also included as Attachment 2 to the Strategy.</p> <p>b) Section 4.0 of the Strategy discusses this requirement. As outlined in the Strategy, Groundwater modelling was undertaken by HydroSimulations to determine the final groundwater equilibrium level for Pit 2 and Pit 6 if they were backfilled. Based on modelling it was reported that any partial backfill option would still involve the creation of a pit lake and to backfill Pits 2 and 6 final voids above the groundwater equilibrium level effectively requires complete backfilling of these voids.</p> <p>c) Section 5 of the Strategy discusses the revised final landform plan. Section 5.1 discusses micro-relief, Section 5.2 discusses landform stability and geotechnical performance and Section 5.3 discusses hydrological and ecological function.</p> <p>d) Section 6.0 details the justification for the final landform. The Strategy presents the approved final voids in Pit 2 and Pit 6 as the preferred option.</p> <p>It is noted that the DPE has had the Rehabilitation Strategy for seven months and has not provided feedback or approval of the Strategy and this has led to the timeframe not being met.</p>	Non-compliant	<p><b>IEA 2018 REC 003</b></p> <p>Continue to work with the DPE to obtain feedback on whether the Rehabilitation Strategy has been prepared to the DPE's satisfaction.</p>
<b>Progressive Rehabilitation</b>					
62	<p>The Applicant must rehabilitate the site progressively as soon as reasonably practicable following disturbance. All reasonable and feasible measures must be taken to minimise the total area exposed for dust generation at any time. Interim rehabilitation strategies must be employed when areas prone to dust generation cannot be permanently rehabilitated.</p> <p><i>Note: It is accepted that some parts of the site that are progressively rehabilitated may be subject to further disturbance at some later stage of the development. It is also accepted that delays in rehabilitation due to extended wet or dry conditions may occur.</i></p>	<ul style="list-style-type: none"> <li>Observations</li> </ul>	<p>Evidence that the site was being progressively rehabilitated was observed during the site inspection with sections of the mine at various stages of rehabilitation. For example:</p> <ul style="list-style-type: none"> <li>Pit 5 contained areas of various aged rehabilitation</li> <li>Southern finger of Pit 5 had been recently (July) seeded to pasture / cover crop</li> <li>Sections of Pit 6 had been returned historically to pasture and woodland</li> <li>The south east section of Pit 6 had been recently rehabilitated and showed residual pasture / cover crop species with native forbe and herbs.</li> <li>Tailings dams north of Pit 1 had been revegetated</li> </ul> <p>Refer to rehabilitation photos in the main report.</p> <p>Pasture and cover crop species have been used across the site since</p>	Compliant	<p><b>IEA 2018 OFI 051</b></p> <p>Develop contingency plan to address site conditions in context of the extending drought. Special consideration should be given to having to reseed those areas where germination has occurred though seedling failed to survive.</p>

APPENDIX A AUDIT CHECKLIST					
Reference	Condition	Evidence	Comments	Audit Finding	Recommendation
			2016/17 to assist in site stabilisation. Table 31 of the MOP has a target of 85.5ha for 2017 and 95ha for 2018 and a cumulative target of 180.5ha. The actual amounts were 82ha for 2017 and YTD 2018 21ha with plans for 20ha / month for the remainder of the year to reach the target. YTD the rehabilitation program is being impacted by extended drought and grazing pressures from native fauna		
63	The Applicant must commence the ecosystem and land use establishment phase of rehabilitation for areas within 50 metres of the Munghorn Gap Nature Reserve, within 2 years of ceasing mining operations in those areas. <i>Note: It is accepted that some ancillary infrastructure would need to be retained for access and water management.</i>	<ul style="list-style-type: none"> <li>Reported</li> <li>Observations</li> </ul>	Mining in the vicinity of the Munghorn Gap Nature Reserve had not ceased during the audit period. Areas adjoining Reserve in Pit 1 predominantly active mining. Areas of Pit 5 have undergone landform establishment and growing media phase with seeding of pasture species. Refer photo 7	Not triggered	
<b>Rehabilitation Management Plan</b>					
64	Prior to carrying out any development under this consent, unless the Secretary agrees otherwise, the Applicant must prepare a Rehabilitation Management Plan for the development to the satisfaction of the Secretary. This plan must:  <i>Notes: The Mine Operations Plan (MOP) may be used to address the requirements of the Rehabilitation Management Plan required under this condition. However, the MOP must clearly document how the requirements of this condition have been met. It is accepted that the Rehabilitation Management Plan initially submitted in accordance with this condition would not include the agreed rehabilitation offsets performance and completion criteria required under condition 37 of this schedule or any rehabilitation changes resulting from the Rehabilitation Strategy required under condition 61 of this schedule.</i>	<ul style="list-style-type: none"> <li>Mining Operations Plan (MOP) (WCPL_MOP_2017), June 2017</li> <li>Approval from DRG dated 4.07.17</li> </ul>	The Mining Operations Plan (MOP) 2017-2019, June 2017, has been developed to incorporate and address the requirements of the Rehabilitation Management Plan (RMP). Table 3 of the MOP clearly outlines the requirements of the RMP and where they are addressed in the MOP. The MOP was developed in June 2017 to align with the requirements of SSD-6764. The MOP was approved by the DPE, Division of Resources and Geoscience (DRG, now Resource Regulator, RR) on 04 July 2017	Compliant	
64(a)	(a) be prepared in consultation with DPI Water, OEH, Council and the CCC;	<ul style="list-style-type: none"> <li>Section 1.4, MOP</li> <li>Letters dated 1.06.17 to OEH, NOW, DPE and OEH advising of preparation of new MOP and requirement for consultation.</li> <li>- CCC meeting minutes 27.02.17</li> <li>- CCC meeting minutes 15.05.17</li> </ul>	Consultation conducted during the preparation of the MOP is summarised in Table 8 of the MOP. Consultation included: <ul style="list-style-type: none"> <li>05.06.17: WCPL met with DRG and DPE to discuss preparation of the MOP</li> <li>07.06.17: DPI-Water replied to WCPL's letter seeking feedback on the MOP. DPI-Water replied of their intentions to wait until MOP submission prior to commenting.</li> <li>01.06.17 WCPL sent a request for feedback letter to OEH. WCPL responded that OEH did not raise any issues during the preparation of the MOP</li> <li>01.06.17 WCPL sent a request for feedback letter to Council (MWRC). WCPL responded that MWRC did not raise any issues during the preparation of the MOP</li> <li>Mining operations and mine planning approvals were discussed during the quarterly CCC meetings. This included CCC Meeting held on the 27.02.17 and 15.05.17</li> </ul>	Compliant	
64(b)	(b) be prepared in accordance with any relevant NSW Government mining rehabilitation guidelines;		The MOP states that it was prepared to satisfy the requirements of <i>ESG3: Mining Operations Plan Guidelines</i> , September 2013. A detailed review against these guidelines was not undertaken.	Compliant	

APPENDIX A AUDIT CHECKLIST					
Reference	Condition	Evidence	Comments	Audit Finding	Recommendation
64(c)	(c) describe how the rehabilitation of the site be integrated with the biodiversity offset strategy;	<ul style="list-style-type: none"> <li>- Section 3.3.6, MOP</li> </ul>	Section 3.3.6 of the MOP discusses biodiversity and refers to the BMP. It states that the MOP will be updated to align with the biometric vegetation types (BVT) performance and completion criteria once they are agreed with OEH, DoEE and DPE.	Compliant	
64(d)	(d) include a conceptual life of mine rehabilitation schedule, a detailed rehabilitation schedule covering a period of up to 3 years, and an annual program for reviewing and revising the schedule;	<ul style="list-style-type: none"> <li>- Section 5.2.2, MOP</li> </ul>	<p>Section 5.2.2 of the MOP is titled the Conceptual Life of Mine Rehabilitation and includes the following:</p> <ul style="list-style-type: none"> <li>A conceptual life of mine rehabilitation schedule; as per the general arrangements provided in Section 2 of the WEP EIS. A review of the life of mine schedule is committed to be undertaken during the MOP term.</li> <li>A detailed rehabilitation schedule covering a period of up to 3 years; the MOP period covers a period of two years only, this was agreed by DRG during consultation. An indicative mining sequence and rehabilitation sequence during the MOP term is provided in Plans 3A and 3B of the MOP.</li> <li>An annual program for reviewing and revising the schedule; Review of the MOP will be undertaken by the Environment and Community Manager and Tech Services Manager as required during the MOPs 2 year term to assess the effectiveness of the procedures against the objectives of the MOP.</li> </ul> <p>Figure 11 of the MOP also outlines the Conceptual Final Rehabilitation and Regeneration for the WCM.</p>	Compliant	<p><b>2018 IEA OFI 52</b></p> <p>Whilst a range of inspections and reports are undertaken it would be good to see that implementation of these actions captured via the site GIS and in turn be linked to the GDP process and overall operation of the mine</p>
64(e)	(e) include detailed performance and completion criteria for evaluating the performance of the rehabilitation of the site and triggering remedial action (if necessary);	<ul style="list-style-type: none"> <li>Section 5.4, MOP</li> </ul>	<p>Section 5.4 of the MOP outlines the preliminary completion criteria, performance criteria, measures and indicators for each domain and rehabilitation phase.</p> <p>This condition has been found to be compliant however a number of opportunities for improvement have been made.</p>	Compliant	<p><b>2018 IEA OFI 053</b></p> <p>Monitoring program data is to be reviewed to ensure that adequate data is being collected on weed species diversity and density (groundcover), in doing so ensuring that information is available to inform weed control programs and the management of topsoil form areas which were weed infested pre mining</p> <p><b>2018 IEA OFI 010</b></p> <p>The LFA component of the monitoring program should define the completion criteria for each component rather than a combined score of 50. Benchmarks should be established for:</p> <ul style="list-style-type: none"> <li>Landscape Organisation;</li> <li>Stability;</li> <li>Infiltration ; and</li> <li>Nutrient cycling.</li> </ul>

APPENDIX A AUDIT CHECKLIST					
Reference	Condition	Evidence	Comments	Audit Finding	Recommendation
64(f)	(f) clearly identify the rehabilitation offset areas required under condition 36 of this Schedule including: areas required for the ecosystem and Regent Honeyeater species credits; areas generating different credits per hectare for Regent Honeyeater species credits; and BVT's proposed to generate the offset credits;	<ul style="list-style-type: none"> <li>Section 3.3.6 and 5.2, MOP</li> </ul>	Section 3.3.6 of the MOP discusses biodiversity and refers to the BMP. It states that the MOP will be updated to align with the biometric vegetation types (BVT) performance and completion criteria once they are agreed with OEH, DoEE and DPE.	Compliant	<b>2018 IEA OFI 054</b> Update MOP to align with the biometric vegetation types (BVT) performance and completion criteria once they are finalised to the satisfaction of DPE.
64(g)	(g) describe the measures that would be implemented to ensure compliance with the relevant conditions of this consent, and address all aspects of rehabilitation including mine closure, final landform (including final voids), biodiversity values and final land use;	<ul style="list-style-type: none"> <li>Table 3, Section 1.4.2, 3.4, 4.2 &amp; 5.0, MOP</li> </ul>	<p>Table 3 of the MOP outlines where in the MOP the requirements of the Conditions of Consent have been addressed.</p> <p>The review of MOP by the rehabilitation specialist highlighted a number of opportunities for improvement that require further attention. These were in relation to Section 3.3 Management of the PAF and Section 5.3.4 ecosystem establishment phase.</p>	Compliant	<p><b>IEA 2018 OFI 055</b></p> <p>S3.3 – Consider rewording parts of this section related to the management of the PAF to reflect that the PAF is to be located either 2m below overburden and where it is placed in the EWR then it is to be placed at 5m depth'.</p> <p><b>IEA 2018 OFI 056</b></p> <p>S 5.3.4 – Ecosystem Establishment Phase should include revegetation of the native plant community. This Section of the MOP currently focuses on the soil preparation and techniques required for pasture species. Details could include the seeding mix for each BVT, fertilisers / soil ameliorants for BVT/ woodland areas, delineation of those species which would be targeted for establishment via tubestock planting rather than direct seeding and approaches to tubestock planting and ongoing maintenance to ensure that these planting reach the next phase, and the location of patch areas for iconic plant species.</p>
64(h)	(h) describe the rehabilitation methodologies that will be implemented to achieve the rehabilitation performance measures;	<ul style="list-style-type: none"> <li>Section 3.3, 3.4, 5.2, 5.3 &amp; 5.4, MOP</li> </ul>	Rehabilitation methodologies are described in Section 3.3 and 3.4. Section 5.0 discusses rehabilitation planning including performance criteria, measures and indicators (Section 5.4).	Compliant	
64(i)	(i) describe a process for managing minor delays or changes to progressive rehabilitation forecasts;	<ul style="list-style-type: none"> <li>Section 9.2, MOP</li> </ul>	Section 9.2 of the MOP details the Trigger Action Response Plan (TARP) for rehabilitation to identify appropriate response measures in the event rehabilitation outcomes are not achieved.	Compliant	



APPENDIX A AUDIT CHECKLIST					
Reference	Condition	Evidence	Comments	Audit Finding	Recommendation
64(j)	(j) include interim rehabilitation where necessary to minimise the area exposed for dust generation;	<ul style="list-style-type: none"> <li>Section 3.4.3, MOP</li> </ul>	Section 3.4.3 of the MOP discusses air quality. Table 18 commits to progressive rehabilitation to minimise areas disturbed for dust generation.	Compliant	
64(k)	(k) include a program to monitor, independently audit and report on the effectiveness of rehabilitation methodologies and progress against the detailed performance measures, trends and completion criteria; and	<ul style="list-style-type: none"> <li>Section 8.0, MOP</li> </ul>	Section 8.0 of the MOP refers to the Biodiversity Monitoring Program which is detailed in the Biodiversity Management Plan. This section outlines monitoring for vegetation, landscape stability (LFA), Fauna, as well as a section on data management and review.	Compliant	
64(l)	(l) build to the maximum extent practicable on the other management plans required under this consent.	<ul style="list-style-type: none"> <li>Section 3.4 &amp; 3.3.6, MOP</li> </ul>	The MOP refers to the other management plans required under this consent.	Compliant	
65	Within 3 months of approval of the performance and completion criteria for rehabilitation offsets required under condition 37 of this schedule, the Applicant must revise the Rehabilitation Management Plan to include the approved performance and completion criteria, including a protocol for assessing and reporting on rehabilitation offsets against the performance criteria, as the mine is progressively rehabilitated.		At the time of writing, WCPL was awaiting approval of the performance and completion criteria for the rehabilitation offsets (refer Condition 37) and on this basis, the Rehabilitation Management Plan had not been revised.	Not triggered	
66	Within 3 months of approval of the Rehabilitation Strategy required under condition 61 of this schedule, the Applicant must revise the Rehabilitation Management Plan accordingly.		The Rehabilitation Strategy was yet to be approved at the time of writing and on this basis the Rehabilitation Management Plan had not been revised.	Not triggered	
67	The Applicant must implement the approved Rehabilitation Management Plan for the development.	Observations	It was considered that the MOP was generally being implemented. Refer to the Rehabilitation section of the main report for recommendations for improvement made by the Rehabilitation Specialist.	Compliant	
<b>SOCIAL</b>					
<b>Social Impact Management Plan</b>					
68	Within 12 months of the commencement of development under this consent, unless the Secretary agrees otherwise, the Applicant must prepare a Social Impact Management Plan to the satisfaction of the Secretary. This plan must	<ul style="list-style-type: none"> <li>Draft Social Impact Management Plan (not submitted), 10.01.2018</li> </ul>	At the time of the audit the plan was in the final stages of development and was yet to be submitted and approved by the DP&E. The Plan is required to be approved by DPE by 19 September 2018.	Not Triggered	
68(a)	(a) be prepared by suitably qualified and experienced persons whose appointment has been endorsed by the Secretary;	<ul style="list-style-type: none"> <li>Letter from DPE to WCPL titled "Social impact Management Plan", dated 03.11.2017</li> </ul>	DPE approved specialist to developed SIMP in letter dated 03 November 2017	Compliant	

APPENDIX A AUDIT CHECKLIST					
Reference	Condition	Evidence	Comments	Audit Finding	Recommendation
68(b)	(b) be prepared in consultation with Council, the CCC and the local community of Wollar;	<ul style="list-style-type: none"> <li>• Consultation record from meeting with CCC, dated 23.04.2018</li> <li>• WEP SIMP Consultation Process 18-19 January 2018</li> </ul>	<p>Consultation History for the SIMP has included the following:</p> <ul style="list-style-type: none"> <li>• Consultation program which occurred on 18 and 19 January 2018 between local community and MWRC.</li> <li>• Consultation with Local Emergency Management Committee</li> <li>• Consultation with Australia Post</li> <li>• Consultation with Wollar Progress Association</li> <li>• WCPL met with Council with specialist to consult on SIMP</li> <li>• Provided draft SIMP on 16.04.2018 to CCC meetings so they had a chance to review the SIMP prior to the meeting in a weeks' time.</li> <li>• Additional CCC meeting held in 23.04.2018 to discuss the SIMP with CCC. WCPL met with Council with specialist.</li> <li>• Sent the draft report to Council</li> <li>• CCC and Council had a chance to provide feedback</li> </ul> <p>Plan has since been revised and is was in the process of being finalised at the time of the audit.</p>	Compliant	
68(c)	(c) identify negative social impacts resulting from the project during operations and following closure in both a local and regional context;		As the SIMP was not an approved document at the time of the audit, the IEA did not conduct a detailed review of the SIMP contents.	Not Triggered	
68(d)	(d) include an adaptive management and mitigation program to minimise and/or mitigate negative social impacts during operations and following closure;		As the SIMP was not an approved document at the time of the audit, the IEA did not conduct a detailed review of the SIMP contents.	Not Triggered	
68(e)	(e) include a detailed description of the measures that would be implemented to: ~ maintain and manage land and assets owned by the Applicant in Wollar Village; ~ assist in maintaining services for the local community, including postal services, public ~ ablution facilities, and the Rural Fire Service; and minimise the adverse social impacts associated with mine closure;		As the SIMP was not an approved document at the time of the audit, the IEA did not conduct a detailed review of the SIMP contents.	Not Triggered	
68(f)	(f) include a program to monitor, review and report on the effectiveness of these measures, including updating the plan 3 years prior to mine closure.		As the SIMP was not an approved document at the time of the audit, the IEA did not conduct a detailed review of the SIMP contents.	Not Triggered	
69	The Applicant must implement the approved Social Impact Management Plan for the development.		The SIMP had not been approved at the time of the audit	Not Triggered	

APPENDIX A AUDIT CHECKLIST					
Reference	Condition	Evidence	Comments	Audit Finding	Recommendation
<b>Schedule 4 ADDITIONAL PROCEDURES</b>					
<b>NOTIFICATION OF LANDOWNERS/TENANTS</b>					
1	Within 1 month of the date of this consent, the Applicant must:				
1(a)	<p>notify in writing the owners of:</p> <ul style="list-style-type: none"> <li>~ the residences listed in Table 1 of schedule 3 that they have the right to require the Applicant to acquire their land at any stage during the development;</li> <li>~ any residence on the land listed in Table 2 of schedule 3 that they have the right to request the Applicant to ask for additional noise mitigation measures to be installed at their residence at any stage during the development; and</li> <li>~ any privately-owned land within 2 kilometres of the approved open cut mining pit/s that they are entitled to ask for an inspection to establish the baseline condition of any buildings or structures on their land, or to have a previous property inspection report updated;</li> </ul>	<ul style="list-style-type: none"> <li>• Tenant Notification Letters dated 23.05.2017</li> </ul>	<p>WCPL provided a letter to land Landowners on 23 May 2017 which informed residence of their general rights under condition 18, Schedule 3 and Condition 1, Schedule 4 of SSD6764.</p> <p>WCPL also enclosed a copy of the NSW health's <i>Mine Dust and You Factsheet</i> with the letter.</p>	Compliant	
1(b)	notify the tenants of any mine-owned land of their rights under this consent; and	<ul style="list-style-type: none"> <li>• Email from WCPL to resident outlining rights under consent, dated 03.05.2017</li> <li>• Letter from WCPL to resident titled "Landowner notification under Schedule 4 of DC SSD 6764", dated 22 May 2017</li> </ul>	<p>WCPL sent an email to landholder of Property 137 on 03 May 2017. The email outlined the rights that the landholder has under the consent and had the development consent attached.</p>	Compliant	
1(c)	send a copy of the NSW Health fact sheet entitled "Mine Dust and You" (as may be updated from time to time) to the owners and/or existing tenants of any land (including mine-owned land) where the predictions in the EIS identify that dust emissions generated by the development are likely to be greater than the relevant air quality criteria in schedule 3 at any time during the life of the development.	<ul style="list-style-type: none"> <li>• Tenant Notification Letters dated 23.05.2017</li> </ul>	<p>WCPL enclosed a copy of the NSW health's <i>Mine Dust and You Factsheet</i> with the letters which were sent to appropriate landholders on 23 May 2017.</p>	Compliant	
2	<p>Prior to entering into any tenancy agreement for any land owned by the Applicant that is predicted to experience exceedances of the recommended dust and/or noise criteria, the Applicant must:</p> <ul style="list-style-type: none"> <li>(a) advise the prospective tenants of the potential health and amenity impacts associated with living on the land, and give them a copy of the NSW Health fact sheet entitled "Mine Dust and You" (as may be updated from time to time); and</li> <li>(b) advise the prospective tenants of the rights they would have under this consent, to the satisfaction of the Secretary.</li> </ul>		<p>WCPL have not signed any new tenants since approval of SSD-6764.</p>	Not triggered	

APPENDIX A AUDIT CHECKLIST					
Reference	Condition	Evidence	Comments	Audit Finding	Recommendation
3	As soon as practicable after obtaining monitoring results showing: (a) an exceedance of any relevant criteria in schedule 3, the Applicant must notify affected landowners in writing of the exceedance, and provide regular monitoring results to each affected landowner until the development is again complying with the relevant criteria; and (b) an exceedance of the relevant air quality criteria in schedule 3, the Applicant must send a copy of the NSW Health fact sheet entitled "Mine Dust and You" (as may be updated from time to time) to the affected landowners and/or existing tenants of the land (including the tenants of any mine-owned land).		This had not occurred during the audit period.	Not triggered	
INDEPENDENT REVIEW					
4	If an owner of privately-owned land considers the development to be exceeding the relevant criteria in schedule 3, then he/she may ask the Secretary in writing for an independent review of the impacts of the development on his/her land. If the Secretary is satisfied that an independent review is warranted, then within 2 months of the Secretary's decision the Applicant must: (a) commission a suitably qualified, experienced and independent person, whose appointment has been approved by the Secretary, to: ~ consult with the landowner to determine his/her concerns; ~ conduct monitoring to determine whether the development is complying with the relevant criteria in schedule 3; and ~ if the development is not complying with these criteria, then identify the measures that could be implemented to ensure compliance with the relevant criteria; and (b) give the Secretary and landowner a copy of the independent review.  <i>Note: Where the independent review finds that the development is not complying with applicable criteria, the Department may take enforcement action under the EP&amp;A Act to ensure compliance with the consent.</i>		This had not been requested at the time of the audit	Not triggered	

APPENDIX A AUDIT CHECKLIST					
Reference	Condition	Evidence	Comments	Audit Finding	Recommendation
<b>LAND ACQUISITION</b>					
5	<p>Within 3 months of receiving a written request from a landowner with acquisition rights, the Applicant must make a binding written offer to the landowner based on:(a) the current market value of the landowner's interest in the land at the date of this written request, as if the land was unaffected by the development, having regard to the:~ existing and permissible use of the land, in accordance with the applicable planning instruments at the date of the written request; and ~ presence of improvements on the land and/or any approved building or structure which has been physically commenced at the date of the landowner's written request, and is due to be completed subsequent to that date;(b) the reasonable costs associated with:~ relocating within the Mid-Western Regional Council local government area, or to any other local government area determined by the Secretary; and~ obtaining legal advice and expert advice for determining the acquisition price of the land, and the terms upon which it is to be acquired; and(c) reasonable compensation for any disturbance caused by the land acquisition process. However, if at the end of this period, the Applicant and landowner cannot agree on the acquisition price of the land and/or the terms upon which the land is to be acquired, then either party may refer the matter to the Secretary for resolution. Upon receiving such a request, the Secretary will request the President of the NSW Division of the Australian Property Institute to appoint a qualified independent valuer to:~ consider submissions from both parties;~ determine a fair and reasonable acquisition price for the land and/or the terms upon which the land is to be acquired, having regard to the matters referred to in paragraphs (a)-(c) above;~ prepare a detailed report setting out the reasons for any determination; and~ provide a copy of the report to both parties.</p> <p>Within 14 days of receiving the independent valuer's report, the Applicant must make a binding written offer to the landowner to purchase the land at a price not less than the independent valuer's determination.</p> <p>However, if either party disputes the independent valuer's determination, then within 14 days of receiving the independent valuer's report, they may refer the matter to the Secretary for review. Any request for a review must be accompanied by a detailed report setting out the reasons why the party disputes the independent valuer's determination. Following consultation with the independent valuer and both parties, the Secretary will determine a fair and reasonable acquisition price for the land, having regard to the matters referred to in paragraphs (a)-(c) above, the independent valuer's report, the detailed report of the party that disputes the independent valuer's determination and any other relevant submissions.</p> <p>Within 14 days of this determination, the Applicant must make a binding written offer to the landowner to purchase the land at a price not less than the Secretary's determination.</p> <p>If the landowner refuses to accept the Applicant's binding written offer under this condition within 6 months of the offer being made, unless the Secretary determines otherwise, then the Applicant's obligations to acquire the land shall cease.</p>		This had not been requested at the time of the audit	Not triggered	
6	The Applicant must pay all reasonable costs associated with the land acquisition process described in condition 5 above, including the costs associated with obtaining Council approval for any plan of subdivision (where permissible), and registration of this plan at the Office of the Registrar-General.		This had not been requested at the time of the audit	Not triggered	

APPENDIX A AUDIT CHECKLIST					
Reference	Condition	Evidence	Comments	Audit Finding	Recommendation
<b>Schedule 5 ENVIRONMENTAL MANAGEMENT, REPORTING AND AUDITING</b>					
<b>ENVIRONMENTAL MANAGEMENT</b>					
<b>Environmental Management Strategy</b>					
1	<p>The Applicant must prepare an Environmental Management Strategy for the development to the satisfaction of the Secretary, and carry out the development in accordance with this strategy. The strategy must:</p> <ol style="list-style-type: none"> <li>be submitted to the Secretary for approval prior to carrying out any development under this consent;</li> <li>provide the strategic framework for environmental management of the development;</li> <li>identify the statutory approvals that apply to the development;</li> <li>describe the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the development;</li> <li>describe the procedures that would be implemented to: <ul style="list-style-type: none"> <li>~ keep the local community and relevant agencies informed about the operation and environmental performance of the development;</li> <li>~ receive, handle, respond to, and record complaints;</li> <li>~ resolve any disputes that may arise during the course of the development;</li> <li>~ respond to any non-compliance;</li> <li>~ respond to emergencies; and</li> </ul> </li> <li>include: <ul style="list-style-type: none"> <li>~ copies of any strategies, plans and programs approved under the conditions of this consent; and</li> <li>~ a clear plan depicting all the monitoring required to be carried out under the conditions of this consent.</li> </ul> </li> </ol>	<ul style="list-style-type: none"> <li>• Letter from DPE to WCPL approving EMS, dated 04.08.2017</li> </ul>	<ol style="list-style-type: none"> <li>WCPL provided the original EMS for approval to the DPE on 07 August 2014. This EMS has subsequently been updated multiple times to address development consent requirements.  WCPL updated the EMS in June 2017 to address the requirements of SSD 6764 as a result of the WEP EIS and WEP approval.  The DPE approved the EMS (Version 3, August 2017) on 4 August 2018</li> <li>The EMS document itself outlines the strategic framework for environmental management at WCPL.</li> <li>Statutory approvals are outlined in Section 3 and Appendix 1 and 2.</li> <li>Section 7 outlines the key responsibilities of personnel under the EMS.</li> <li>Section 4 summarises WCPLs implementation and monitoring processes for the EMS and identifies where the processes are also included in individual site Environmental Management Plans. Section 6 outlines the reporting requirements for the EMS including non-compliance reporting, adaptive management, annual review, PIRMP, EPL reporting and outlines access to information.</li> <li>Section 3.11 outlines the components of the EMS and lists the Environmental Management Plans and programs required by the Development Consent. Appendix 3 details the monitoring locations from each of the management plans.</li> </ol>	Compliant	
<b>Adaptive Management</b>					
2	<p>The Applicant must assess and manage development-related risks to ensure that there are no exceedances of the criteria and/or performance measures in schedule 3. Any exceedance of these criteria and/or performance measures constitutes a breach of this consent and may be subject to penalty or offence provisions under the EP&amp;A Act or EP&amp;A Regulation. Where any exceedance of these criteria and/or performance measures has occurred, the Applicant must, at the earliest opportunity:</p> <ol style="list-style-type: none"> <li>take all reasonable and feasible steps to ensure that the exceedance ceases and does not recur;</li> <li>consider all reasonable and feasible options for remediation (where relevant) and submit a report to the Department describing those options and any preferred remediation measures or other course of action; and</li> <li>implement reasonable remediation measures as directed by the Secretary.</li> </ol>		<p>Section 6.2 of the EMS outlines adaptive management measures that WCPL will have in place.</p> <p>WCPL commits to assessing and managing the development-related risks to ensure that there are no exceedances of the criteria and/or performance measures in Schedule 3 of SSD 6764.</p> <p>No exceedances of performance criteria had occurred during the audit period. As such, WCPL was not required to implement the actions specified in Section 6.2 of the EMS.</p>	Compliant	

APPENDIX A AUDIT CHECKLIST					
Reference	Condition	Evidence	Comments	Audit Finding	Recommendation
<b>Management Plan Requirements</b>					
3	<p>The Applicant must ensure that the management plans required under this consent are prepared in accordance with any relevant guidelines, and include:</p> <p>(a) detailed baseline data;</p> <p>(b) a description of:</p> <ul style="list-style-type: none"> <li>– the relevant statutory requirements (including any relevant approval, licence or lease conditions);</li> <li>– any relevant limits or performance measures/criteria;</li> <li>– the specific performance indicators that are proposed to be used to judge the performance of, or guide the implementation of, the development or any management measures;</li> </ul> <p>(c) a description of the measures that would be implemented to comply with the relevant statutory requirements, limits, or performance measures/criteria;</p> <p>(d) a program to monitor and report on the:~ impacts and environmental performance of the development;~ effectiveness of any management measures (see c above);</p> <p>(e) a contingency plan to manage any unpredicted impacts and their consequences;</p> <p>(f) a program to investigate and implement ways to improve the environmental performance of the development over time;</p> <p>(g) a protocol for managing and reporting any:~ incidents;~ complaints;~ non-compliances with statutory requirements; and~ exceedances of the criteria and/or performance criteria; and</p> <p>(h) a protocol for periodic review of the plan.</p>	<ul style="list-style-type: none"> <li>• WCPL Management Plans</li> </ul>	<p>A review of WCPL's management plans was undertaken by the auditors. The auditors found that the management plans for WCPL generally follow the same format and include these requirements. Refer to adequacy review of management plans within the main report.</p>	Compliant	
<b>Annual Review</b>					

APPENDIX A AUDIT CHECKLIST					
Reference	Condition	Evidence	Comments	Audit Finding	Recommendation
4	<p>By the end of March each year, the Applicant must submit a review of the environmental performance of the development for the previous calendar year to the satisfaction of the Secretary. This review must:</p> <p>(a) describe the development (including any rehabilitation) that was carried out in the past year, and the development that is proposed to be carried out over the next year;</p> <p>(b) include a comprehensive review of the monitoring results and complaints records of the development over the past year, which includes a comparison of these results against the:</p> <ul style="list-style-type: none"> <li>~ relevant statutory requirements, limits or performance measures/criteria;</li> <li>~ monitoring results of previous years; and</li> <li>~ relevant predictions in the EIS;</li> </ul> <p>(c) identify any non-compliance over the last year, and describe what actions were (or are being) taken to ensure compliance;</p> <p>(d) identify any trends in the monitoring data over the life of the development;</p> <p>(e) identify any discrepancies between the predicted and actual impacts of the development, and analyse the potential cause of any significant discrepancies; and</p> <p>(f) describe what measures will be implemented over the next year to improve the environmental performance of the development.</p> <p><i>Note: The "Post Approval Requirements for State Significant Developments - Annual Review Guideline 2015, NSW Government, October 2015" (or its latest version) provides a reporting framework to integrate the reporting requirements of the Annual Review required by the Department under the development consent and the Annual Environment Management Report (AEMR) required under the Mining Lease.</i></p>	<ul style="list-style-type: none"> <li>• 2017 Annual Review</li> <li>• Letter to DPE from WCPL titled "Annual Review 2017" and dated 31.03.2018.</li> <li>• Letter from DPE to WCPL titled "WEP, Annual Review 2017" dated 31.05.2018</li> <li>• Letter from WCPL to DPE titled "Annual review 2017 – resubmitted" dated 18.06.2018</li> <li>• Letter from DPE to WCPL titled "WEP, Annual Review 2017 – resubmitted" dated 25.06.2018</li> </ul>	<p>WCPL submitted the 2017 Annual Review to DPE on 30 March 2018. Following review of the Annual Review by DPE, WCPL were notified on 31 May 2018 that the Annual Review would require resubmission. WCPL resubmitted the Annual Review to DPE on 18 June 2018 and on 25 June 2018 the DPE approved the resubmitted Annual Review stating that it considers the Annual Review satisfies the requirements of the approval and consent.</p> <p>The 2017 Annual Review was reviewed and noted to contain the information required including:</p> <ul style="list-style-type: none"> <li>• An operations summary in Section 4 outlining the activities carried out in the reporting period.</li> <li>• A review of environmental performance in Section 6 including a comparison of monitoring results against approval criteria, EIS predictions, identification of trends and management implications and proposed actions to improve environmental performance in the next reporting year.</li> <li>• Incidents and non-compliances are summarised in Section 11.2 and Table 3.</li> <li>• Section 12 outlines activities for the next reporting period.</li> </ul>	Compliant	
<b>Revision of Strategies, Plans and Programs</b>					
5	<p>Within 3 months of:</p> <p>(a) the submission of an annual review under condition 4 above;</p> <p>(b) the submission of an incident report under condition 8 below;</p> <p>(c) the submission of an audit under condition 10 below; and</p> <p>(d) the approval of any modification to the conditions of this consent; or</p> <p>(e) a direction of the Secretary under condition 4 of schedule 2;</p> <p>the Applicant must review, and if necessary revise, the strategies, plans, and programs required under this consent to the satisfaction of the Secretary. Where this review leads to revisions in any such document, then within 4 weeks of the review the revised document must be submitted to the Secretary for approval, unless otherwise agreed with the Secretary.</p> <p><i>Note: This is to ensure the strategies, plans and programs are updated on a regular basis, and incorporate any recommended measures to improve the environmental performance of the development.</i></p>	<ul style="list-style-type: none"> <li>• Letter from DPE dated 13.08.2018 "Revised management plan revision"</li> </ul>	<p>The only event which has triggered a review of the strategies, plans and programs required under this consent was the 2017 Annual Review 2017.</p> <p>The annual review triggered an update of the surface water management plan and the air quality management plans. Both of these revised management plans were submitted to DPE on 29 June 2018. DPE replied to WCPL on 13.08.2018 and noted that they will be conducting their review of the plans over the "next couple of weeks".</p> <p>At the time of the audit WCPL had not received approval from the DPE for the revised management plans.</p>	Compliant	<p><b>2018 IEA OFI 057</b></p> <p>To assist with verifying future compliance it is recommended that WCPL implement a means of tracking when a review is conducted but a revision is not required.</p>



APPENDIX A AUDIT CHECKLIST					
Reference	Condition	Evidence	Comments	Audit Finding	Recommendation
<b>Updating and Staging Strategies, Plans or Programs</b>					
6	<p>To ensure the strategies, plans and programs are updated on a regular basis, and incorporate any recommended measures to improve the environmental performance of the development, the Applicant may submit revised strategies, plans or programs required under this consent at any time. With the agreement of the Secretary, the Applicant may also submit any strategy, plan or program required by this consent on a staged basis.</p> <p>The Secretary may approve a revised strategy, plan or program required under this consent, or the staged submission of any of these documents, at any time. With the agreement of the Secretary, the Applicant may prepare the revised or staged strategy, plan or program without undertaking consultation with all parties nominated under the applicable condition in this consent.</p> <p><i>Notes:</i></p> <p>~ While any strategy, plan or program may be submitted on a progressive basis, the Applicant will need to ensure that the existing operations on site are covered by suitable strategies, plans or programs at all times.</p> <p>~ If the submission of any strategy, plan or program is to be staged, then the relevant strategy, plan or program must clearly describe the specific stage to which the strategy, plan or program applies, the relationship of this stage to any future stages, and the trigger for updating the strategy, plan or program.</p> <p>~ For the avoidance of doubt, existing approved management plans, strategies or monitoring programs for the Wilpinjong Coal Project will continue to apply until the approval of a similar plan, strategy or program under this consent (see condition 9 of schedule 2).</p>	<ul style="list-style-type: none"> <li>Letter from WCPL to DPE titled "WEP (Development Consent SSD-6764) – Staged Submission of Cumbo Creek Relocation Plan" dated 08.06.17.</li> <li>Letter from DPE to WCPL titled "WEP SSD-6764, Approval of Environmental Management Plans" dated 04.08.17</li> <li>Letter to DPE from WCPL titled "WEP – Staged Submission of Historic Heritage Management Plan" dated 08.06.2017</li> <li>Letter from DPE to WCPL titled "WCM Approval – Historic Heritage Management Plan" Dated 12.07.2018</li> </ul>	<p>WCPL requested approval from DPE on two separate occasions for staged submissions of management plans. This included the Water Management Plan and the Historic Heritage Management Plan.</p> <p>Approval history for each of these plans has been outlined in the corresponding conditions in Schedule 3, see below. The auditors are satisfied that staged submission of management plans has been done in accordance with Condition 6, schedule 5 of SSD 6764.</p> <ul style="list-style-type: none"> <li>Water Management Plan – refer Condition 30(d)(i), Schedule 3</li> <li>Historic Heritage Management Plan – refer Condition 49, Schedule 3</li> </ul>	Compliant	
<b>Community Consultative Committee</b>					
7E	<p>The Applicant must operate a Community Consultative Committee (CCC) for the development to the satisfaction of the Secretary. This CCC must be operated in accordance with the Guidelines for Establishing and Operating Community Consultative Committees for Mining Projects (Department of Planning, 2007, or its latest version).</p> <p><i>Notes:</i></p> <p>The CCC is an advisory committee. The Department and other relevant agencies are responsible for ensuring that the Applicant complies with this consent.</p> <p>In accordance with the guideline, the Committee should be comprised of an independent chair and appropriate representation from the Applicant, Council, recognised environmental groups and the local community.</p>	<ul style="list-style-type: none"> <li>Wilpinjong Public Website</li> <li>WCPL CCC Minutes (June 2018 – March 2010 available)</li> </ul>	<p>The WCPL CCC is run in accordance with NSW Planning and Infrastructure Guidelines for Establishing and Operating Community Consultative Committees for Mining Projects and includes the following:</p> <ul style="list-style-type: none"> <li>An independent chairperson who was approved by the DP&amp;E</li> <li>Council (MWRC) and National Parks and Wildlife Services (NPWS) representation</li> <li>WCPL representation</li> <li>Adequate community representation</li> <li>Determined by the committee to occur quarterly</li> <li>A CCC meeting agenda which has been developed to match the Department guideline.</li> <li>Minutes of the meetings are taken and made available on the WCPL website.</li> <li>WCPL provide the CCC with reports on mine progress and performance.</li> </ul>	Compliant	
<b>REPORTING</b>					

APPENDIX A AUDIT CHECKLIST					
Reference	Condition	Evidence	Comments	Audit Finding	Recommendation
<b>Incident Reporting</b>					
8	Within 7 days of the date of the incident, the Applicant must provide the Secretary and any relevant agencies with a detailed report on the incident, and such further reports as may be requested.	WCPL Incident Register	No incidents occurred during the audit period which triggered the requirement for WCPL to report to DPE.	Not Triggered	
<b>Regular Reporting</b>					
9	The Applicant must provide regular reporting on the environmental performance of the development on its website, in accordance with the reporting arrangements in any plans or programs approved under the conditions of this consent.	<a href="#">Peabody Energy Website</a>	<p>To meet this requirement and to comply with EPL requirements, WCPL upload an environmental monitoring results summary each month onto its public website.</p> <p>In addition the following is also available on the <a href="#">Peabody Energy Website</a>.</p> <ul style="list-style-type: none"> <li>• Pollution reduction program results</li> <li>• Project and community updates are also provided to the CCC as part of the CCC meetings.</li> <li>• Annual Review</li> <li>• EPL reporting</li> <li>• CCC Meeting minutes</li> <li>• Incident reporting</li> <li>• Complaints summary</li> </ul>	Compliant	
<b>INDEPENDENT ENVIRONMENTAL AUDIT</b>					
10	<p>Within a year of commencing development under this consent, and every 3 years thereafter, unless the Secretary directs otherwise, the Applicant must commission and pay the full cost of an Independent Environmental Audit of the development. This audit must:</p> <p><i>Note: The "Post Approval Requirements for State Significant Developments - Independent Audit Guideline, NSW Government, October 2015" (or its latest version) provides an audit and reporting framework for the independent audit that will guide compliance with this condition.</i></p> <ol style="list-style-type: none"> <li>be conducted by a suitably qualified lead auditor and suitably qualified, experienced and independent team of experts in any field specified by the Secretary, whose appointment has been endorsed by the Secretary;</li> <li>include consultation with the relevant agencies;</li> <li>assess the environmental performance of the development and assess whether it is complying with the requirements in this consent and any relevant EPL or Mining Lease (including any assessment, plan or program required under these approvals);</li> <li>review the adequacy of strategies, plans or programs required under the abovementioned approvals;</li> <li>recommend appropriate measures or actions to improve the environmental performance of the development, and/or any strategy, plan or program required under the abovementioned approvals; and</li> <li>be conducted and reported to the satisfaction of the Secretary.</li> </ol>	<ul style="list-style-type: none"> <li>• DP&amp;E Letter dated 12.06.2018 approving AECOM to conduct the IEA.</li> </ul>	<p>WCPL commissioned AECOM to conduct the 2018 IEA of SSD 6764 in accordance with Condition 10, Schedule 5. This is the first IEA of the WEP and the audit process commenced on 27 July 2018.</p> <ol style="list-style-type: none"> <li>Refer Appendix B of the IEA report.</li> <li>Refer Section 4.0 of the IEA report.</li> <li>In addition to this checklist refer Section 6.0 &amp; Section 8.5.4 of the IEA report.</li> <li>Refer Section 7.0 of the IEA report.</li> <li>Refer Section 8.5.4 of the IEA report.</li> <li>To be determined following delivery by WCPL.</li> </ol>	Compliant	

APPENDIX A AUDIT CHECKLIST					
Reference	Condition	Evidence	Comments	Audit Finding	Recommendation
11	Within 3 months of commissioning this audit, or as otherwise agreed by the Secretary, the Applicant must submit a copy of the audit report to the Secretary, together with its response to any recommendations contained in the audit report, and a timetable for the implementation of these recommendations as required. The Applicant must implement these recommendations, to the satisfaction of the Secretary.		The IEA commencement meeting was held on the 27 July 2018 with the site inspection taking place on the 22-24 August 2018. WCPL are responsible for the delivery of this IEA report before 27 October 2018.	Not Triggered	
ACCESS TO INFORMATION					
12	From the commencement of development under this consent, the Applicant shall: (a) Make copies of the following information publicly available on its website: ~ the EIS; ~ current statutory approvals for the development; ~ approved strategies, plans or programs required under the conditions of this consent; ~ a comprehensive summary of the monitoring results of the development, reported in accordance with the specifications in any conditions of this consent, or any approved plans and programs; ~ a complaints register, which is to be updated monthly; ~ minutes of CCC meetings; ~ the last five annual reviews; ~ any independent environmental audit, and the Applicant's response to the recommendations in any audit; ~ any other matter required by the Secretary; and (b) keep this information up to date.	<ul style="list-style-type: none"> <li>• <a href="#">Peabody Energy Website</a></li> </ul>	<p>A review of the <a href="#">Peabody Energy Website</a> was conducted on 22 August 2018. The following was available on the website:</p> <ul style="list-style-type: none"> <li>• The WCM EIS and WEP EIS</li> <li>• Project Approval, Mining Lease and EP</li> <li>• Summary of monitoring results</li> <li>• 2011 and 2015 Independent Environmental Audits</li> <li>• Management Plans (both approved plans and those no longer required by SSD 6764, but are still implemented internally)</li> <li>• Annual Reviews dating back to 2012 (referred to as AEMRs)</li> <li>• Complaints register dating back to 2014</li> <li>• CCC minutes and presentations</li> <li>• Monthly monitoring results summary's dating back to 2013</li> <li>• Scheduled Blast Information</li> </ul> <p>Information was current and up to date at the time of the audit site inspection.</p> <p>As of September 2018 the HHMP on the website had not been updated to the most recent version.</p>	Compliant	<p><b>IEA 2018 OFI 058</b></p> <p>Upload the current version of the HHMP to the Peabody Energy Public Website.</p>

Appendix A2 Audit Checklist Environmental Protection Licence 12425

APPENDIX A AUDIT CHECKLIST												
Reference	Condition	Evidence	Comments	Audit Finding	Recommendation							
<b>1 Administrative conditions</b>												
<b>A1 What licence authorises and regulates</b>												
A1.1	<p>This licence authorises the carrying out of the scheduled activities listed below at the premises specified in A2. The activities are listed according to their scheduled activity classification, fee-based activity classification and the scale of the operation. Unless otherwise further restricted by a condition of this licence, the scale at which the activity is carried out must not exceed the maximum scale specified in this condition.</p> <table border="1"> <thead> <tr> <th>Fee Based Activity</th> <th>Scale</th> </tr> </thead> <tbody> <tr> <td>Mining for coal</td> <td>&gt; 5000000 - T produced</td> </tr> <tr> <td>Coal works</td> <td>&gt; 5000000 - T loaded</td> </tr> </tbody> </table>	Fee Based Activity	Scale	Mining for coal	> 5000000 - T produced	Coal works	> 5000000 - T loaded	<ul style="list-style-type: none"> <li>WCPL Coal Plan Spreadsheet (Managed by CHPP)</li> </ul>	<p>Tracking of ROM Coal quantities was managed by the Tech Services Department. The auditors reviewed the ROM Coal tracking spreadsheet which monitors ROM coal extracted. As of July 2018, 8.4 million tonnes of ROM coal had been extracted in 2018. Predicted tracking for the remainder of 2018 anticipates approximately 15 million tonnes of ROM coal to be extracted.</p> <p>ROM coal extracted in the 2017 Calendar year was recorded at 13.68 million tonnes. This was also reported in Section 4.0 of the 2017 Annual Review.</p>	Compliant		
Fee Based Activity	Scale											
Mining for coal	> 5000000 - T produced											
Coal works	> 5000000 - T loaded											
<b>A2 Premises to which this licence applies</b>												
<b>A2.1 The licence applies to the following premises:</b>												
A2.1	<table border="1"> <thead> <tr> <th>Premises Details</th> </tr> </thead> <tbody> <tr> <td>WILPINJONG COAL MINE</td> </tr> <tr> <td>1434 ULAN-WOLLAR ROAD</td> </tr> <tr> <td>WILPINJONG</td> </tr> <tr> <td>NSW 2850</td> </tr> <tr> <td> </td> </tr> <tr> <td>THE LAND DESCRIBED IN APPENDIX 1 – SCHEDULE OF LAND AND APPENDIX 2 - DEVELOPMENT LAYOUT PLAN IN THE DEVELOPMENT CONSENT SSD-6764 DATED 24 APRIL 2017</td> </tr> </tbody> </table>	Premises Details	WILPINJONG COAL MINE	1434 ULAN-WOLLAR ROAD	WILPINJONG	NSW 2850		THE LAND DESCRIBED IN APPENDIX 1 – SCHEDULE OF LAND AND APPENDIX 2 - DEVELOPMENT LAYOUT PLAN IN THE DEVELOPMENT CONSENT SSD-6764 DATED 24 APRIL 2017		This is noted.	noted	
Premises Details												
WILPINJONG COAL MINE												
1434 ULAN-WOLLAR ROAD												
WILPINJONG												
NSW 2850												
THE LAND DESCRIBED IN APPENDIX 1 – SCHEDULE OF LAND AND APPENDIX 2 - DEVELOPMENT LAYOUT PLAN IN THE DEVELOPMENT CONSENT SSD-6764 DATED 24 APRIL 2017												
<b>A3 Other Activities</b>												
A3.1	<p>This licence applies to all other activities carried on at the premises, including:</p> <ul style="list-style-type: none"> <li>- Crushing, grinding or separating</li> <li>- Extractive activities</li> </ul>	<ul style="list-style-type: none"> <li>Interviews</li> <li>Observations</li> </ul>	<p>WCPL reported that no works and activities outside those specified in the EPL application have been undertaken during the audit period. No works and activities outside those specified in EPL 12425 were observed during the site inspection.</p>	Compliant								
<b>A4 Information supplied to the EPA</b>												
A4.1	<p>Works and activities must be carried out in accordance with the proposal contained in the licence application, except as expressly provided by a condition of this licence. In this condition the reference to "the licence application" includes a reference to:</p> <ul style="list-style-type: none"> <li>(a) the applications for any licences (including former pollution control approvals) which this licence replaces under the Protection of the Environment Operations (Savings and Transitional) Regulation 1998; and</li> <li>(b) the licence information form provided by the licensee to the EPA to assist the EPA in connection with the issuing of this licence.</li> </ul>	<ul style="list-style-type: none"> <li>Interviews</li> <li>Observations</li> </ul>	<p>WCPL reported that no works and activities outside those specified in the EPL application have been undertaken during the audit period. No works and activities outside those specified in EPL 12425 were observed during the site inspection.</p>	Compliant								
<b>2 Discharges to air and water and applications to land</b>												
<b>P1 Location of monitoring/discharge points and areas</b>												
P1.1	<p>The following points referred to in the table below are identified in this licence for the purposes of monitoring and/or the setting of limits for the emission of pollutants to the air from the point.</p>	<ul style="list-style-type: none"> <li>The listed monitoring points are</li> </ul>	<p>A review of the monitoring data for the audit period indicated that monitoring was being undertaken at the monitoring points specified in the EPL.</p>	Compliant								

APPENDIX A AUDIT CHECKLIST																																															
Reference	Condition			Evidence	Comments	Audit Finding	Recommendation																																								
	<table border="1"> <thead> <tr> <th colspan="4">Air</th> </tr> <tr> <th>EPA identification no.</th> <th>Type of Monitoring Point</th> <th>Type of Discharge Point</th> <th>Location Description</th> </tr> </thead> <tbody> <tr> <td>3</td> <td>Dust Monitoring</td> <td></td> <td>DG4: Mine owned location - old Robinson's property approximately 2.5 km south east of CHPP, as indicated on Figure 2 licence variation application additional information received by the EPA 26.11.12</td> </tr> <tr> <td>4</td> <td>Dust Monitoring</td> <td></td> <td>DG5: Wollar - adjacent to St Laurence O'Toole Catholic Church, as indicated on Figure 2 licence variation application additional information received by the EPA on 26.11.12</td> </tr> <tr> <td>6</td> <td>Dust Monitoring</td> <td></td> <td>DG8: Mine owned location - Mittaville Nth property boundary with Ulan Coal mine owned land as indicated on Figure 2 licence variation application additional information received by the EPA 26.11.12</td> </tr> <tr> <td>9</td> <td>Dust Monitoring</td> <td></td> <td>DG11: Mine owned location - adjacent to Wilpinjong Creek north east of mine project area, as indicated on Figure 2 licence variation application additional information received by the EPA 26.11.12</td> </tr> <tr> <td>10</td> <td>Dust Monitoring</td> <td></td> <td>DG12: Mine owned location - Aboriginal rock art site 72, as indicated on Figure 2 licence variation application additional information received by the EPA 26.11.12</td> </tr> <tr> <td>11</td> <td>Dust Monitoring</td> <td></td> <td>DG13: Mine owned location - Aboriginal rock art site 153, as indicated on Figure 2 licence variation application additional information received by the EPA 26.11.12</td> </tr> <tr> <td>12</td> <td>Dust Monitoring</td> <td></td> <td>DG14: Mine owned location - Aboriginal rock art site 152, as indicated on Figure 2 licence variation application additional information received by the EPA 26.11.12</td> </tr> <tr> <td>13</td> <td>Dust Monitoring</td> <td></td> <td>PM10 - HV1: Wollar - adjacent to St Laurence O'Toole Catholic Church as indicated in Figure 2 licence variation application additional information received by the EPA 26.11.12</td> </tr> </tbody> </table>			Air				EPA identification no.	Type of Monitoring Point	Type of Discharge Point	Location Description	3	Dust Monitoring		DG4: Mine owned location - old Robinson's property approximately 2.5 km south east of CHPP, as indicated on Figure 2 licence variation application additional information received by the EPA 26.11.12	4	Dust Monitoring		DG5: Wollar - adjacent to St Laurence O'Toole Catholic Church, as indicated on Figure 2 licence variation application additional information received by the EPA on 26.11.12	6	Dust Monitoring		DG8: Mine owned location - Mittaville Nth property boundary with Ulan Coal mine owned land as indicated on Figure 2 licence variation application additional information received by the EPA 26.11.12	9	Dust Monitoring		DG11: Mine owned location - adjacent to Wilpinjong Creek north east of mine project area, as indicated on Figure 2 licence variation application additional information received by the EPA 26.11.12	10	Dust Monitoring		DG12: Mine owned location - Aboriginal rock art site 72, as indicated on Figure 2 licence variation application additional information received by the EPA 26.11.12	11	Dust Monitoring		DG13: Mine owned location - Aboriginal rock art site 153, as indicated on Figure 2 licence variation application additional information received by the EPA 26.11.12	12	Dust Monitoring		DG14: Mine owned location - Aboriginal rock art site 152, as indicated on Figure 2 licence variation application additional information received by the EPA 26.11.12	13	Dust Monitoring		PM10 - HV1: Wollar - adjacent to St Laurence O'Toole Catholic Church as indicated in Figure 2 licence variation application additional information received by the EPA 26.11.12	<p>listed in the monitoring sections of the management plans</p> <ul style="list-style-type: none"> <li>Site Inspection</li> </ul>	<p>The following was inspected during the audit site inspection:</p> <ul style="list-style-type: none"> <li>A sample of real time dust gauges and attended air quality monitoring locations were sighted by the air quality specialist;</li> <li>Water discharge points were sighted by the surface water specialist;</li> <li>Groundwater monitoring bores were sighted by the groundwater specialist; and</li> <li>A sample of attended noise locations, real time noise monitors and vibration monitors were sighted by the noise specialist.</li> <li>The meteorological weather station was sighted by the auditors.</li> </ul>		
Air																																															
EPA identification no.	Type of Monitoring Point	Type of Discharge Point	Location Description																																												
3	Dust Monitoring		DG4: Mine owned location - old Robinson's property approximately 2.5 km south east of CHPP, as indicated on Figure 2 licence variation application additional information received by the EPA 26.11.12																																												
4	Dust Monitoring		DG5: Wollar - adjacent to St Laurence O'Toole Catholic Church, as indicated on Figure 2 licence variation application additional information received by the EPA on 26.11.12																																												
6	Dust Monitoring		DG8: Mine owned location - Mittaville Nth property boundary with Ulan Coal mine owned land as indicated on Figure 2 licence variation application additional information received by the EPA 26.11.12																																												
9	Dust Monitoring		DG11: Mine owned location - adjacent to Wilpinjong Creek north east of mine project area, as indicated on Figure 2 licence variation application additional information received by the EPA 26.11.12																																												
10	Dust Monitoring		DG12: Mine owned location - Aboriginal rock art site 72, as indicated on Figure 2 licence variation application additional information received by the EPA 26.11.12																																												
11	Dust Monitoring		DG13: Mine owned location - Aboriginal rock art site 153, as indicated on Figure 2 licence variation application additional information received by the EPA 26.11.12																																												
12	Dust Monitoring		DG14: Mine owned location - Aboriginal rock art site 152, as indicated on Figure 2 licence variation application additional information received by the EPA 26.11.12																																												
13	Dust Monitoring		PM10 - HV1: Wollar - adjacent to St Laurence O'Toole Catholic Church as indicated in Figure 2 licence variation application additional information received by the EPA 26.11.12																																												

APPENDIX A AUDIT CHECKLIST														
Reference	Condition		Evidence	Comments	Audit Finding	Recommendation								
	20	Dust Monitoring	PM10 - HV4: Mine owned location - old Robinsons property approximately 2.5km south east of CHPP, as indicated on Figure 2 licence variation application additional information received by the EPA 26.11.12											
	21	Meteorological weather monitoring	Meteorological weather station(s) indicated on Figure 2 licence variation application additional information received by the EPA 26.11.12											
	25	Dust monitoring	TEOM 3: Wollar - adjacent to St Laurence O'Toole Catholic Church, as indicated on Figure 2 licence variation application additional information received by the EPA 26.11.12											
	26	Dust monitoring	DG15: Mine owned location - adjacent to property number 1-30 (mine owned property) on Araluen Rd as indicated on Figure 2 licence variation application additional information received by the EPA 26.11.12											
	27	Dust monitoring	PM10 - HV5: Araluen Rd - mine owned location adjacent to property number 1-30 (mine owned property) on Araluen Rd as indicated in Figure 2 licence variation application additional information received by the EPA 26.11.12											
	28	Dust monitoring	TEOM 4: Araluen Rd - Mine owned location - adjacent to property number 1-30 (mine owned property) on Araluen Rd as indicated on Figure 2 of the licence variation application additional information received by the EPA 26.11.12											
P1.2	The following utilisation areas referred to in the table below are identified in this licence for the purposes of the monitoring and/or the setting of limits for any application of solids or liquids to the utilisation area.			None specified	Noted									
P1.3	<p>The following points referred to in the table are identified in this licence for the purposes of the monitoring and/or the setting of limits for discharges of pollutants to water from the point.</p> <p style="text-align: center;"><i>Water and land</i></p> <table border="1"> <thead> <tr> <th>EPA Identification no.</th> <th>Type of Monitoring Point</th> <th>Type of Discharge Point</th> <th>Location Description</th> </tr> </thead> <tbody> <tr> <td>24</td> <td>Discharge to waters. Discharge water quality monitoring.</td> <td>Discharge to waters. Discharge water quality monitoring.</td> <td>Surface water discharge downstream of the outlet from the reverse osmosis plant located on Lot 234 DP723412.</td> </tr> </tbody> </table>		EPA Identification no.	Type of Monitoring Point	Type of Discharge Point	Location Description	24	Discharge to waters. Discharge water quality monitoring.	Discharge to waters. Discharge water quality monitoring.	Surface water discharge downstream of the outlet from the reverse osmosis plant located on Lot 234 DP723412.	<ul style="list-style-type: none"> <li>Visual Inspection</li> </ul>	The discharge point referred to as EPA identification point 24 was observed by the surface water specialist during the inspection of the Water Treatment Facility.	Compliant	
EPA Identification no.	Type of Monitoring Point	Type of Discharge Point	Location Description											
24	Discharge to waters. Discharge water quality monitoring.	Discharge to waters. Discharge water quality monitoring.	Surface water discharge downstream of the outlet from the reverse osmosis plant located on Lot 234 DP723412.											
<b>3 Limit conditions</b>														
<b>L1 Pollution of waters</b>														
L1.1	Except as may be expressly provided in any other condition of this licence, the licensee must comply with section 120 of the Protection of the Environment Operations Act 1997.			Refer to Condition 25, Schedule 3 of development consent.	Compliant									
<b>L2 Concentration limits</b>														
L2.1	For each monitoring/discharge point or utilisation area specified in the table below (by a point number), the concentration of a pollutant discharged at that point, or applied to that area, must not exceed the concentration limits specified for that pollutant in the table.			Refer Condition L2.4.	Refer Condition L2.4.									
L2.2	Where a pH quality limit is specified in the table, the specified percentage of samples must be within the specified ranges.			Noted	Noted									
L2.3	<p>To avoid any doubt, this condition does not authorise the pollution of waters by any pollutant other than those specified in the table/s.</p> <p>Note: Deposited matter is assessed as insoluble solids as defined by AS 3580.10.1-2003 (AM-19)</p>		<ul style="list-style-type: none"> <li>PEA ERM WRAC Environmental Risk Register WCPL (08.08.2018)</li> </ul>	<p>While evidence suggests that WCPL have in place measures to prevent pollution of waters by any other pollutant the auditors were unable to completely rule out pollution by any other substance. However there was no evidence to suggest that pollution of waters had occurred and on this basis, this condition has been assessed as compliant.</p> <p>A review of the incident register did not indicate any incidents relating to the pollution of waters.</p>	Compliant									

APPENDIX A AUDIT CHECKLIST																																			
Reference	Condition	Evidence	Comments	Audit Finding	Recommendation																														
L2.4	<p>Water and/or Land Concentration Limits</p> <p>POINT 24</p> <table border="1"> <thead> <tr> <th>Pollutant</th> <th>Units of Measure</th> <th>50 percentile concentration limit</th> <th>90 percentile concentration limit</th> <th>3DGM concentration limit</th> <th>100 percentile concentration limit</th> </tr> </thead> <tbody> <tr> <td>Conductivity</td> <td>microsiemens per centimetre</td> <td></td> <td></td> <td></td> <td>500</td> </tr> <tr> <td>Oil and Grease</td> <td>milligrams per litre</td> <td></td> <td></td> <td></td> <td>10</td> </tr> <tr> <td>pH</td> <td>pH</td> <td></td> <td></td> <td></td> <td>6.5-8.5</td> </tr> <tr> <td>Total suspended solids</td> <td>milligrams per litre</td> <td></td> <td></td> <td></td> <td>50</td> </tr> </tbody> </table> <p>Note: All water discharged from the premises must have a flow regime which is variable and consistent with the ephemeral nature of the flows in Wilpinjong and Cumbo Creeks.</p>	Pollutant	Units of Measure	50 percentile concentration limit	90 percentile concentration limit	3DGM concentration limit	100 percentile concentration limit	Conductivity	microsiemens per centimetre				500	Oil and Grease	milligrams per litre				10	pH	pH				6.5-8.5	Total suspended solids	milligrams per litre				50	<ul style="list-style-type: none"> <li>Annual Review 2017</li> <li>Water quality results Jan-Jul 2018</li> <li>Annual Return 2017/18</li> <li>Environmental Monitoring Results, January, June and August 2018</li> <li>Water discharged from site spreadsheet 01.06.16 – 16.09.18</li> </ul>	<p>The auditors conducted a review of water monitoring records for Point 24 across the audit period. Concentrations of all pollutants were below the pollution concentration limits. One record for oil and grease from 18 June 2018 recorded a concentration of &lt;20mg/L. It was reported that in this instance a detection limit of 20mg/L was the best the laboratory could report. For this sample, compliance with the &lt;10 mg/L limit was not able to be verified however given all other samples recorded oil and grease concentrations of &lt;5 mg/L it is considered likely that the sample taken on the 18 June 2018 was below the concentration limits and on this basis this condition has been assessed as compliant.</p> <p><u>Note</u></p> <p>The volume of water discharged from the RO Plant is monitored in real time and reported on a daily basis to WCPL. Environmental Monitoring Results and spreadsheet showing the volume of water discharged from site each day shows that the volume discharged from Point 24 is variable.</p> <p>It was not clear in the WMP or SWMP if the flow regime from Point 24 is managed to be variable and consistent with the ephemeral nature of the flows in Wilpinjong and Cumbo Creeks.</p>	Compliant	<p><b>IEA 2018 OFI 031</b> Include discussion within the SWMP of how the discharge regime from Point 24 will be managed to ensure it is variable and consistent with the ephemeral nature of the flows in Wilpinjong and Cumbo Creeks .</p>
Pollutant	Units of Measure	50 percentile concentration limit	90 percentile concentration limit	3DGM concentration limit	100 percentile concentration limit																														
Conductivity	microsiemens per centimetre				500																														
Oil and Grease	milligrams per litre				10																														
pH	pH				6.5-8.5																														
Total suspended solids	milligrams per litre				50																														
<b>L3 Volume and mass limits</b>																																			
L3.1	<p>For each discharge point or utilisation area specified below (by a point number), the volume/mass of:</p> <p>(a) liquids discharged to water; or; (b) solids or liquids applied to the area; must not exceed the volume/mass limit specified for that discharge point or area.</p> <table border="1"> <thead> <tr> <th>Point</th> <th>Unit of Measure</th> <th>Volume/Mass Limit</th> </tr> </thead> <tbody> <tr> <td>24</td> <td>megalitres per day</td> <td>15</td> </tr> </tbody> </table>	Point	Unit of Measure	Volume/Mass Limit	24	megalitres per day	15	<ul style="list-style-type: none"> <li>Annual Review 2017</li> <li>Water discharge data</li> </ul>	<p>EPL currently allows for up to 15ML/day and this expires December 2019 prior to reverting to 5ML/day. Data reviewed verified that WCPL had not exceeded the volume allowance of water discharged.</p>	Compliant																									
Point	Unit of Measure	Volume/Mass Limit																																	
24	megalitres per day	15																																	
<b>L4 Waste</b>																																			
L4.1	<p>The licensee must not cause, permit or allow any waste to be received at the premises, except the wastes expressly referred to in the column titled "Waste" and meeting the definition, if any, in the column titled "Description" in the table below. Any waste received at the premises must only be used for the activities referred to in relation to that waste in the column titled "Activity" in the table below. Any waste received at the premises is subject to those limits or conditions, if any, referred to in relation to that waste contained in the column titled "Other Limits" in the table below. This condition does not limit any other conditions in this licence.</p> <table border="1"> <thead> <tr> <th>Code</th> <th>Waste</th> <th>Description</th> <th>Activity</th> <th>Other Limits</th> </tr> </thead> <tbody> <tr> <td>NA</td> <td>General solid waste (non-putrescible)</td> <td>The general solid waste disposed of on the premises must only be sourced from licensee owned properties in the district</td> <td>Waste disposal (application to land)</td> <td>Waste must be classified and disposed of in accordance with the statement of commitments summarised in Appendix 8 of Project Approval 05-0021 (Mod 5)</td> </tr> <tr> <td>NA</td> <td>Waste</td> <td>Any waste received on site that is below licensing thresholds in Schedule 1 of the POEO Act, as in force from time to time</td> <td>-</td> <td>NA</td> </tr> <tr> <td>T140</td> <td>Tyres</td> <td>As defined in Schedule 1 of the POEO Act, as in force from time to time</td> <td>Waste disposal (application to land)</td> <td>The total volume of tyres disposed of at the premises must not exceed 350 tonnes per annum</td> </tr> </tbody> </table>	Code	Waste	Description	Activity	Other Limits	NA	General solid waste (non-putrescible)	The general solid waste disposed of on the premises must only be sourced from licensee owned properties in the district	Waste disposal (application to land)	Waste must be classified and disposed of in accordance with the statement of commitments summarised in Appendix 8 of Project Approval 05-0021 (Mod 5)	NA	Waste	Any waste received on site that is below licensing thresholds in Schedule 1 of the POEO Act, as in force from time to time	-	NA	T140	Tyres	As defined in Schedule 1 of the POEO Act, as in force from time to time	Waste disposal (application to land)	The total volume of tyres disposed of at the premises must not exceed 350 tonnes per annum	<ul style="list-style-type: none"> <li>Tyre burial register (August 2018)</li> <li>Annual Review 2017</li> <li>Site Inspection</li> <li>WCPL Waste Management Plan</li> </ul>	<p>Waste is managed in accordance with the sites Waste Management Plan. The waste management plan was originally developed to meet the requirements of former Project Approval (PA05-0021). The plan identifies waste streams, waste monitoring and tracking procedures and details management measures to ensure the generation of waste is minimised and recycling of waste is maximised where practicable.</p> <p>WCPL maintain a tyre burial register which tracks tyres requiring disposal/burial against the limits specified in the EPL. At the time of the audit WCPL had not exceeded their allowance of tyres to be disposed of onsite. During the 2017 Annual Review reporting period WCPL disposed of 24.27 tonnes of tyres in Pit 7. It is noted that the tyres are generated on site and no tyres are received from offsite.</p> <p>It was reported that no waste had been received from off site for disposal by application to land (including building waste from WCPL owned properties for in-pit disposal) during the audit period.</p>	Compliant											
Code	Waste	Description	Activity	Other Limits																															
NA	General solid waste (non-putrescible)	The general solid waste disposed of on the premises must only be sourced from licensee owned properties in the district	Waste disposal (application to land)	Waste must be classified and disposed of in accordance with the statement of commitments summarised in Appendix 8 of Project Approval 05-0021 (Mod 5)																															
NA	Waste	Any waste received on site that is below licensing thresholds in Schedule 1 of the POEO Act, as in force from time to time	-	NA																															
T140	Tyres	As defined in Schedule 1 of the POEO Act, as in force from time to time	Waste disposal (application to land)	The total volume of tyres disposed of at the premises must not exceed 350 tonnes per annum																															

APPENDIX A AUDIT CHECKLIST																																								
Reference	Condition	Evidence	Comments	Audit Finding	Recommendation																																			
<b>L5 Noise Limits</b>																																								
L5.1	<p>Noise generated at the premises must not exceed the noise limits presented in the table below. The locations referred to in the table below are indicated in Appendix 5 - Figures 1 and 2 of Development Consent number SSD-6764 dated 24 April 2017.</p> <table border="1"> <thead> <tr> <th>Location</th> <th>Day</th> <th>Evening</th> <th>Night</th> <th>Night</th> </tr> <tr> <td></td> <td>LAeq(15 minute)</td> <td>LAeq(15 minute)</td> <td>LAeq(15 minute)</td> <td>LA1(1 minute)</td> </tr> </thead> <tbody> <tr> <td>Wollar village - residential</td> <td>36</td> <td>37</td> <td>37</td> <td>45</td> </tr> <tr> <td>All other privately owned land</td> <td>35</td> <td>35</td> <td>35</td> <td>45</td> </tr> <tr> <td>102</td> <td>36</td> <td>36</td> <td>38</td> <td>45</td> </tr> <tr> <td>Wollar school</td> <td>35 (internal), 45 (external) when in use</td> <td></td> <td></td> <td></td> </tr> <tr> <td>St Luke's Anglican Church &amp; St Laurence O'Toole Catholic Church</td> <td>40 (internal) when in use</td> <td></td> <td></td> <td></td> </tr> </tbody> </table> <p>Note: The above noise limits do not apply at properties where the licensee has a written agreement with the landowner to exceed the noise limits.</p>	Location	Day	Evening	Night	Night		LAeq(15 minute)	LAeq(15 minute)	LAeq(15 minute)	LA1(1 minute)	Wollar village - residential	36	37	37	45	All other privately owned land	35	35	35	45	102	36	36	38	45	Wollar school	35 (internal), 45 (external) when in use				St Luke's Anglican Church & St Laurence O'Toole Catholic Church	40 (internal) when in use				<ul style="list-style-type: none"> <li>Evidence against Condition 3, Schedule 3</li> </ul>	As per evidence detailed against Condition 3, Schedule 3 of development consent.	Compliant	
Location	Day	Evening	Night	Night																																				
	LAeq(15 minute)	LAeq(15 minute)	LAeq(15 minute)	LA1(1 minute)																																				
Wollar village - residential	36	37	37	45																																				
All other privately owned land	35	35	35	45																																				
102	36	36	38	45																																				
Wollar school	35 (internal), 45 (external) when in use																																							
St Luke's Anglican Church & St Laurence O'Toole Catholic Church	40 (internal) when in use																																							
L5.2	<p>For the purpose of condition L5.1;</p> <ul style="list-style-type: none"> <li>Day is defined as the period from 7am to 6pm Monday to Saturday and 8am to 6pm Sunday and Public Holidays.</li> <li>Evening is defined as the period 6pm to 10pm.</li> <li>Night is defined as the period from 10pm to 7am Monday to Saturday and 10pm to 8am Sunday and Public Holidays.</li> </ul>		This is noted.	noted																																				
L5.3	<p>The noise limits set out in condition L5.1 apply under all meteorological conditions except for the following:</p> <ul style="list-style-type: none"> <li>a) Wind speeds greater than 3 metres/second at 10 metres above ground level; or</li> <li>b) Temperature inversion conditions of up to 3oC/100m and wind speeds greater than 2 metres/second at 10 metres above the ground level; or</li> <li>c) Temperature inversion conditions greater than 3oC/100m.</li> </ul>		This is noted.	noted																																				
L5.4	<p>For the purpose of condition L5.3:</p> <ul style="list-style-type: none"> <li>a) The meteorological data to be used for determining meteorological conditions is the data recorded by the meteorological weather station identified as EPA identification Point 21 in condition P1.1; and</li> <li>b) Temperature inversion conditions (vertical temperature gradient in degrees C) are to be determined by direct measurement over a minimum 50m height interval as referred to in Part E2 of Appendix E to the NSW Industrial Noise Policy.</li> </ul>	<ul style="list-style-type: none"> <li>Site Inspection</li> </ul>	The auditors confirmed that weather data used for determining meteorological conditions is that recorded by the onsite weather station.	Compliant																																				
L5.5	<p>To determine compliance:</p> <ul style="list-style-type: none"> <li>a) With the Leq(15 minute) noise limits in condition L5.1, the noise measurement equipment must be located: <ul style="list-style-type: none"> <li>- approximately on the property boundary, where any dwelling is situated 30 metres or less from the property boundary closest to the premises; or</li> <li>- within 30 metres of a dwelling façade, but not closer than 3 metres where any dwelling on the property is situated more than 30 metres from the property boundary closest to the premises; or, where applicable</li> <li>- within approximately 50 metres of the boundary of a National Park or Nature Reserve</li> </ul> </li> <li>b) With the LA1(1 minute) noise limits in condition L5.1, the noise measurement equipment must be located within 1 metre of a dwelling façade.</li> <li>c) With the noise limits in condition L5.1, the noise measurement equipment must be located:</li> </ul>	<ul style="list-style-type: none"> <li>NMP, Section 3</li> <li>Monthly Global Acoustics Reports (April, May 2017)</li> </ul>	<p>Figure 3 of the WCPL NMP outlines the noise monitoring locations for the site. A sample of monitoring locations were inspected by the noise specialist during the audit site inspection.</p> <p>The auditors viewed a sample of noise monitoring reports which reported that the required methodology was followed.</p>	Compliant																																				



APPENDIX A AUDIT CHECKLIST					
Reference	Condition	Evidence	Comments	Audit Finding	Recommendation
	- at the most affected point at a location where there is no dwelling at the location; or - at the most affected point within an area at a location prescribed by conditions L5.5(a) or L5.5(b).				
L5.6	A non-compliance of condition L5.1 will still occur where noise generated from the premises in excess of the appropriate limit is measured: - at a location other than an area prescribed by conditions L5.5(a) and L5.5(b); and/or - at a point other than the most affected point at a location.		This is noted	noted	
L5.7	For the purpose of determining the noise generated at the premises the modification factors in Section 4 of the NSW Industrial Noise Policy must be applied, as appropriate, to the noise levels measured by the noise monitoring equipment.	<ul style="list-style-type: none"> <li>Monthly Global Acoustics Reports (April, May 2017)</li> </ul>	Global Acoustics conduct monthly attended noise monitoring at WCPL and surrounds. The monitoring reports indicate that noise levels from WCP are unlikely to be intermittent or tonal however there is the potential for low-frequency modifying factors to apply under certain conditions. Low-frequency analysis is therefore undertaken as part of the monthly attended monitoring reports to evaluate for possible low frequency penalty applicability in accordance with the EPA's Noise Policy for Industry (NPII, 2017 which superseded the INP 2000).	Compliant	
<b>L7 Blasting</b>					
L6.1	The overpressure level from blasting operations at the premises must not exceed 115dB (Lin Peak) at any noise sensitive locations for more than five per cent of the total number of blasts over each reporting period. Error margins associated with any monitoring equipment used to measure this are not to be taken into account in determining whether or not the limit has been exceeded.	<ul style="list-style-type: none"> <li>Condition 7, Schedule 3 of SSD 6764</li> </ul>	Refer evidence against Condition 7, Schedule 3 of SSD 6764. 0.4% of blasts during the audit period exceeded 115 dB (Lin Peak). This was below the criteria of 5% allowable exceedance.	Compliant	
L6.2	The overpressure level from blasting operations at the premises must not exceed 120dB (Lin Peak) at any time at any noise sensitive locations. Error margins associated with any monitoring equipment used to measure this are not to be taken into account in determining whether or not the limit has been exceeded.	<ul style="list-style-type: none"> <li>Condition 7, Schedule 3 of SSD 6764</li> </ul>	Refer evidence against Condition 7, Schedule 3 of SSD 6764. No exceedances of the 120 dB (Lin Peak) criteria were recorded during the audit period.	Compliant	
L6.3	Ground vibration peak particle velocity from the blasting operations at the premises must not exceed 5mm/sec at any noise sensitive locations for more than five per cent of the total number of blasts over each reporting period. Error margins associated with any monitoring equipment used to measure this are not to be taken into account in determining whether or not the limit has been exceeded.	<ul style="list-style-type: none"> <li>Condition 7, Schedule 3 of SSD 6764</li> </ul>	Refer evidence against Condition 7, Schedule 3 of SSD 6764. No exceedances of ground vibration criteria were recorded during the audit period.	Compliant	
L6.4	Ground vibration peak particle velocity from the blasting operations at the premises must not exceed 10mm/sec at any time at any noise sensitive locations. Error margins associated with any monitoring equipment used to measure this are not to be taken into account in determining whether or not the limit has been exceeded. <i>Note: "Noise sensitive locations" includes buildings used as a residence, hospital, school, child care centre, place of public worship and nursing homes. A noise sensitive location includes the land within 30 metres of the building.</i>	<ul style="list-style-type: none"> <li>Condition 7, Schedule 3 of SSD 6764</li> </ul>	Refer evidence against Condition 7, Schedule 3 of SSD 6764. No exceedances of ground vibration criteria were recorded during the audit period.	Compliant	
L6.5	Blasting operations at the premises may only take place between 9:00am – 5:00pm Monday to Saturday. Blasting outside the hours specified in this condition can only take place with the written approval of the EPA.	<ul style="list-style-type: none"> <li>Condition 8, Schedule 3 of SSD 6764</li> </ul>	Refer Condition 8, Schedule 3 of SSD 6764. Blasts were within the specified hours.	Compliant	
L6.6	Blasting at the premises is limited to the following: a) a maximum of 2 blasts per day; and b) a maximum of 5 blasts per week, on average over a calendar year.	<ul style="list-style-type: none"> <li>Condition 9, Schedule 3 of SSD 6764W</li> </ul>	Refer Condition 9, Schedule 3 of SSD 6764. The specified blasting frequency was complied with.	Compliant	
L6.7	Offensive blast fume must not be emitted from the premises. <i>Definition: Offensive blast fume means post-blast gases from the detonation of explosives at the</i>	<ul style="list-style-type: none"> <li>Blast Fume Management</li> </ul>	WCPL have in place a Blast Fume Mitigation Strategy (BFMS). The BFMS site under the Blast Management Plan and documents fume minimisation	Compliant	

APPENDIX A AUDIT CHECKLIST					
Reference	Condition	Evidence	Comments	Audit Finding	Recommendation
	<p>premises that by reason of their nature, duration, character or quality, or the time at which they are emitted, or any other circumstances:</p> <p>1. are harmful to (or likely to be harmful to) a person that is outside the premises from which it is emitted, or</p> <p>2. interferes unreasonably with (or is likely to interfere unreasonably with) the comfort or repose of a person who is outside the premises from which it is emitted.</p>	<p>Strategy</p> <ul style="list-style-type: none"> <li>Shotfirer Blast Checklist (WI-WIN-FRM-0199) for Shot Number 1993 dated 17.08.2018.</li> <li>Blast Controller Checklist (WI-MIN-FRM-0210) for Shot Number 1994 dated 21.08.2018.</li> <li>Blast Exclusion Map sent to landowners during notification for Shot Number 1993 dated 17.08.2018</li> <li>Wilpinjong Blast Tracking Spreadsheet 24.04.2017 – 23.08.2018</li> </ul>	<p>measures utilised at WCPL for all surface blasting activities.</p> <p>Key management measures are outlined in Section 2.0 of the BFMS.</p> <p>WCPL has developed a Blasting Protocol which outlines the measures to protect the safety of people and livestock, including internal WCPL personnel. The Protocol includes the following:</p> <ul style="list-style-type: none"> <li>Notifications to residence, the public and workers (sighted example landowner notifications)</li> <li>Exclusion zone during blasting operations;</li> <li>Shotfirer Checklist which confirms if a fume risk exists (sighted completed examples).</li> <li>WCPL reported that it would postpone blasting during adverse weather conditions when there is the potential to cause dust and fume impacts to travel outside the Mine boundary. Adverse weather conditions are defined in the Blast Management Plan as westerly winds at speeds greater than 7 m/sec. The Blast checklist which is completed by the Blast Controller includes a review of meteorological conditions to ensure they do not exceed trigger values which would halt a blast occurring. (sighted completed examples).</li> </ul> <p>A Blast Fume Trigger Action Response Plan (TARP) has been developed which documents the process to be followed should the shot firer identify a fume risk exists.</p> <p>11 complaints were received in relation to blast operations during the audit period. The auditors reviewed the complaints received in relation to blasting and identified that no complaints had been received relating to blast fume. All complaints were in relation to noise generated by a blast or overpressure.</p>		
<b>4 Operating conditions</b>					
<b>O1 Activities must be carried out in a competent manner</b>					
O1.1	<p>Licensed activities must be carried out in a competent manner. This includes:</p> <p>(a) the processing, handling, movement and storage of materials and substances used to carry out the activity; and</p> <p>(b) the treatment, storage, processing, reprocessing, transport and disposal of waste generated by the activity.</p>	<ul style="list-style-type: none"> <li>Waste tracking data (J.R Richards, sample across audit period)</li> <li>Complaints register (01.04.2017 – 22.08.2018)</li> <li>Incident register</li> <li>Site Inspection</li> </ul>	<p>WCPL has established processes for managing the processing, handling, movement and storage of coal including:</p> <ul style="list-style-type: none"> <li>24 /7 site operational control via the Dispatch Control Room which includes monitoring of site conditions and weather forecasts and other controls as required,</li> <li>Spillage recovery systems and processes to recover as much product coal as possible</li> <li>Complaints and incident investigation process to determine the cause of a complaint or incident and implementation of control measures.</li> </ul> <p>General site waste was managed by waste contractor J.R Richards during the audit period. J.R Richards provides reporting on waste collected from site. Evidence of waste segregation was observed during the audit site inspection. Separate bins for batteries, scrap metal, recycling, oil filters and cardboard recycling were observed. Waste oil in the workshop is automatically pumped to the Maintenance Infrastructure Area (MIA) when the level reaches 70% capacity. WCPL utilise the CITEC system to track waste oil levels.</p>	Compliant	
<b>O2 Maintenance of plant and equipment</b>					
O2.1	<p>All plant and equipment installed at the premises or used in connection with the licensed activity:(a) must be maintained in a proper and efficient condition; and(b) must be operated in a proper and efficient manner.</p>	<ul style="list-style-type: none"> <li>Condition 13, Schedule 2, SSD 6764</li> </ul>	<p>Refer evidence against Condition 13, Schedule 2, SSD 6764.</p>	Compliant	

APPENDIX A AUDIT CHECKLIST					
Reference	Condition	Evidence	Comments	Audit Finding	Recommendation
<b>O3 Dust</b>					
O3.1	All operations and activities occurring at the premises must be carried out in a manner that will minimise the emission of dust from the premises.	<ul style="list-style-type: none"> <li>Condition 19(a), Schedule 3, SSD 6764</li> </ul>	<p>WCPL received a formal warning letter on 08 February 2018 from the EPA following an unannounced visit to site on 17 January 2018. The EPA officer identified excessive dust emissions from the mine as a result of activities being undertaken in Pit 7 and Pit 4. The inspection also identified a dust haze in the area around the mine when compared to that of the Ulan area. The EPA contacted the WCPL E&amp;C Manager at the time of the observations and as a result WCPL ceased activities in the areas of concern and increased the use of water carts.</p> <p>The EPA considered the event to be a breach of the sites EPL conditions (Condition O3.1) and as a result issued the site with a formal warning. This condition was found to be non-compliant on the basis that the EPA found WCPL to be in breach of EPL 12425 requirements O3.1 Management of air quality at the time of the audit site inspection was considered to be adequate at minimising the emission of dust from the premises, as such no recommendation has been made.</p>	Non-compliant	
O3.2	All trafficable areas, coal storage areas and vehicle manoeuvring areas in or on the premises must be maintained, at all times, in a condition that will minimise the generation, or emission from the premises, of wind-blown or traffic generated dust.	<ul style="list-style-type: none"> <li>Site Inspection</li> </ul>	The audit site inspection identified the following controls relating to dust in place: dust monitors, water sprays on conveyors, water carts and operational cameras visible by the E&C department and dispatch room for dust monitoring, among other purposes.	Compliant	
O3.3	Any plant in or on the premises must be operated by such practicable means as to prevent or minimise the emission into the air or air pollutants (which includes dust).	<ul style="list-style-type: none"> <li>Condition 13, Schedule 2, SSD 6764</li> <li>Condition 19(a), Schedule 3, SSD 6764</li> </ul>	Refer evidence against Condition 13, Schedule 2 and Condition 19(a), Schedule 3, SSD 6764.	Compliant	
<b>O4 Effluent application to land</b>					
O4.1	The irrigation of treated waste water must be in accordance with the DECC's Environmental Guideline for the use of Effluent by Irrigation (2004).				
O4.2	Effluent application must not occur in a manner which causes surface runoff.				
O4.3	The quantity of effluent applied to the utilisation area(s) must not exceed the capacity of the utilisation area(s) to effectively utilise the effluent. For the purpose of this condition, "effectively utilise" includes the ability of the soil to absorb the nutrient, salt and hydraulic loads and the applied organic material without causing harm to the environment.	<ul style="list-style-type: none"> <li>SWB Section 5.3</li> <li>Site Inspection</li> <li>Irrigation Design: On-Site Effluent Disposal (Barnson, 2015)</li> <li>ALS COA</li> <li>Septic System Service Quote, Plumbing Worx, dated 09.11.15</li> </ul>	<p>Section 5.3 of the Site Water Balance (SWB) states: <i>Sewage treatment occurs at a domestic sewage treatment facility located near the mine administration area and at the CHPP (septic system). Treated effluent is used for irrigation in accordance with EPL 12425. The existing sewage treatment facilities and treated/grey water spray areas will continue to be operated in accordance with the Environmental Guidelines: Use of Effluent by Irrigation (NSW DEC, 2004).</i></p> <p>SWB (Section 6.2) notes that <i>A minor portion of treated effluent from remote crib areas may also be trucked off-site by a waste contractor.</i></p> <p>A detailed review against the DECC's Environmental Guideline for the use of Effluent by Irrigation was not undertaken by the auditors. In addition the Septic and irrigation system was not physically inspected.</p> <p>WCPL contracted Barnson (2015) to provide a site suitability assessment and irrigation area design for upgrade to on site treatment system – the irrigation area nominated is located inside the rail loop. Barnson (2015) referenced other guidelines and criteria, not NSW DEC 2004 (validity of these criteria / comparison not checked). Laboratory COA providing analysis of STP Effluent and Soil Analysis from locations within the rail loop, in addition to design report for irrigation area, is taken as supporting documentation that review of treatment and irrigation has been previously undertaken.</p> <p>The WCPL septic and irrigation system was updated in 2016 by Plumbing Worx. This involved the installation of a new aerated water treatment system to replace the existing waste water treatment system. Servicing of the system was being conducted by Plumbing Worx on a fortnightly basis. Servicing involves checking and testing of the following:</p> <ul style="list-style-type: none"> <li>The efficiency of the chlorinator</li> <li>The chlorine tablets and replenishing</li> <li>The irrigation pump</li> </ul>	Compliant	

APPENDIX A AUDIT CHECKLIST					
Reference	Condition	Evidence	Comments	Audit Finding	Recommendation
			<ul style="list-style-type: none"> <li>• Operation of the blower</li> <li>• Efficiency of the sludge and skimmer return</li> <li>• General condition of the pipes and hoses</li> <li>• Efficiency of the irrigation sprays.</li> <li>• High level water alarm</li> <li>• Low air alarm</li> <li>• Water clarity</li> <li>• pH level</li> <li>• Free residual chlorine level.</li> </ul>		
<b>5 Monitoring and recording conditions</b>					
<b>M1 Monitoring records</b>					
M1.1	The results of any monitoring required to be conducted by this licence or a load calculation protocol must be recorded and retained as set out in this condition.	Various as documented elsewhere	<p>Monitoring results are compiled and stored on spread sheets stored on the WCPL network drive.</p> <p>Monitoring results for monthly monitoring data were sighted and available for the audit period.</p> <p>Environmental reports containing environmental monitoring data prepared by external consultants were available for review.</p> <p>Reports included but were not limited to noise, blast, water and air emission data.</p>	Compliant	
M1.2	All records required to be kept by this licence must be: (a) in a legible form, or in a form that can readily be reduced to a legible form; (b) kept for at least 4 years after the monitoring or event to which they relate took place; and (c) produced in a legible form to any authorised officer of the EPA who asks to see them.	Various as documented elsewhere	<p>Monitoring results for monthly monitoring data were sighted and available for the audit period as well as preceding years. It is considered that the monitoring records are maintained in compliance with the requirements of this condition and may be made available upon requests of an authorised officer.</p> <p>Records are maintained on the internal WCPL server.</p> <p>During the audit period, the EPA requested noise monitoring data applicable to the period of a complaint. WCPL was able to provide this data in a legible form to the EPA as required.</p>	Compliant	
M1.3	The following records must be kept in respect of any samples required to be collected for the purposes of this licence: (a) the date(s) on which the sample was taken; (b) the time(s) at which the sample was collected; (c) the point at which the sample was taken; and (d) the name of the person who collected the sample.	<ul style="list-style-type: none"> <li>• Wilcoa_2018_SW updated 180807</li> <li>• Examples of completed ALS Chain of Custody forms</li> </ul>	The surface water quality spreadsheet reviewed by the auditors shows the sample date, location and time but not the name of the person who collected the sample. The name of the person taking the sample is however recorded on the ALS Chain of Custody forms (along with the date, time and point at which the sample was taken).	Compliant	

APPENDIX A AUDIT CHECKLIST																																					
Reference	Condition	Evidence	Comments	Audit Finding	Recommendation																																
<b>M2 Requirement to monitor concentration of pollutants discharged</b>																																					
M2.1 M2.2	<p>For each monitoring/discharge point or utilisation area specified below (by a point number), the licensee must monitor (by sampling and obtaining results by analysis) the concentration of each pollutant specified in Column 1. The licensee must use the sampling method, units of measure, and sample at the frequency, specified opposite in the other columns.</p> <p><b>POINT 3,4,6,9,26</b></p> <table border="1"> <thead> <tr> <th>Pollutant</th> <th>Units of measure</th> <th>Frequency</th> <th>Sampling Method</th> </tr> </thead> <tbody> <tr> <td>Particulates - Deposited Matter</td> <td>grams per square metre per month</td> <td>Monthly</td> <td>AM-19</td> </tr> </tbody> </table> <p><b>POINT 13,20,27</b></p> <table border="1"> <thead> <tr> <th>Pollutant</th> <th>Units of measure</th> <th>Frequency</th> <th>Sampling Method</th> </tr> </thead> <tbody> <tr> <td>PM10</td> <td>micrograms per cubic metre</td> <td>Every 6 days</td> <td>AM-18</td> </tr> </tbody> </table> <p><b>POINT 25,28</b></p> <table border="1"> <thead> <tr> <th>Pollutant</th> <th>Units of measure</th> <th>Frequency</th> <th>Sampling Method</th> </tr> </thead> <tbody> <tr> <td>PM10</td> <td>micrograms per cubic metre</td> <td>Continuous</td> <td>AM-22</td> </tr> </tbody> </table> <p><b>POINT 29</b></p> <table border="1"> <thead> <tr> <th>Pollutant</th> <th>Units of measure</th> <th>Frequency</th> <th>Sampling Method</th> </tr> </thead> <tbody> <tr> <td>PM2.5</td> <td>micrograms per cubic metre</td> <td>Continuous</td> <td>Special Method 1</td> </tr> </tbody> </table>	Pollutant	Units of measure	Frequency	Sampling Method	Particulates - Deposited Matter	grams per square metre per month	Monthly	AM-19	Pollutant	Units of measure	Frequency	Sampling Method	PM10	micrograms per cubic metre	Every 6 days	AM-18	Pollutant	Units of measure	Frequency	Sampling Method	PM10	micrograms per cubic metre	Continuous	AM-22	Pollutant	Units of measure	Frequency	Sampling Method	PM2.5	micrograms per cubic metre	Continuous	Special Method 1	<ul style="list-style-type: none"> <li>Annual Return 2017/18</li> <li>Monitoring records</li> <li>Observations</li> </ul>	<p>WCPL reported non-compliances against condition M2.2 in the 2017/18 Annual Return.</p> <p>The non-compliances were due to equipment issues which resulted in a gap of continuous monitoring at points 13, 20, 25 and 28.</p> <p>WCPL reported that in response to these failures the site replaced HV1 while repairs were made to the unit, in addition TEOM 3 was reportedly checked monthly on site, remotely each day and as soon as possible when equipment issues are identified. Periodic checking of TEOM data by Dispatch Operators was observed during the site inspection. During the site inspection it was reported that monitors are also checked on a daily basis, Monday to Friday by the E&amp;C team and the Service Provider.</p> <p>No further recommendations are considered necessary.</p>	Non-compliant	
Pollutant	Units of measure	Frequency	Sampling Method																																		
Particulates - Deposited Matter	grams per square metre per month	Monthly	AM-19																																		
Pollutant	Units of measure	Frequency	Sampling Method																																		
PM10	micrograms per cubic metre	Every 6 days	AM-18																																		
Pollutant	Units of measure	Frequency	Sampling Method																																		
PM10	micrograms per cubic metre	Continuous	AM-22																																		
Pollutant	Units of measure	Frequency	Sampling Method																																		
PM2.5	micrograms per cubic metre	Continuous	Special Method 1																																		
M2.3	For the purposes of the table(s) above Special Method 1 means AS/NZS 3580.9.13:2013 - Methods for sampling and analysis of ambient air determination of suspended particulate matter - PM 2.5 continuous direct mass method using a tapered element oscillating microbalance monitor.	Commissioning Maintenance Report, Novecom, 27.12.17	A new TEOM was installed in Wollar Village to record PM2.5 in December 2017. The Commissioning Maintenance Report (dated 27.12.17) states that the site audit meets the criteria identified in AS/NZS 3580.1.1:2007	Compliant																																	
M2.4	<p>Water and/or Land Monitoring Requirements</p> <p><b>POINT 24</b></p> <table border="1"> <thead> <tr> <th>Pollutant</th> <th>Units of measure</th> <th>Frequency</th> <th>Sampling Method</th> </tr> </thead> <tbody> <tr> <td>Conductivity</td> <td>micrograms per cubic metre</td> <td>Continuous during discharge</td> <td>Continuously</td> </tr> <tr> <td>Oil and Grease</td> <td>milligrams per litre</td> <td>Weekly during any discharge</td> <td>Grab sample</td> </tr> <tr> <td>pH</td> <td>pH</td> <td>Continuous during discharge</td> <td>Continuously</td> </tr> <tr> <td>Total suspended solids</td> <td>milligrams per litre</td> <td>Weekly during any discharge</td> <td>Grab sample</td> </tr> </tbody> </table>	Pollutant	Units of measure	Frequency	Sampling Method	Conductivity	micrograms per cubic metre	Continuous during discharge	Continuously	Oil and Grease	milligrams per litre	Weekly during any discharge	Grab sample	pH	pH	Continuous during discharge	Continuously	Total suspended solids	milligrams per litre	Weekly during any discharge	Grab sample		Water quality monitoring was being undertaken using the sampling method and at the frequency specified.	Compliant													
Pollutant	Units of measure	Frequency	Sampling Method																																		
Conductivity	micrograms per cubic metre	Continuous during discharge	Continuously																																		
Oil and Grease	milligrams per litre	Weekly during any discharge	Grab sample																																		
pH	pH	Continuous during discharge	Continuously																																		
Total suspended solids	milligrams per litre	Weekly during any discharge	Grab sample																																		

APPENDIX A AUDIT CHECKLIST					
Reference	Condition	Evidence	Comments	Audit Finding	Recommendation
<b>M3 Testing methods - concentration limits</b>					
M3.1	Monitoring for the concentration of a pollutant emitted to the air required to be conducted by this licence must be done in accordance with: (a) any methodology which is required by or under the Act to be used for the testing of the concentration of the pollutant; or (b) if no such requirement is imposed by or under the Act, any methodology which a condition of this licence requires to be used for that testing; or (c) if no such requirement is imposed by or under the Act or by a condition of this licence, any methodology approved in writing by the EPA for the purposes of that testing prior to the testing taking place.	<ul style="list-style-type: none"> <li>AQMP</li> <li>Site Inspection</li> </ul>	<p>The monitoring network utilises depositional dust gauges, High Volume Air Samplers (HVAS) and real-time PM10 monitors to determine compliance against the Air Quality Criteria</p> <p>The audit confirmed that the monitoring method was confirmed to be appropriate. The methods used for the sampling were as follows:</p> <ul style="list-style-type: none"> <li>Dust deposition: Gauges are sampled monthly (30+/- 2 days) for ash content and insoluble solids (g/m2/month) in accordance with Australian Standard/New Zealand Standard (AS/NZS) 3580.10.1-2003 Methods for sampling and analysis of ambient air - Determination of particulate matter - Deposited matter - Gravimetric method.</li> <li>High Volume Air Samples PM10: The HVAS is programmed to operate for a period of 24 hours every six days so that no particular day of the week is biased.</li> <li>Real Time – PM10: The TEOMs are used to monitor PM10 concentrations in accordance with AS 3580.9.8-2008 Determination of suspended particulate matter – PM10 continuous direct mass method using a tapered element oscillating microbalance analyser.</li> </ul>	Compliant	
M3.2	Subject to any express provision to the contrary in this licence, monitoring for the concentration of a pollutant discharged to waters or applied to a utilisation area must be done in accordance with the Approved Methods Publication unless another method has been approved by the EPA in writing before any tests are conducted.  Note: The Protection of the Environment Operations (Clean Air) Regulation 2002 requires testing for certain purposes to be conducted in accordance with test methods contained in the publication "Approved Methods for the Sampling and Analysis of Air Pollutants in NSW".	<ul style="list-style-type: none"> <li>SWMP</li> <li>Wilpinjong Surface Water monitoring spreadsheet (07.08.18)</li> <li>ALS Certificate of Analysis (19.09.18)</li> <li>WCPL Air Quality Monitoring Report (2017)</li> <li>ALS Certificate of Analysis for depositional dust (10.09.18)</li> </ul>	<p>The SWMP details that surface water monitoring will be conducted in accordance with the following:</p> <ul style="list-style-type: none"> <li>Approved Methods for the Sampling and Analysis of Water pollutants in NSW (DEC, 2004);</li> <li>AS/NZS 5667.1:1998 Water Quality – Sampling – Guidance on the Design of Sampling Programs,</li> <li>Sampling Techniques and the Preservation and Handling of Samples; and</li> <li>AS/NZS 5667.10:1998 Water Quality – Sampling – Guidance on Sampling of Waste Waters.</li> </ul> <p>ALS Certificates of Analysis confirm that only approved EPA methods for the analysis of water pollutants in New South Wales are used.</p> <p>The AQMP details that air quality monitoring will be conducted in accordance with the following:</p> <ul style="list-style-type: none"> <li>AS/NZS 3580.10.1:2003, Methods for Sampling and Analysis of Air – Determination of Particulate Matter – Gravimetric Method</li> <li>AS 3580.9.6:2003 - Methods for sampling and analysis of ambient air - Determination of suspended particulate matter - PM10 high volume sampler with size-selective inlet - Gravimetric method</li> <li>AS/NZS 3580.9.7:2009 - Methods for sampling and analysis of ambient air - Determination of suspended particulate matter - Dichotomous sampler (PM10, coarse PM and PM2.5) - Gravimetric method</li> <li>AS 3580.9.8-2008 - Methods for sampling and analysis of ambient air -Determination of suspended particulate matter – PM10 continuous direct mass method using a tapered element oscillating microbalance analyser</li> </ul> <p>WCPL Air Quality Monitoring reports (2017) make reference to the data collection methods used for air quality monitoring. This includes reference to AS 3580.5.1-2011, AS 3580.4.1-2008, Ecotech laboratory manual, Synspec GC955 Series Manual, and AS 3580.14-2011. ALS Certificates of Analysis state that deposited dust was assessed as insoluble solids in accordance with AS/NZS 3580.10.1. ALS Certificates of Analysis state that TSP and PM10 are analysed in accordance with AS 3580.9.6 and AS 3580.9.3.</p>	Compliant	

APPENDIX A AUDIT CHECKLIST																																								
Reference	Condition	Evidence	Comments	Audit Finding	Recommendation																																			
<b>M4 Weather Monitoring</b>																																								
M4.1	The meteorological weather station must be maintained so as to be capable of continuously monitoring the parameters specified in condition M4.2.	<ul style="list-style-type: none"> <li>Calibration report, Ecotech, 18.06.2018</li> <li>Annual Return 2017/18</li> <li>Annual Review 2017</li> </ul>	<p>A meteorological station was installed at the Mine in May 2004 to assess local meteorological conditions including wind speed and direction. WCPL operates a 10m meteorological station to assist with the environmental management of site operations. In addition, WCPL also operates a 60 metre temperature inversion tower to monitor temperature lapse rates.</p> <p>Novecom have been contracted to maintain the station and conduct calibration of the weather station in September of each year.</p>	Compliant																																				
M4.2	<p>For each monitoring point specified in the table below the licensee must monitor (by sampling and obtaining results by analysis) the parameters specified in Column 1. The licensee must use the sampling method, units of measure, averaging period and sample at the frequency specified opposite in the other columns.</p> <p>Point 21</p> <table border="1"> <thead> <tr> <th>Parameter</th> <th>Unit of Measure</th> <th>Frequency</th> <th>Averaging Period</th> <th>Sampling Method</th> </tr> </thead> <tbody> <tr> <td>Air temperature</td> <td>Degress celsius</td> <td>Continuous</td> <td>1 hour</td> <td>AM-4</td> </tr> <tr> <td>Wind direction</td> <td>Degrees</td> <td>Continuous</td> <td>15 minute</td> <td>AM-2 &amp; AM-4</td> </tr> <tr> <td>Wind speed</td> <td>m/s</td> <td>Continuous</td> <td>15 minute</td> <td>AM-2 &amp; AM-4</td> </tr> <tr> <td>Temperature lapse rate</td> <td>Degrees</td> <td>Continuous</td> <td>15 minute</td> <td>Part E2 &amp; E4 of the Nsw Industrial Noise Policy</td> </tr> <tr> <td>Rainfall</td> <td>mm</td> <td>Continuous</td> <td>24 hour</td> <td>AM-4</td> </tr> <tr> <td>Relative humidity</td> <td>%</td> <td>Continuous</td> <td>1 hour</td> <td>AM-4</td> </tr> </tbody> </table>	Parameter	Unit of Measure	Frequency	Averaging Period	Sampling Method	Air temperature	Degress celsius	Continuous	1 hour	AM-4	Wind direction	Degrees	Continuous	15 minute	AM-2 & AM-4	Wind speed	m/s	Continuous	15 minute	AM-2 & AM-4	Temperature lapse rate	Degrees	Continuous	15 minute	Part E2 & E4 of the Nsw Industrial Noise Policy	Rainfall	mm	Continuous	24 hour	AM-4	Relative humidity	%	Continuous	1 hour	AM-4	<ul style="list-style-type: none"> <li>Annual Return 2017/18</li> <li>Daily emails of Meteorological data</li> </ul>	<p>Due to general maintenance or equipment issues in 2017, continuous monitoring for air temperature, wind speed/direction, lapse rate, rainfall and humidity did not occur for 1.6% of the reporting period. This was reported as a non-compliance against Condition M4.2 in the 2017/18 Annual Return. In response to the non-compliance WCPL committed to remotely checking meteorological equipment each day and as soon as possible when equipment issues are identified. It was reported that data was checked daily by the Service Provider, Dispatch Operators and E&amp;C team and if any discrepancies detected they are reported between the teams for actioning.</p> <p>This is considered appropriate and no further recommendations are considered necessary.</p>	Non-compliant	
Parameter	Unit of Measure	Frequency	Averaging Period	Sampling Method																																				
Air temperature	Degress celsius	Continuous	1 hour	AM-4																																				
Wind direction	Degrees	Continuous	15 minute	AM-2 & AM-4																																				
Wind speed	m/s	Continuous	15 minute	AM-2 & AM-4																																				
Temperature lapse rate	Degrees	Continuous	15 minute	Part E2 & E4 of the Nsw Industrial Noise Policy																																				
Rainfall	mm	Continuous	24 hour	AM-4																																				
Relative humidity	%	Continuous	1 hour	AM-4																																				
<b>M5 Recording of pollution complaints</b>																																								
M5.1	The licensee must keep a legible record of all complaints made to the licensee or any employee or agent of the licensee in relation to pollution arising from any activity to which this licence applies.	<ul style="list-style-type: none"> <li>Complaints Register 01.04.2017 – 23.08.2018</li> <li>Complaint Response Protocol</li> <li>Peabody Energy Website</li> </ul>	Complaints are recorded in the WCPL complaints register. The auditors reviewed complaints received by WCPL from 01 April 2017 to 23 August 2018. A detailed review of complaints was conducted by the audit team as part of the environmental performance review part of the audit. This review has been summarised in Section 7.2 of the IEA audit report (AECOM, 2018).	Compliant																																				
M5.2	The record must include details of the following: (a) the date and time of the complaint; (b) the method by which the complaint was made; (c) any personal details of the complainant which were provided by the complainant or, if no such details were provided, a note to that effect; (d) the nature of the complaint; (e) the action taken by the licensee in relation to the complaint, including any follow-up contact with the complainant; and (f) if no action was taken by the licensee, the reasons why no action was taken.	<ul style="list-style-type: none"> <li>Complaints Register 01.04.2017 – 23.08.2018</li> </ul>	Review of the complaints register verified that the required information is being recorded.	Compliant																																				
M5.3	The record of a complaint must be kept for at least 4 years after the complaint was made.	<ul style="list-style-type: none"> <li>Peabody Energy Website</li> </ul>	Complaints were available from 2006.	Compliant																																				
M5.4	The record must be produced to any authorised officer of the EPA who asks to see them.		It was reported that this had not occurred during the audit period.	Not Triggered																																				
<b>M6 Telephone complaints line</b>																																								
M6.1	The licensee must operate during its operating hours a telephone complaints line for the purpose of receiving any complaints from members of the public in relation to activities conducted at the premises or by the vehicle or mobile plant, unless otherwise specified in the licence.	<ul style="list-style-type: none"> <li>Peabody Energy Website</li> </ul>	WCPL has in place a Complaint Response Protocol to respond to all community concerns. This Protocol involves operation of a community information and community hotline ( <b>Complaints line:</b> 1300 606 625) which receives complaints from members of the public.	Compliant																																				
M6.2	The licensee must notify the public of the complaints line telephone number and the fact that it is a complaints line so that the impacted community knows how to make a complaint.	<ul style="list-style-type: none"> <li>Wilpinjong Community Newsletter</li> <li>Peabody Energy Website</li> <li>WCPL CCC Meetings</li> </ul>	The complaints line is advertised in the local newspaper quarterly. In addition the complaints line has also been advertised in the Wilpinjong Community Newsletter, in the WCPL CCC Meetings and on the Peabody Energy Website.	Compliant																																				

APPENDIX A AUDIT CHECKLIST											
Reference	Condition	Evidence	Comments	Audit Finding	Recommendation						
M6.3	Conditions M5.1 and M5.2 do not apply until 3 months after: (a) the date of the issue of this licence or (b) if this licence is a replacement licence within the meaning of the Protection of the Environment Operations (Savings and Transitional) Regulation 1998, the date on which a copy of the licence was served on the licensee under clause 10 of that regulation.		Noted.	Noted							
<b>M7 Requirement to monitor volume or mass</b>											
M7.1	For each discharge point or utilisation area specified below, the licensee must monitor: (a) the volume of liquids discharged to water or applied to the area; (b) the mass of solids applied to the area; (c) the mass of pollutants emitted to the air; at the frequency and using the method and units of measure, specified below.  POINT 24 <table border="1"> <thead> <tr> <th>Frequency</th> <th>Unit of Measure</th> <th>Sampling Method</th> </tr> </thead> <tbody> <tr> <td>Continuous during discharge</td> <td>megalitres per day</td> <td>Flow meter and continuous logger</td> </tr> </tbody> </table>	Frequency	Unit of Measure	Sampling Method	Continuous during discharge	megalitres per day	Flow meter and continuous logger	<ul style="list-style-type: none"> <li>Site Inspection</li> </ul>	Discharge of water is via the reverse osmosis treatment plant as approved by the EPA. Water volume and concentration limits (including EC, oil and grease, pH and TSS) are continuously monitored (verified by audit team on site).	Compliant	
Frequency	Unit of Measure	Sampling Method									
Continuous during discharge	megalitres per day	Flow meter and continuous logger									
<b>M8 Blasting</b>											
M8.1	To determine compliance with condition(s) L6.1 to L6.4: a) Airblast overpressure and ground vibration levels experienced at the following noise sensitive locations must be measured and recorded for all blasts carried out on the premises; - approximately 50m west of the Wollar Primary School grounds - E 777403 N6416219 (MGA94, Zone 55) b) Instrumentation used to measure and record the airblast overpressure and ground vibration levels must meet the requirements of Australian Standard AS 2187.2-2006. Note : A breach of the licence will still occur where airblast overpressure or ground vibration levels from the blasting operations at the premises exceeds the limit specified in conditions L6.1 to L6.4 at any "noise sensitive locations" other than the locations identified in the above condition.	<ul style="list-style-type: none"> <li>Blast Management Plan</li> <li>Ecotech Geophone &amp; Microphone Calibration 28.03.18, 14.09.18, 24.07.18, 25.07.18, 08.06.18,</li> <li>Ecotech Dynamate Channel Verification 24.07.18, 25.07.18</li> </ul>	Section 6.2 of the Blast Management Plan outlines the blast monitoring locations for ground vibration and airblast overpressure. An airblast overpressure and ground vibration monitor is located at the rear of the Wollar Public School. The auditors sighted the monitor during an off-site inspection of Wollar Village. Calibration of blast monitoring units was conducted by offsite specialists. Examples of calibration records were sighted by the auditors	Compliant							
<b>6 Reporting Conditions</b>											
<b>R1 Annual return documents</b>											
<b>What documents must an Annual Return contain?</b>											
R1.1	The licensee must complete and supply to the EPA an Annual Return in the approved form comprising: (a) a Statement of Compliance; and (b) a Monitoring and Complaints Summary. At the end of each reporting period, the EPA will provide to the licensee a copy of the form that must be completed and returned to the EPA.	<ul style="list-style-type: none"> <li>2017/18 EPL Annual Return.</li> </ul>	The 2017 Annual Return was prepared and submitted by WCPL as required by this Condition R1.1. The Auditors sighted the signed Annual Return for the 2017/18 that contained a Statement of Compliance and Monitoring and Complaints Summary.	Compliant							
<b>Period covered by Annual Return</b>											
R1.2	An Annual Return must be prepared in respect of each reporting period, except as provided below. <i>Note: The term "reporting period" is defined in the dictionary at the end of this licence. Do not complete the Annual Return until after the end of the reporting period.</i>	<ul style="list-style-type: none"> <li>2017/18 EPL Annual Return.</li> </ul>	Annual Return for the 2017/18 reporting period was conducted and is available for review. The 2018/19 Annual Return had not been triggered at the time of the audit.	Compliant							



APPENDIX A AUDIT CHECKLIST					
Reference	Condition	Evidence	Comments	Audit Finding	Recommendation
R1.3	Where this licence is transferred from the licensee to a new licensee: (a) the transferring licensee must prepare an Annual Return for the period commencing on the first day of the reporting period and ending on the date the application for the transfer of the licence to the new licensee is granted; and (b) the new licensee must prepare an Annual Return for the period commencing on the date the application for the transfer of the licence is granted and ending on the last day of the reporting period. <i>Note: An application to transfer a licence must be made in the approved form for this purpose.</i>		Noted. This requirement has not been triggered.	Not Triggered	
R1.4	Where this licence is surrendered by the licensee or revoked by the EPA or Minister, the licensee must prepare an Annual Return in respect of the period commencing on the first day of the reporting period and ending on: (a) in relation to the surrender of a licence - the date when notice in writing of approval of the surrender is given; or (b) in relation to the revocation of the licence - the date from which notice revoking the licence operates.		Noted. This requirement has not been triggered.	Not Triggered	
R1.5	The Annual Return for the reporting period must be supplied to the EPA by registered post not later than 60 days after the end of each reporting period or in the case of a transferring licence not later than 60 days after the date the transfer was granted (the 'due date')	<ul style="list-style-type: none"> <li>EPA Public Website <a href="https://apps.epa.nsw.gov.au/prpoeoapp/default.aspx">https://apps.epa.nsw.gov.au/prpoeoapp/default.aspx</a></li> </ul>	The reporting period for the WCPL Annual Return ends on 07 February each year. The EPA website details that the 2017/18 Annual Return was received on 05 April 2017.	Compliant	
R1.6	The licensee must retain a copy of the Annual Return supplied to the EPA for a period of at least 4 years after the Annual Return was due to be supplied to the EPA.	<ul style="list-style-type: none"> <li>WCPL Server</li> </ul>	All Annual Return's submitted by WCPL were available on the WCPL server.	Compliant	
R1.7	Within the Annual Return, the Statement of Compliance must be certified and the Monitoring and Complaints Summary must be signed by: a) the licence holder; or b) by a person approved in writing by the EPA to sign on behalf of the licence holder.	<ul style="list-style-type: none"> <li>2017/18 EPL Annual Return.</li> </ul>	The 2017/18 Annual Return was signed by the company directors on 3 April 2018 and 29 March 2018.	Compliant	
<b>R2 Notification of environmental harm</b>					
	<i>Note: The licensee or its employees must notify the EPA of incidents causing or threatening material harm to the environment as soon as practicable after the person becomes aware of the incident in accordance with the requirements of Part 5.7 of the Act.</i>	<ul style="list-style-type: none"> <li>Audit interview with E&amp;C Manager</li> <li>PEA ERM WRAC Environmental Risk Register WCPL (08.08.2018)</li> </ul>	The auditors were informed that no incidents or near misses occurred during the audit period which required notifying to the EPA. A review of the incident database did not identify any incidents which may have been considered to trigger the requirement for notification.	Not Triggered	
R2.1	Notifications must be made by telephoning the Environment Line service on 131 555.				
R2.2	The licensee must provide written details of the notification to the EPA within 7 days of the date on which the incident occurred.				
<b>R3 Written report</b>					
R3.1	Where an authorised officer of the EPA suspects on reasonable grounds that: (a) where this licence applies to premises, an event has occurred at the premises; or (b) where this licence applies to vehicles or mobile plant, an event has occurred in connection with the carrying out of the activities authorised by this licence, and the event has caused, is causing or is likely to cause material harm to the environment (whether the harm occurs on or off premises to which the licence applies), the authorised officer may request a written report of the event.				
R3.2	The licensee must make all reasonable inquiries in relation to the event and supply the report to the EPA within such time as may be specified in the request.				
R3.3	The request may require a report which includes any or all of the following information: (a) the cause, time and duration of the event; (b) the type, volume and concentration of every pollutant discharged as a result of the event; (c) the name, address and business hours telephone number of employees or agents of the licensee, or a specified class of them, who witnessed the event; (d) the name, address and business hours telephone number of every other person (of whom the licensee is aware) who witnessed the event, unless the licensee has been unable to obtain that information after making reasonable effort; (e) action taken by the licensee in relation to the event, including any follow-up contact with any complainants; (f) details of any measure taken or proposed to be taken to prevent or mitigate against a recurrence of such an event; and (g) any other relevant matters.	<ul style="list-style-type: none"> <li>Audit interview with E&amp;C Manager</li> </ul>	The auditors were informed that WCPL had not received a request from an officer of the EPA to provide a written report in response to any identified event at the premises.	Not Triggered	

APPENDIX A AUDIT CHECKLIST					
Reference	Condition	Evidence	Comments	Audit Finding	Recommendation
R3.4	The EPA may make a written request for further details in relation to any of the above matters if it is not satisfied with the report provided by the licensee. The licensee must provide such further details to the EPA within the time specified in the request				
<b>R4 Other reporting conditions</b>					
R4.1	A noise compliance assessment report must be submitted to the EPA within 30 days of the completion of the second round of quarterly monitoring. The assessment must be prepared by a suitably qualified and experienced acoustical consultant and include: 1. an assessment of compliance with noise limits presented in Condition L6.1; and 2. an outline of any management actions taken within the monitoring period to address any exceedances of the limits contained in Condition L5.1.	<ul style="list-style-type: none"> <li>Email to EPA from WCPL titled 'Wilpinjong Coal – noise compliance assessment, dated 06.08.18</li> <li>Noise Compliance Assessment Report, Global Acoustics 6.08.18</li> </ul>	A Noise Compliance Assessment report for the period January to June 2018 was prepared by noise consultants, Global Acoustics. The assessment concluded that noise levels from WCPL complied with relevant noise limits at all monitoring locations during the survey period. The noise compliance assessment report was provided to the EPA by email on 06 August 2018.	Compliant	<b>IEA 2018-OFI-59</b> With the next EPL variation request that the completed conditions are removed from the EPL
<b>7 General Conditions</b>					
<b>G1 Copy of licence kept at the premise</b>					
G1.1	A copy of this licence must be kept at the premises to which the licence applies.	<ul style="list-style-type: none"> <li>Site Inspection</li> </ul>	A copy of the licence was available from the WCPL E&C Department. The EPL is also available on the Peabody Energy website and internal intranet.	Compliant	
G1.2	The licence must be produced to any authorised officer of the EPA who asks to see it.	<ul style="list-style-type: none"> <li>Site Observations.</li> </ul>	Copies of the licence were observed to be available on-site and able to be provided to an authorised officer of the EPA upon request.	Compliant	
G1.3	The licence must be available for inspection by any employee or agent of the licensee working at the premises.	<ul style="list-style-type: none"> <li>Site Inspection</li> </ul>	A copy of the licence was available from the WCPL E&C Department. The EPL is also available on the Peabody Energy website and internal intranet.	Compliant	
<b>8 Pollution Studies and Reduction Programs</b>					
<b>U1 Reverse Osmosis Plant Waste</b>					
U1.1	By 28 February 2017, the licensee must provide a report to the EPA regarding waste materials generated from the reverse osmosis water treatment process at the premises which: 1. details all wastes types generated, including: • the classification of all wastes in accordance with the EPA Waste Classification Guidelines (Nov 2014); and • the volumes all wastes generated. 2. assesses the options for the disposal of all wastes.		This condition has been completed and falls outside the audit period.	Completed	Refer OFI against Condition R4.1
<b>U2 Particulate Matter Control Best Practice Implementation - Disturbing and Handling Overburden in Adverse Weather Conditions</b>					
U2.1	The licensee must alter or cease the use of equipment on overburden and the loading and dumping of overburden during adverse weather conditions to minimise the generation of particulate matter from 22 March 2013.		The EPA reports that this program was completed on 15 August 2014.	Completed	

APPENDIX A AUDIT CHECKLIST					
Reference	Condition	Evidence	Comments	Audit Finding	Recommendation
<b>9 Special Conditions</b>					
<b>E1 Spontaneous Combustion Air Monitoring</b>					
E1.1	<p>The licensee must undertake continuous monitoring of the following pollutants at the Barigan Street, Wollar air monitoring unit:</p> <ul style="list-style-type: none"> <li>- Oxides of nitrogen;</li> <li>- Sulfur dioxide;</li> <li>- Hydrogen Sulfide;</li> <li>- Volatile organic compounds (VOCs) including, benzene, toluene and xylene; and</li> <li>- Polycyclic aromatic hydrocarbons (PAHs)</li> </ul> <p>Monitoring must be undertaken in accordance with the relevant methods outlined in the EPA publication "Approved Methods - for the Sampling and Analysis of Air Pollutants in NSW" (2007).</p> <p>This monitoring must be undertaken until 30 June 2014.</p> <p>This data must be used to update the report titled "Ambient Air Monitoring Report - Wilpinjong Coal" prepared by Pacific Environment Limited and dated 22 July 2013. Reference must be made in the report comparing ambient air monitoring monitoring results in Wollar to odour complaints received by the licensee and all known spontaneous events that occurred at the premises during the monitoring period.</p> <p>The updated report must be submitted to the Central West (Bathurst) office of the EPA by 29 August 2014.</p>	<ul style="list-style-type: none"> <li>• Peabody Energy Website</li> </ul>	<p>The ambient air monitoring report is available on the Peabody Energy Website. This condition was closed out prior to the audit period commencing and was assessed as part of the 2014 IEA.</p>	Completed	
E1.2	<p>The licensee must undertake near source air monitoring at appropriate locations adjacent to the 'Keylah' and 'Noise Bund' overburden stockpiles. The monitoring must be undertaken:</p> <ul style="list-style-type: none"> <li>- at least twice, from either stockpile, during the period up to 30 June 2014;</li> <li>- for a sufficient length of time in order to collect a representative sample;</li> <li>- at a time when a spontaneous combustion event is occurring from the respective stockpile; and</li> <li>- such that the samples are analysed for NOx, SO2, H2S, PAHs and VOCs.</li> </ul> <p>Monitoring must be undertaken in accordance with the relevant methods outlined in the EPA publication "Approved Methods - for the Sampling and Analysis of Air Pollutants in NSW" (2007).</p> <p>This data must be used to update the report titled "Ambient Air Monitoring Report - Wilpinjong Coal" prepared by Pacific Environment Limited and dated 22 July 2013.</p> <p>The updated report must be submitted to the Central West (Bathurst) office of the EPA by 29 August 2014.</p>	<ul style="list-style-type: none"> <li>• Peabody Energy Website</li> </ul>	<p>The ambient air monitoring report is available on the Peabody Energy Website. This condition was closed out prior to the audit period commencing and was assessed as part of the 2014 IEA.</p>	Completed	
<b>E2 Keylah Dump Removal</b>					
E2.1	<p>Prior to the commencement of works associated with the removal of the Keylah dump at the premises, the licensee must develop a management plan which:</p> <ul style="list-style-type: none"> <li>- Is consistent with any recognised industry standards or guidelines;</li> <li>- Details how the removal will occur;</li> <li>- Defines the location of where material will be relocated to;</li> <li>- Provides a timeframe for the completion of the works;</li> <li>- Identifies mitigation measures for any risks identified during the risk assessment process;</li> <li>- Details the proactive measures that will be utilised to prevent to occurrence of spontaneous combustion during the works, including but not necessarily limited to: <ul style="list-style-type: none"> <li>o Temperature and oxygen monitoring;</li> <li>o A weather Trigger Action Response Plan (TARP); and</li> <li>o A spontaneous combustion determination and response TARP which includes air quality management triggers and defined response actions;</li> </ul> </li> <li>- Details the contingency plans should additional resources be required;</li> <li>- Details air quality management trigger and define the actions performance indicators which will be utilised to minimise offsite impacts including odour and dust; and</li> <li>- Outlines the complaint response procedure including verification and follow up action.</li> </ul>	n/a	<p>This Condition was required to be completed outside of the audit period and was assessed as part of the 2014 IEA (AECOM, 2015).</p>	Completed	

APPENDIX A AUDIT CHECKLIST					
Reference	Condition	Evidence	Comments	Audit Finding	Recommendation
E2.2	Prior to the commencement of works associated with the removal of the Keylah dump at the premises, the licensee must review and update the Pollution Incident Response Management Plan for the premises to include incidents which relate to the removal of the Keylah dump.	n/a	This Condition was required to be completed outside of the audit period and was assessed as part of the 2014 IEA (AECOM, 2015).	Completed	

## Appendix A3 Audit Checklist Mining Lease 1573

APPENDIX A AUDIT CHECKLIST					
Reference	Condition	Evidence	Comments	Audit Finding	Recommendation
<b>Notice to Landholders</b>					
1	Within a period of three months from the date of grant/renewal of this lease or within such further time as the Minister may allow, the lease holder must serve on each landholder of the land notice in writing indicating that this lease has been granted/renewed and whether the lease includes the surface. An adequate plan and description of the lease area must accompany the notice	n/a	This condition is outside of the audit period. This condition is therefore not triggered.	Not Triggered	
1	If there are ten or more landholders affected, the leaseholder may serve the notice by publication in a newspaper circulating in the region where the lease area is situated. The notice must indicate that this lease has been granted/renewed; state whether the lease includes the surface and must contain an adequate plan and description of the lease area.	n/a	This condition is outside of the audit period. This condition is therefore not triggered.	Not Triggered	
<b>Subsidence Management</b>					
4(a)	The leaseholder shall prepare a Subsidence Management Plan prior to commencing and underground mining operations which will potentially lead to subsidence of the land surface.	n/a	WCPL undertakes open cut coal mining operations only. No underground mining operations were planned to occur. This condition is therefore not triggered.	Not Triggered	
4(b)	Underground mining operations which will potentially lead to subsidence include secondary extraction panels such as longwalls or miniwalls, associated first workings (gateroads, installation roads and associated main headings, etc), and pillar extractions, and are otherwise defined by the Guideline for Applications for Subsidence Management Approvals.	n/a	WCPL undertakes open cut coal mining operations only. No underground mining operations were planned to occur. This condition is therefore not triggered.	Not Triggered	
4(c)	The leaseholder must not commence or undertake underground mining operations that will potentially lead to subsidence other than in accordance with a Subsidence Management Plan approved by the Director-Genera, an approval under the Coal Mines Regulation Act 1982, or the document New Subsidence Management Plan Approval Process - Transitional Provisions	n/a	WCPL undertakes open cut coal mining operations only. No underground mining operations were planned to occur. This condition is therefore not triggered.	Not Triggered	
4(d)	Subsidence Management Plans are to be prepared in accordance with the Guideline for Applications for Subsidence Management Approvals.	n/a	WCPL undertakes open cut coal mining operations only. No underground mining operations were planned to occur. This condition is therefore not triggered.	Not Triggered	
4(e)	Subsidence Management Plans as approved shall form part of the Mining Operations Plan required under Condition 2 and will be subject to the Annual Environmental Management Report process as set out under Condition 3. The SMP is also subject to the requirements for subsidence monitoring and reporting set out in the document New Approval Process for Management of Coal Mining Subsidence - Policy.	n/a	WCPL undertakes open cut coal mining operations only. No underground mining operations were planned to occur. This condition is therefore not triggered.	Not Triggered	
<b>Working Requirement</b>					
5	The lease holder must:				
5(a)	Ensure that at least 114 competent people are efficiently employed on the lease area on each weekday except Saturday or any weekday that is a public holiday; or	<ul style="list-style-type: none"> <li>Interview with Environment and Community Manager</li> <li>Annual Return 2017/18</li> </ul>	WCPL maintains a workforce of approximately 550 personnel. The WCM operates 24 hours per day seven days per week.	Compliant	
5(b)	Expend on operations carried out in the course of prospecting or mining the lease area, an amount of not less than \$1,995,000 per annum whilst the lease is in force.	n/a	This is not required to be conducted as WCPL satisfies the quantity of staff required by condition 5(a).	Not Triggered	
5	The Minister may at any time or times, by instrument in writing served on the lease holder, increase or decrease the expenditure required or the number of people to be employed	<ul style="list-style-type: none"> <li>Audit Interviews</li> </ul>	The auditors were informed that this had not occurred during the audit period.	Not Triggered	

APPENDIX A AUDIT CHECKLIST					
Reference	Condition	Evidence	Comments	Audit Finding	Recommendation
<b>Control of Operations</b>					
6(a)	<p>a) If an Environmental Officer of the Department believes that the leaseholder is not complying with any provision of the Act or any condition of this lease relating to the working of the lease, he may direct the leaseholder to:</p> <ol style="list-style-type: none"> <li>i. Cease working the lease; or</li> <li>ii. cease that part of the operation not complying with the Act or conditions until in the opinion of the Environmental Officer the situation is rectified.</li> </ol> <p>b) The lease holder must comply with any direction given. The Director-General may confirm, vary or revoke any such direction.</p> <p>c) A direction referred to in this condition may be served on the Mine Manager.</p>	<ul style="list-style-type: none"> <li>• Audit Interviews</li> </ul>	The auditors were informed that this had not occurred during the audit period.	Not Triggered	
<b>Reports</b>					
7	<p>The leaseholder must provide an exploration report, within a period of twenty-eight days after each anniversary of the date this lease has effect or at such other date as the Director-General may stipulate, of each year. The report must be to the satisfaction of the Director-General and contain the following:</p> <ol style="list-style-type: none"> <li>a) Full particulars, including results, interpretation and conclusions, of all exploration conducted during the twelve months period;</li> <li>b) Details of expenditure incurred in conducting that exploration;</li> <li>c) A summary of all geological findings acquired through mining or development valuation activities</li> <li>d) Particulars of exploration proposed to be conducted in the next twelve months period;</li> <li>e) All plans, maps, sections and other data necessary to satisfactorily interpret the report.</li> </ol>	<ul style="list-style-type: none"> <li>• Wilpinjong Annual Report, Wilpinjong Coal Mine (ML 1573) Report, February 2018.</li> <li>• Email titled "RE:Wilpinjong – ML 1573 – Annual Exploration Report" dated 01.02.2018 – 17.05.18</li> <li>• Email from WCPL Mine Geologist dated 27.09.2018</li> </ul>	<p>The anniversary of the Mining Lease is 8 February each year and as such the report is due for lodgement by 07 March each year. The annual exploration report for ML 1573 for the reporting period 08.02.17 -07.02.18 was lodged on 09 March 2018. The auditors reviewed the email trail with regards to the Annual Exploration Reports submission. WCPL stated that the time delay for submission was caused by the lengthy process associated with uploading the data for the 176 boreholes.</p> <p>The auditors were informed by the WCPL Mine Geologist that the site was yet to receive EROL Submission and acceptance report notifications from the Director-General. WCPL were informed by RR that the Department has a large backlog of reports to be examined.</p> <p>Review of the Exploration report indicated it contained the required information. This included the following:</p> <ol style="list-style-type: none"> <li>a) Exploration completed in the reporting period is outlined in section 3 of the report. This section includes exploration conducted as well as a summary of the results and discussion from exploration including coal quality and palaeo channel and structure delineation.</li> <li>b) Section 3.3 of the report outlines the exploration activity and expenditure for the reporting period. Exploration expenditure is detailed in a table which outlines the exploration category, a description of the activity, the quantity (in hours) and the resulting expenditure.</li> <li>c) The Table of Contents from the report stated that Section 5.4 is the 'Geological Findings' Section however Section 5.4 is titled 'Conclusion'. Geological findings are detailed in Section 3.2, results and discussion.</li> <li>d) Section 4 of the report outlines the 'Proposed exploration in the next reporting period'.</li> <li>e) A number of plans and maps are included in the exploration report which satisfies this condition.</li> </ol> <p>On the basis that the exploration was not submitted within the required timeframe, this condition has been assessed as non-compliant.</p>	Non-compliant	<p><b>2018 IEA REC 004</b> In future, account for the time taken to upload borehole data to ensure the annual exploration report is lodged by the due date.</p> <p><b>2018 IEA OFI 032</b> Review table of contents and report headings and ensure they align.</p>
<b>Licence to Use Reports</b>					
8(a)	<ol style="list-style-type: none"> <li>a) The lease holder grants the Minister, by way of a non-exclusive licence, the right to publish, print, adapt and reproduce all exploration reports lodged in any form and for the full duration of copyright.</li> <li>b) The non-exclusive licence will operate as a consent for the purposes of section 365 of the Mining Act 1992.</li> </ol>	n/a	Noted	Noted	

APPENDIX A AUDIT CHECKLIST					
Reference	Condition	Evidence	Comments	Audit Finding	Recommendation
<b>Confidentiality</b>					
9(a)	<p>a) All exploration reports submitted in accordance with the conditions of this lease will be kept confidential while the lease is in force, except in cases where:</p> <p>i. Where the lease holder has granted that specific reports may be made non-confidential.</p> <p>ii. Reports deal with exploration conducted exclusively on areas that have ceased to be part of the lease.</p> <p>b) Confidentiality will be continued beyond the termination of a lease where an application for a flow-on title or any subsequent flow-on title, has terminated.</p> <p>c) The Director-General may extend the period of confidentiality.</p>	n/a	Noted	Noted	
<b>Terms of the non-exclusive licence</b>					
10	<p>The terms of the non-exclusive copyright licence granted under condition 8(a) are:</p> <p>a) The Minister may sub-licence others to publish, print, adapt and reproduce but not on-licence reports.</p> <p>b) The Minister and any sub- licensee will acknowledge the lease holder's and any identifiable consultant's ownership of copyright in any reproduction of the reports, including storage of reports onto an electronic database.</p> <p>c) The lease holder does not warrant ownership of all copyright works in any report and, the lease holder will use best endeavours to identify those parts of the report for which the lease holder owns the copyright.</p> <p>d) There is no royalty payable by the Minister for the licence</p> <p>e) If the lease holder has reasonable grounds to believe that the Minister has exercised his rights under the non-exclusive copyright licence in a manner which adversely affects the operations of the lease holder, that licence is revocable on the giving of a period of not less than three months notice.</p>	n/a	Noted	Noted	
<b>Safety</b>					
12	<p>Operations must be carried out in a manner that ensures the safety of persons or stock in the vicinity of the operations. All drill holes shafts and excavations must be appropriately protected, to the satisfaction of the Director-General, to ensure that access to them by persons and stock is restricted. Abandoned shafts and excavations opened up or used by the lease holder must be filled in or otherwise rendered safe to a standard acceptable to the Director-General</p>	<ul style="list-style-type: none"> <li>Sire Preparation Procedure</li> <li>Peabody Energy Wilpinjong Exploration Site Rehabilitation Procedure – PA-WI-EXP-PRO-0031(March 2016)</li> <li>ESF4 Applications 28.11.17 and 6,9,17</li> <li>Letter from RR approving the ESF4 Applications, dated 8.4.16</li> </ul>	<p>Site Preparation Procedure was viewed which includes fencing to render the site safe during operations. The Exploration Site Rehabilitation Procedure was also viewed by the auditors. This outlines how drill sites are surveyed before sealing. An agreement has been made between WCPL and RR regarding alternative borehole sealing requirements (e.g. grouted or alternative methods).</p> <p>WCPL submitted an ESF4 application to conduct drilling activities under the site exploration licences. The applications reference the following "All boreholes drilled will be fully sealed in accordance with 'EDG01 Borehole Sealing Requirements on Land: Coal Exploration' to avoid possible interaction between any aquifers intersected. This process is further detailed in 'PA-WI-EXP-PRO-0031 Exploration Site Rehabilitation Procedure' (Attachment 2)". Approval letters from the DPE for ESF4 applications were sighted by the auditors.</p>	Compliant	

APPENDIX A AUDIT CHECKLIST					
Reference	Condition	Evidence	Comments	Audit Finding	Recommendation
<b>Exploratory Drilling</b>					
15	<p>(1) At least twenty eight days prior to commencement of drilling operations the lease holder must notify the relevant Department of Planning regional hydrogeologist the intention to drill exploratory drill holes together with information on the location of the proposed holes</p> <p>(2) If the lease holder drills exploratory drill holes he must satisfy the Director- General that:</p> <p>a) All cored holes are accurately surveyed and permanently marked in accordance with Departmental guidelines so that their location can be easily established;</p> <p>b) All holes cored or otherwise are sealed to prevent the collapse of the surrounding surface;</p> <p>c) All drill holes are permanently sealed with cement plugs to prevent surface discharge of groundwaters</p> <p>d) If any drill hole meets natural or noxious gases it is plugged or sealed to prevent their escape;</p> <p>e) If any drill hole meets an artesian or sub-artesian flow it is effectively sealed to prevent contamination of aquifers;</p> <p>f) Once any drill hole ceases to be used the hole must be sealed in accordance with Departmental guidelines. Alternatively, the hole must be sealed as instructed by the Director-General;</p> <p>g) Once any drill hole ceases to be used the land and its immediate vicinity is left in a clean, tidy and stable condition.</p>	<ul style="list-style-type: none"> <li>Email from WCPL to DPI-Water titled 'Wilpinjong Drilling Notification' and dated 16.12.2016</li> <li>Email from WCPL mine geologist to DPI-Water hydrogeologist titled 'WCPL 28 Day Notification to NOW' and dated 05.02.2017</li> <li>Email from WCPL mine geologist to DPI-Water hydrogeologist titled 'WCPL 28 Day Notification to NOW' and dated 04.04.2017</li> <li>Exploration Report 2017/18</li> <li>Letter from RR approving the ESF4 Applications, dated 8.4.16</li> </ul>	<p>The auditors sighted evidence of emails being sent to NSW DPI-Water (<a href="mailto:drilling.mineralsandenergy@water.nsw.gov.au">drilling.mineralsandenergy@water.nsw.gov.au</a>). These emails were sent at least 28 days prior to drilling operations occurring. The Exploration Report for 2017/18 reported that a total of 176 boreholes were drilled in the 2017/18 reporting period, with an additional 55 planned to occur in the 2018/19 reporting period.</p> <p>Multiple ESF4 applications have been submitted over the past 3 years which have been approved by RR. RR satisfaction with WCPL drill practices is obtained via review and approval of the ESF4 applications.</p>	Compliant	
<b>Prevention of Soil Erosion and Pollution</b>					
16	Operations must be carried out in a manner that does not cause or aggravate air pollution, water pollution (including sedimentation) or soil contamination or erosion, unless otherwise authorised by a relevant approval, and in accordance with an accepted Mining Operations Plan. For the purpose of this condition, water shall be taken to include any watercourse, waterbody or groundwaters. The lease holder must observe and perform any instructions given by the Director-General in this regard.	<ul style="list-style-type: none"> <li>SSD 647 Condition 19, Schedule 3</li> <li>SSD 647 Condition 29, Schedule 3</li> </ul>	<p>It is considered that the management measures in place at the time of the audit site inspection were reasonable and feasible in minimising air pollution, water pollution or erosion.</p> <p>Refer SSD 647; Air Pollution – Condition 19, Schedule 3</p> <p>Refer SSD 647; Water – Condition 29, Schedule 3</p>	Compliant	
<b>Transmission lines, Communication lines and Pipelines</b>					
17	Operations must not interfere with or impair the stability or efficiency of any transmission line, communication line, pipeline or any other utility on the lease area without the prior written approval of the Director-General and subject to any conditions he may stipulate.	<ul style="list-style-type: none"> <li>Transmission Line Relocation – Mine Site; TransGrid and WCPL Agreement, dated 28.09.2017</li> <li>Letter to MWRC from WCPL outlining the Ulan-Wollar road re-alignment design and process, dated 07.06.2017</li> </ul>	<p>During the audit no adverse impacts were reported or observed.</p> <p>A number of infrastructure relocations are planned to occur as a result of the WEP approval. This includes the following which will be funded by WCPL:</p> <ul style="list-style-type: none"> <li>330kV Powerline relocation – relocation of a section of TransGrid's existing transmission line located at WCM (Transmission Line79). The auditors reviewed the Transmission line agreement between WCPL and TransGrid regarding WCPL funding the relocation.</li> <li>Essential Energy 33kV Powerline relocation – relocation is planned to occur however had not been commenced at the time of the audit.</li> </ul> <p>The relocation of the powerlines was detailed in the WEP EIS which was reviewed by RR and approved by DPE in April 2017.</p>	Compliant	
<b>Fences, Gates</b>					
18	<p>a) Activities on the lease must not interfere with or damage fences without the prior written approval of the owner thereof or the Minister and subject to any conditions the Minister may stipulate.</p> <p>b) Gates within the lease area must be closed or left open in accordance with the requirements of the landholder</p>	<ul style="list-style-type: none"> <li>Site inspection</li> </ul>	<p>No damage or interference to fences was reported during the audit period. All relevant land is owned by Peabody.</p>	Compliant	



APPENDIX A AUDIT CHECKLIST					
Reference	Condition	Evidence	Comments	Audit Finding	Recommendation
<b>Roads and Tracks</b>					
20	Access tracks must be kept to a minimum and be positioned so that they do not cause any unnecessary damage to the land. Temporary access tracks must be ripped, topsoiled and revegetated as soon as possible after they are no longer required for mining operations. The design and construction of access tracks must be in accordance with specifications fixed by the Department of Planning	<ul style="list-style-type: none"> <li>Site Interviews</li> </ul>	No access tracks have been constructed during the audit period.	Compliant	
<b>Resource Recovery</b>					
23(a)	Notwithstanding any description of mining methods and their sequence or of proposed resource recovery contained within the Mining Operations Plan, if at any time the Director-General is of the opinion that minerals which the lease entitles the lease holder to mine and which are economically recoverable at the time are not being recovered from the lease area, or that any such minerals which are being recovered are not being recovered to the extent which should be economically possible or which for environmental reasons are necessary to be recovered, he may give notice in writing to the lease holder requiring the holder to recover such minerals		It was reported that no notices under this condition had been issued to WCPL.	Not Triggered	
20(b)	The notice shall specify the minerals to be recovered and the extent to which they are to be recovered, or the objectives in regard to resource recovery, but shall not specify the processes the lease holder shall use to achieve the specified recovery.				
20(c)	The lease holder must, when requested by the Director-General, provide such information as the Director-General may specify about the recovery of the mineral resources of the lease area.				
20(d)	The Director-General shall issue no such notice unless the matter has firstly been thoroughly discussed with and a report to the Director-General has incorporated the views of the lease holder				
20(e)	The lease holder may object to the requirements of any notice issued under this condition and on receipt of such an objection the Minister shall refer it to a Warden for inquiry and report under Section 334 of the Mining Act, 1992				
20(f)	After considering the Warden's report the Minister shall decide whether to withdraw, modify or maintain the requirements specified in the original notice and shall give the lease holder written notice of the decision. The lease holder must comply with the requirements of this notice.				
<b>Indemnity</b>					
24	The lease holder must indemnify and keep indemnified the Crown from and against all actions, suits, claims and demands of whatsoever nature and all costs, charges and expenses which may be brought against the lease holder or which the lease holder may incur in respect of any accident or injury to any person or property which may arise out of the construction, maintenance or working of any workings now existing or to be made by the lease holder within the lease area or in connection with any of the operations notwithstanding that all other conditions of this lease shall in all respects have been observed by the lease holder or that any such accident or injury shall arise from any act or thing which the lease holder may be licensed or compelled to do.		Noted	Not Triggered	
<b>Security</b>					
25	A security in the sum of \$3,560,000 must be given and maintained with the Minister by the lease holder for the purpose of ensuring the fulfilment by the lease holder of obligations under this lease. If the lease holder fails to fulfil any one or more of such obligations the said sum may be applied at the discretion of the Minister towards the cost of fulfilling such obligations. For the purpose of this clause the lease holder shall be deemed to have failed to fulfil the obligations of this lease if the lease holder fails to comply with any condition or provision hereof, any provision of the Act or regulations made thereunder or any condition or direction imposed or given pursuant to a condition or provision hereof or of any provision of the Act or regulations made thereunder The lease holder must provide the security required by sub-clause (a) in one of the following forms: a) Cash b) A security certificate in a form approved by the Minister and issued by an authorised deposit-taking institution.	<ul style="list-style-type: none"> <li>Letter from RR to WCPL titled 'Mining Lease 1573 – WCM – Notice of assessment for security (Assessed Deposit), dated 16.02.17</li> </ul>	An assessment of the security deposit required under ML 1573 was made by the RR (letter dated 16.02.17). The Assessed Deposit was determined to be \$48,685,000. This was a reduction of \$8,992,000.00 (difference between the "Assessed Deposit" and the current security deposit held by the Department.	Compliant	

APPENDIX A AUDIT CHECKLIST					
Reference	Condition	Evidence	Comments	Audit Finding	Recommendation
<b>Environmental Management Condition</b>					
<b>Environmental Harm</b>					
26	The proponent shall implement all practicable measures to prevent and/or minimise any harm to the environment that may result from the construction, operation or rehabilitation of the development	<ul style="list-style-type: none"> <li>Annual Return (08.02.2017 – 07.02.2018)</li> <li>PEA ERM WRAC Environmental Risk Register WCPL (08.08.2018)</li> <li>EPA Incident 10000086877 08.06.2017</li> <li>EPA Incident 10000099892 17.07.2017</li> <li>EPA Incident 10000134852 08.02.2018</li> <li>Complaints Register 01.04.2017 – 23.07.2018</li> <li>WCPL Annual Review 2017</li> <li>Site Inspection</li> <li>Air Quality Data</li> <li>Water Quality Reports</li> <li>Noise Monitoring Reports</li> </ul>	<p>The auditors and specialists conducted a review of incident occurrences at the mine during the audit period, complaints received, as well as a review of the general environmental performance of the site with WCPL's various environmental management plans.</p> <p>While a number of non-compliances of EPL requirements for water and grease and air quality monitoring were reported in the 2017 Annual Review no exceedances of performance criteria established under this consent were recorded by WCPL.</p> <p>No incidents were recorded which were considered to have caused or had the potential to cause material harm to the environment.</p> <p>WCPL has received a number of complaints relating to noise, blasting and air quality during the audit period however review of data available indicated that no events had occurred which were considered to have caused material harm to the environment.</p> <p>Based on the audit team's assessment of implementation with the various environmental management plans, the site appears to be implementing reasonable and feasible measures to prevent and/or minimise harm to the environment.</p>	Compliant	

APPENDIX A AUDIT CHECKLIST					
Reference	Condition	Evidence	Comments	Audit Finding	Recommendation
<b>Mining Operations Plan</b>					
27(a)	<p>a) Mining operations must not be carried out otherwise than in accordance with a Mining Operations Plan (MOP) which has been approved by the Director-General of the Department of Primary Industries - Mineral Resources</p> <p>b) The [MOP] must:</p> <ul style="list-style-type: none"> <li>- identify a areas that will be disturbed by mining operations;</li> <li>- detail the staging of specific mining operations;</li> <li>- identify how the mine will be managed to allow mine closure;</li> <li>- identify how mining operations will be carried out on site in order to prevent and or minimise harm to the environment;</li> <li>- reflect the conditions of approval under: <ul style="list-style-type: none"> <li>(i) the Environmental Planning and Assessment Act 1979;</li> <li>(ii) the Protection of the Environment Operations Act 1997</li> <li>(iii) and any other approvals relevant to the development including the conditions of this lease; and</li> </ul> </li> <li>- have regard to any relevant guidelines adopted by the Director-General.</li> </ul> <p>c) The titleholder may apply to the DG to amend an approved MOP at any time.</p> <p>d) It is not a breach of this condition if:</p> <p>27(d)(i) The operations constituting the breach were necessary to comply with a lawful order or direction given under the Mining Act 1992, the Environmental Planning and Assessment Act 1979, Protection of the Environment Operations Act 1997 or the Occupational Health and Safety Act 2000; and</p> <p>27(d)(ii) The Director-General had been notified of the terms of the order or direction prior to the operations constituting the breach being carried out. Note: The Director-General is deemed to be notified of the terms of an order or direction if the order or Direction was issued by the Department or a copy of the order or direction has been faxed to 02 4931 6790</p> <p>e) A MOP ceases to have affect 7 years after date of approval or other such period as identified by the D-G. An approved amendment to the MOP under condition 29 does not constitute an approval for the purpose of this paragraph unless otherwise identified by the DG.</p>	<ul style="list-style-type: none"> <li>• Mining Operations Plan (MOP) (WCPL_MOP_2017), June 2017</li> <li>• Approval from DRG dated 4.07.17</li> </ul>	<p>a) The Mining Operations Plan (MOP) 2017-2019, June 2017, has been developed to incorporate and address the requirements of the Rehabilitation Management Plan (RMP). Table 3 of the MOP clearly outlines the requirements of the RMP and where they are addressed in the MOP.</p> <p>The MOP was developed in June 2017 to align with the requirements of SSD-6764.</p> <p>The MOP was approved by the DPE, Division of Resources and Geoscience (DRG, now Resource Regulator, RR) on 04 July 2017</p> <p>b) The MOP was considered to contain the information required by this condition. This included the following:</p> <ul style="list-style-type: none"> <li>- Section 2 outlines the proposed mining activities at WCPL for the MOP period (2017-2019).</li> <li>- Plans 3A and 3B outline the sequence of mining and rehabilitation activities for year 1 and 2.</li> <li>- Section 1.4.1 details rehabilitation and mine closure consultation.</li> <li>- Section 3 outlines the specific management measures for environmental issues and includes an environmental risk assessment to identify key environmental aspects in relation to rehabilitation.</li> <li>- Section 1.1 outlines WCPL's approvals, licences and leases applicable to the development.</li> <li>- Section 1.2 outlines the development consent requirements for rehabilitation.</li> <li>- Section 5 outlines rehabilitation planning with regards to mine closure domains.</li> </ul> <p>c) The MOP had not been amended during the audit period.</p> <p>d) Noted</p> <p>e) The MOP has been prepared for the years 2017 – 2019.</p>	Compliant	
<b>Annual Environmental Management Reporting</b>					
28	The lease holder must lodge Environmental Management Reports (EMR) with the Director-General annually or at dates otherwise directed by the DG.	<ul style="list-style-type: none"> <li>• Condition 4, Schedule 5 of SSD 6764.</li> </ul>	The EMR is completed as part of the Annual Review process. Refer evidence against Condition 4, Schedule 5 of SSD 6764.	Compliant	
29	<p>The EMR must:</p> <ul style="list-style-type: none"> <li>- Report against compliance with the MOP;</li> <li>- Report on progress in respect of rehabilitation completion criteria;</li> <li>- Report on the extent of compliance with regulatory requirements; and</li> <li>- Have regard to any relevant guidelines adopted by the D-G</li> </ul>	Section 8 Annual Review 2017	Section 8 of the Annual Review outlines rehabilitation progress and references the MOP.	Compliant	
30	Additional environmental reports may be required on specific surface disturbing operations or environmental incidents from time to time as directed in writing by the Director-General and must be lodged as instructed.		No additional reports were requested during the audit period.	Not Triggered	

APPENDIX A AUDIT CHECKLIST					
Reference	Condition	Evidence	Comments	Audit Finding	Recommendation
<b>Rehabilitation</b>					
31	Disturbed land must be rehabilitated to a sustainable/agreed land use to the satisfaction of the Director-General	<ul style="list-style-type: none"> <li>• Observations</li> <li>• Mining Operations Plan (MOP) (WCPL_MOP_2017), June 2017</li> <li>• MOP Approval from RR dated 4.07.17</li> <li>• RR notice of satisfaction of 2017 Annual Review (letter dated 22.06.18)</li> </ul>	<p>Evidence that the site was being progressively rehabilitated was observed during the site inspection with sections of the mine at various stages of rehabilitation. For example:</p> <ul style="list-style-type: none"> <li>• Pit 5 contained areas of various aged rehabilitation</li> <li>• Southern finger of Pit 5 had been recently (July) seeded to pasture / cover crop</li> <li>• Sections of Pit 6 had been returned historically to pasture and woodland</li> <li>• The south east section of Pit 6 had been recently rehabilitated and showed residual pasture / cover crop species with native forbes and herbs.</li> <li>• Tailings dams north of Pit 1 had been revegetated</li> </ul> <p>Refer to rehabilitation photos in the main report.</p> <p>Pasture and cover crop species have been used across the site since 2016/17 to assist in site stabilisation. WCPL was working towards achieving the vegetation communities outlined in Development Consent SSD 6764.</p> <p>Table 31 of the MOP has a target of 85.5ha for 2017 and 95ha for 2018 and a cumulative target of 180.5ha. The actual amounts were 82ha for 2017 and YTD 2018 21ha with plans for 20ha / month for the remainder of the year to reach the target.</p> <p>YTD the rehabilitation program is being impacted by extended drought and grazing pressures from native fauna.</p> <p>Director-General satisfaction is evidenced through the following:</p> <ul style="list-style-type: none"> <li>• RR approval of the MOP / Rehabilitation Plan which includes the agreed landuse</li> <li>• Reporting against the MOP and progress of rehabilitation within the Annual Reviews which are submitted and following a site inspection approved by the RR</li> <li>• Formal sign off upon completion of rehabilitation (it is noted this had not been triggered at the time of audit as no areas were considered to be completely rehabilitated).</li> </ul>	Compliant	

# Appendix B

Audit Team DPE  
Approval

## Appendix B Audit Team DPE Approval



Contact: Chris Schultz  
Phone: 02 4224 9478  
Fax: 02 4224 9470  
Email: [chris.schultz@planning.nsw.gov.au](mailto:chris.schultz@planning.nsw.gov.au)

Mr Kieren Bennetts  
Environment and Community Manager  
Wilpinjong Coal Pty Ltd  
Locked Bag 2005  
Mudgee NSW 2850

Dear Mr Bennetts

**Wilpinjong Extension Project SSD 6764  
Independent Environmental Audit**

I refer to your letter dated 6 June 2018 seeking the Secretary's endorsement for an audit team to undertake the Independent Environmental Audit (audit) under Development Consent SSD 6764 (the consent) for the Wilpinjong Extension Project.

Having considered the qualifications and experience of the AECOM Australia (AECOM) audit team, namely;

- Helen Onus – Lead Auditor;
- Kate Michelmores – Auditor;
- Ian Richardson – Peer Review and Verification;
- Patrick Martinez – Noise Specialist;
- David Rollings – Air Quality Specialist;
- Amanda Kerr – Surface Water Specialist;
- Angus McFarlane – Groundwater Specialist; and
- Dee Murdoch – Rehabilitation Specialist

the Secretary endorses the appointment of this team to undertake the audit in accordance with Condition 10 of Schedule 5 of SSD 6764. This approval is conditional on the audit team being independent of the development.

The audit is to be conducted in accordance with AS/NZS ISO 19011 Australian/New Zealand Standard: Guidelines for quality and/or environmental management systems auditing and the *Post-approval requirements for State significant developments – Independent Audit Guideline* dated October 2015.

The audit report is to:

- include a compliance table indicating the compliance status of each condition of consent and any relevant EPL or Mining Lease (including any assessment, plan or program required under these approvals);
- not use the term "partial compliance";
- recommend actions in response to non-compliances;

- review the adequacy of plans and programs required under the approvals; and
- identify opportunities for improved environmental management and performance.

Within three (3) months of commissioning the audit, or otherwise as agreed by the Secretary, the Applicant is to submit a copy of the audit report to the Secretary together with its response to any recommendations contained in the audit report and a timetable to implement the recommendations.

Prior to submitting the audit report to the Secretary, it is recommended that the Applicant review the report to ensure it complies with the relevant consent condition.

Should you wish to discuss this matter, please contact me on 4224 9478 or at [chris.schultz@planning.nsw.gov.au](mailto:chris.schultz@planning.nsw.gov.au).

Yours sincerely

 12/6/18

Chris Schultz  
**A/Team Leader Compliance**  
*as nominee for the Secretary*



# Appendix C

IEA Declaration Form

## Appendix C IEA Declaration Form

## Appendix C – Independent Audit Declaration Form Template

### Independent Audit Declaration Form

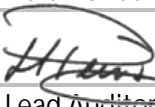
Project Name	Wilpinjong Coal Mine Extension Project
Consent Number	SSD-6764
Description of Project	Open cut coal mine
Project Address	1434 Ulan-Wollar Road, Wilpinjong, New South Wales, 2850,
Proponent	Wilpinjong Coal Pty Ltd
Title of Audit	Wilpinjong Coal Mine: 2018 Independent Environmental Audit
Date	12 October 2018

I declare that I have undertaken the Independent Audit and prepared the contents of the attached Independent Audit Report and to the best of my knowledge:

- the audit has been undertaken in accordance with relevant condition(s) of consent and the *Independent Audit Post Approval Requirements (Department 2018)*;
- the findings of the audit are reported truthfully, accurately and completely;
- I have exercised due diligence and professional judgement in conducting the audit;
- I have acted professionally, objectively and in an unbiased manner;
- I am not related to any proponent, owner or operator of the project neither as an employer, business partner, employee, or by sharing a common employer, having a contractual arrangement outside the audit, or by relationship as spouse, partner, sibling, parent, or child;
- I do not have any pecuniary interest in the audited project, including where there is a reasonable likelihood or expectation of financial gain or loss to me or spouse, partner, sibling, parent, or child;
- neither I nor my employer have provided consultancy services for the audited project that were subject to this audit except as otherwise declared to the Department prior to the audit; and
- I have not accepted, nor intend to accept any inducement, commission, gift or any other benefit (apart from payment for auditing services) from any proponent, owner or operator of the project, their employees or any interested party. I have not knowingly allowed, nor intend to allow my colleagues to do so.

#### Notes:

- Under section 10.6 of the *Environmental Planning and Assessment Act 1979* a person must not include false or misleading information (or provide information for inclusion in) in a report of monitoring data or an audit report produced to the Minister in connection with an audit if the person knows that the information is false or misleading in a material respect. The proponent of an approved project must not fail to include information in (or provide information for inclusion in) a report of monitoring data or an audit report produced to the Minister in connection with an audit if the person knows that the information is materially relevant to the monitoring or audit. The maximum penalty is, in the case of a corporation, \$1 million and for an individual, \$250,000; and
- The *Crimes Act 1900* contains other offences relating to false and misleading information: section 307B (giving false or misleading information – maximum penalty 2 years imprisonment or 200 penalty units, or both)

Name of Auditor	Helen Onus
Signature	
Qualification	Lead Auditor Certification – Exemplar Global
Company	AECOM
Company Address	Level 21, 420 George Street, Sydney, NSW 2000