

# Independent Environmental Audit Metropolitan Coal Mine Helensburgh

transport | community | mining | industrial | food & beverage | energy



**Prepared for:**

Metropolitan Coal

**Client representative:**

Stephen Love

**Date:**

26 June 2018

Rev 2

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Prepared by: **Avanish Panikkar** Date: 5 June 2018

Reviewed by: **Ken Holmes** Date: 5 June 2018

Authorised by: **Ken Holmes** Date: 5 June 2018

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## Acronyms

CC	Campbelltown Council
CCC	Community Consultative Committee
CCL	Consolidated Coal Lease
CMP	Catchment Monitoring Program
DECC	Department of Environment and Climate Change
DoI	Department of Industries
DPI	Department of Planning and Infrastructure
DP&E	Department of Planning and Environment (formerly DP&I)
DRE	Department of Resources and Energy
EA	Environmental Assessment
EMP	Environmental Management Plan
EP	Extraction Plan
EPA	NSW Environment Protection Authority
EPL	Environmental Protection Licence
EP&A Act	Environmental Planning and Assessment Act 1979
HCPL	Helensburgh Coal Pty Limited
I&I	NSW Industry & Investment NSW
ML	Mining Lease
MOP	Mine Operations Plan
LW20-22	Longwalls 20-22
LW23-27	Longwalls 23-27
LW301-307	Longwalls 301-307
NOW	NSW Office of Water
OEH	NSW Office of Environment and Heritage
OoW	Office of Water
RFS	NSW Rural Fire Service
RMP	Rehabilitation Management Plan
RS	Rehabilitation Strategy
SCA	Sydney Catchment Authority
SFWMP	Surface Facilities Water Management
SoC	Statement of Commitments
TSS	Total Suspended Solids
Water NSW	(formerly SCA and State Water Corporation) NSW State-owned Corporation acting as bulk water supplier and operator of rivers, dams and pipelines
WCC	Wollongong City Council
WMP	Water Management Plan

## Executive Summary

**Pitt&sherry** was engaged by Peabody (Australia), to conduct an Independent Environmental Audit (IEA) of the Helensburgh Coal Mine located on Parkes St, Helensburgh, New South Wales (NSW). The audit comprised a site inspection on Wednesday the 14 March 2018, document review, interviews with personnel, consultation with agencies and reporting of the findings. The audit was undertaken to meet the brief outlined in the **pitt&sherry** Proposal (dated 21 November 2017). Environmental performance of the project is reviewed by way of compliance with the requirements and conditions of the following regulatory approvals and provides recommendations to improve the environmental performance of the project.

- Metropolitan Coal Project Approval 08\_0149 (Mod 3, dated 2 Oct 2013)
- Environmental Protection Licence (EPL) No. 767
- Consolidated Coal Lease 703
- DPI OoW Groundwater Licence 10BL603595
- Mining Renewal Grant ML 1610
- Longwalls 23-27 Extraction Plan Approval
- Longwalls 23-27 Subsidence Management Plan Approval.

The IEA was required in accordance with Condition 8, Schedule 7 of the Metropolitan Coal Project Approval 08\_0149 for the mine. In line with this, an initial independent external environmental audit was to be undertaken within a year of the date of the consent and every 3 years thereafter. This is the third three-yearly IEA to be conducted as per this condition covering the period from 1 January 2015 to 31 December 2017.

The site was found to be in reasonably good condition during the site inspection and the operations were contained to within the site boundaries. Detailed review of documentation and interviews identified a number of issues that need to be addressed and these are outlined in the compliance section of this audit report (Table 4) as well as summarised below.


Non-compliances identified in the previous audit have been satisfactorily addressed by the auditee. In general, operational environmental management activities observed during the site inspection were being carried out in a competent manner, with very few non-compliances identified by the Auditor. Those non-compliances and observations are detailed in the body of this report.

During this audit, some conditions within the Project Approval, Mining Lease and Subsidence Management Plan Approval were not verified due to inadequacy of objective evidence.

During the site inspection, non-compliances and opportunities for improvement were identified in the following areas:

- Noise management
- Subsidence Management
- Pollution Control and Monitoring and
- Documents / Records and data management.

## Auditor Certification

Independent Audit Certification Form	
Development Name	Metropolitan Coal Mine, Helensburgh
Development Consent No.	Metropolitan Coal Project Approval 08_0149
Description of Development	Coal Mine
Development Address	Parkes St, Helensburgh NSW 2508
Proponent	Metropolitan Collieries Pty Ltd
Operator Address	Metropolitan Coal (Peabody Energy Australia Pty Ltd) Parkes St, Helensburgh NSW 2508
Independent Audit	
Title of Audit	Metropolitan Coal Mine Independent Environmental Audit
<p><i>I certify that I have undertaken the independent audit and prepared the contents of the attached independent audit report and to the best of my knowledge:</i></p> <ul style="list-style-type: none"> <li><i>The audit has been undertaken in accordance with relevant approval condition(s) and in accordance with the auditing standard AS/NZS ISO 19011:2011 and Post Approval Guidelines – Independent Audits</i></li> <li><i>The findings of the audit are reported truthfully, accurately and completely;</i></li> <li><i>I have exercised due diligence and professional judgement in conducting the audit;</i></li> <li><i>I have acted professionally, in an unbiased manner and did not allow undue influence to limit or over-ride objectivity in conducting the audit;</i></li> <li><i>I am not related to any owner or operator of the development as an employer, business partner, employee, sharing a common employer, having a contractual arrangement outside the audit, spouse, partner, sibling, parent, or child;</i></li> <li><i>I do not have any pecuniary interest in the audited development, including where there is a reasonable likelihood or expectation of financial gain or loss to me or to a person to whom I am closely related (i.e. immediate family);</i></li> <li><i>Neither I nor my employer have provided consultancy services for the audited development that were subject to this audit except as otherwise declared to the lead regulator prior to the audit; and</i></li> <li><i>I have not accepted, nor intend to accept any inducement, commission, gift or any other benefit (apart from fair payment) from any owner or operator of the development, their employees or any interested party. I have not knowingly allowed, nor intend to allow my colleagues to do so.</i></li> </ul> <p><i>Note.</i></p> <p><i>a) The Independent Audit is an ‘environmental audit’ for the purposes of section 122B(2) of the Environmental Planning and Assessment Act 1979. Section 122E provides that a person must not include false or misleading information (or provide information for inclusion in) an audit report produced to the Minister in connection with an environmental audit if the person knows that the information is false or misleading in a material respect. The maximum penalty is, in the case of a corporation, \$1 million and for an individual, \$250,000.</i></p> <p><i>b) The Crimes Act 1900 contains other offences relating to false and misleading information: section 192G (Intention to defraud by false or misleading statement—maximum penalty 5 years imprisonment); sections 307A, 307B and 307C (False or misleading applications/information/documents—maximum penalty 2 years imprisonment or \$22,000, or both).</i></p>	
Signature	
Name of Lead/Principal Auditor	Ken Holmes
Address	4 Baeckea Place, Frenchs Forest, NSW
Email Address	kholmes@pittsh.com.au
Auditor Certification (if relevant)	Exemplar Global 14065
Date	26 June 2018

## 1. Introduction

**pitt&sherry** was engaged by Metropolitan Coal, to conduct an Independent Environmental Audit (IEA) of the Helensburgh Coal Mine located on Parkes St, Helensburgh, New South Wales (NSW). The IEA was required in accordance with condition 8, schedule 7 of the Metropolitan Coal Project Approval 08\_0149 (Mod 3, dated 2 Oct 2013) for the mine. In line with this, an initial independent external environmental audit is to be undertaken by December 2011 and every 3 years thereafter. This is the third three-yearly IEA to be conducted at the site. This IEA report details the audit process, presents the audit findings and provides recommendations that if implemented will facilitate improved compliance with environmental approvals.

### 1.1 Metropolitan Coal Mine

Peabody Energy operates the Metropolitan Coal Mine, located on Parkes St Helensburgh, New South Wales (NSW). The Metropolitan Coal Project Approval (08\_0149) was granted on 22 June 2009 under Section 75J of the NSW EP&A Act) by the NSW Minister for Planning and Infrastructure and has been modified thrice since this time:

- Mod 1 (8 September 2010) – to construct a replacement underground drift, including construction of a new drift portal at the mine’s Major Surface Facilities Area
- Mod 2 (2 July 2011) – relating to the amount of product coal to be trucked off-site and the number of truck departures for product coal and coal reject
- Mod 3 (3 October 2013) – to consolidate the annual environmental reporting requirements under the Project Approval and the Mining Lease and Consolidated Coal Lease conditions.

Metropolitan Coal Mine is considered the oldest continually operating coal mine in Australia, having been in operation from 1888. The mine uses underground longwall mining techniques to extract coal, which is then transferred by conveyor for further processing at the surface facilities. Surface activities include coal washing, sorting and shipping to Port Kembla Coal Terminal for domestic and international shipping. The main products are hard coking and semi-hard coking product coal. The majority of coal wash reject is transported to the Glenlee Washery for disposal while a smaller proportion is pumped underground as part of the coal wash reject emplacement plant where it is injected into the goaf behind the longwall.

In the longwall mining process, coal seam is mined at a minimum depth of 400m from the ground surface with each section being 153m wide by design. The project area is wholly located in the Woronora Plateau (Woronora Reservoir Catchment) adjacent to the Royal National Park, which is the second oldest national park in the world and the oldest in Australia. Mining is undertaken beneath the Waratah Rivulet and upper reaches of Woronora Reservoir as per relevant approval conditions. Subsidence is predominantly managed through mine layout planning prior to extraction. Metropolitan has also developed a rock bar remediation technique to rehabilitate sections of stream on Waratah Rivulet and Eastern Tributary where required.

## 1.2 Audit Summary

Audit Title:	Metropolitan Coal Mine Independent Environmental Audit
Site:	Parkes St, Helensburgh
Client Contact:	Stephen Love
Position:	Environment and Community Superintendent
Client:	Peabody Energy Pty Ltd
Client Address:	100 Melbourne St, South Brisbane QLD 4101
Mine Address:	Parkes St, Helensburgh NSW 2508
Client Telephone:	02 9412 6600
Client Email:	<a href="mailto:slove@peabodyenergy.com.au">slove@peabodyenergy.com.au</a>
Audit Team:	Ken Holmes – Certified Lead Auditor Dr Avanish Panikkar – Certified Principal Auditor Jade Molloy – Certified Principal Auditor
Auditor's Telephone:	0438 046 261
Auditor's Fax:	(02) 8008 1600
Date of Site Visit	14 March 2018
Audit Scope:	<p>The audit was undertaken to meet the brief outlined in the <b>pitt&amp;sherry</b> Proposal (dated 21 November 2017). As such, the audit provides an assessment of the environmental performance of the project by way of compliance with the requirements and conditions of the following regulatory approvals and provides recommendations to improve the environmental performance of the project.</p> <ul style="list-style-type: none"> <li>• Metropolitan Coal Project Approval 08_0149 (Mod 3, dated 2 Oct 2013)</li> <li>• Consolidated Coal Lease 703</li> <li>• Environmental Protection Licence (EPL) No. 767</li> <li>• DPI OoW Groundwater Licence 10BL603595</li> <li>• Mining Renewal Grant ML 1610</li> <li>• Longwalls 23-27 Extraction Plan Approval</li> <li>• Longwalls 23-27 Subsidence Management Plan Approval.</li> </ul>

## 2. Audit Process

The audit process and methodology are described in this section, and comprised the following key undertakings:

- Preliminary planning activities
- Review of information and preparation of a compliance register (audit protocol / checklist)
- Site inspection and interviews:
  - Opening meeting
  - Site inspection
  - Review of relevant records
- Review of additional information provided after the site inspection
- Preparation of this audit report.

### 2.1 Preliminary Activities

Off-site planning for the site audit comprised:

- Initial discussions with Stephen Love, Environment and Planning Superintendent, to organise the site inspection
- Prepare and Review the audit protocol / compliance checklist
- Completion of a **pitt&sherry** Site Risk Assessment
- Review of Metropolitan Coal Mine online information
- Submission of a preliminary document / record request.

### 2.2 Information Review and Compliance Register

Prior to the site inspection, Jade Molloy, in consultation with Ken Holmes and Dr Avanish Panikkar, reviewed and revised the compliance register (as per previous IEAs) which formed both the audit checklist used during the site inspection and is the compliance register presented in the Appendices of this report. The compliance register specifies the conditions within:

- Metropolitan Coal Project Approval 08\_0149 (Mod 3, dated 2 Oct 2013)
- Consolidated Coal Lease 703
- Environmental Protection Licence (EPL) No. 767
- DPI OoW Groundwater Licence 10BL603595
- Mining Renewal Grant ML 1610
- Longwalls 23-27 Extraction Plan Approval
- Longwalls 23-27 Subsidence Management Plan Approval.

### 2.3 Site Audit

The audit team conducted the site inspection component of the Metropolitan Coal Mine audit on Wednesday 14 March 2018.



### 2.3.1 Opening meeting

Following site inductions, the opening meeting was held on-site at Metropolitan Coal office. It was attended by Stephen Love (Environment & Community Superintendent – Peabody Energy) as well as the audit team comprising Ken Holmes (Lead Auditor) and Dr Avanish Panikkar (Principal Auditor). Introductions were made and the purpose and scope of the audit was outlined. An explanation of the audit process was communicated. That is, a site inspection, site interviews and detailed review of records in order to identify compliance with the approval conditions relevant to the current operations at the site.

### 2.3.2 Site Inspection

A general tour of the site was attended by the audit team, Ken Holmes and Dr Avanish Panikkar, accompanied by Stephen Love. After undertaking necessary site inductions, this included observation of:

- Woronora Special Area – Waratah Rivulet impacts and remediation
- Eastern Tributary impacts
- Groundwater monitoring instrumentation
- Swamp 20 impacts
- Surface facilities.

Some site photographs are reproduced in **Appendix A** of this report.

### 2.3.3 Site Interviews

Audit interview comprised of discussions during site inspection visit and also at the Metropolitan Coal office with Stephen Love - Environment & Community Superintendent, Peabody Energy.

### 2.3.4 Document review

Compliance related documents that were not available during the site component of the audit were requested to be provided following the audit. Stephen Love assisted with the provision of documentation following the audit, through secure file transfer mechanisms. The key documents reviewed during this audit are listed in the Compliance Registers.

## 2.4 Reporting

The compliance register was completed using notes and observations recorded during the site inspection / interviews and review of appropriate Peabody / Metropolitan Coal documentation. The completed compliance registers are presented in **Appendix B**. A summary of the non-compliances identified during this audit are provided in Table 4.

### 2.4.1 Audit Criteria

The audit criteria used to determine compliance for this audit is defined in

Table 1.

Table 1 Compliance assessment criteria

Assessment	Criteria
<b>Compliant</b>	<p><b>Compliance</b></p> <p>The site complies with the requirements of applicable regulatory instruments (DA/Licence/Permit) &amp; associated environmental requirements.</p> <p>A judgment made by an auditor that the activities undertaken and the results achieved fulfil the specified requirements of the audit criteria. While further improvements may still be possible, the minimum requirements are being met.</p>
<b>Non-Compliant</b>	<p><b>Non-Compliance</b></p> <p>Clear evidence has been collected to demonstrate the particular requirement has not been complied with and is within the scope of the audit.</p> <p>Site displays little or no evidence of compliance with the requirements of the regulatory documentation.</p>
<b>Observation</b>	<p><b>Observation (Minor non-compliance)</b></p> <p>Evidence of controls being partially in place, but with some gaps evident.</p> <p>* May have an understanding of requirement but cannot verify its implementation.</p>
<b>Not Verified</b>	<p>Where the auditor has not been able to collect sufficient verifiable evidence to demonstrate that the intent and all elements of the requirement of the regulatory approval have been complied with within the scope of the audit. In the absence of sufficient verification, the auditor may in some instances be able to verify by other means (visual inspection, personal communication, etc.) that a requirement has been met. In such a situation, the requirement should still be assessed as not verified. However, the auditor could note in the report that they have no reasons to believe that the operation is non-compliant with that requirement.</p>
<b>Not Triggered</b>	<p><b>Not Applicable / Not Triggered</b></p> <p>The respective condition / requirement was not activated within the scope of the audit.</p>
<b>Noted</b>	<p>A statement or fact, where no assessment of compliance is required.</p>

Risk levels for any non-compliances were identified consistent with Table 2.

Table 2 Risk levels for non-compliances

Risk Level	Description
<b>High</b>	Non-compliance with potential for significant environmental consequences, regardless of the likelihood of occurrence.
<b>Medium</b>	Non-compliance with: <ul style="list-style-type: none"> <li>potential for serious environmental consequences, but is unlikely to occur; or</li> <li>potential for moderate environmental consequences, but is likely to occur.</li> </ul>
<b>Low</b>	Non-compliance with: <ul style="list-style-type: none"> <li>potential for moderate environmental consequences, but is unlikely to occur; or</li> <li>potential for low environmental consequences, but is likely to occur.</li> </ul>
<b>Administrative non-compliance</b>	Only to be applied where the non-compliance does not result in any risk of environmental harm (e.g. submitting a report to government later than required under approval conditions).

### 3. Statutory Compliance & Recommendations

The environmental performance of the Metropolitan Coal Mine has been reviewed by assessing compliance against the various documentation related to project approval, as listed in section 2.2 of this report. Compliance Registers presented in **Appendix B** provide a detailed review of the compliance status of the site, including recommendations to address non-conformances.

#### 3.1 Summary of Compliance Status

A summary of compliance with statutory requirements is provided in Table 3. The number of conditions include sub-clauses within each approval document.

Table 3 Summary of Statutory Compliance

Approval/ Licence	No. of Conditions	Compliant	Non- Compliant	Observation	Noted	Not Verified	n/a or Not Triggered
<b>Development Consent (08_0149)</b>	103	76	4	5	6	0	12
<b>Consolidated Coal Lease 703</b>	83	29	0	0	54	0	0
<b>EPL No. 767</b>	52	20	4	1	27	0	0
<b>Mining Lease 1610</b>	20	10	0	0	10	0	0
<b>Groundwater Licence No. 10BL603595</b>	9	7	0	0	2	0	0
<b>Subsidence Management Plan Approval</b>	31	17	0	0	12	0	2
<b>Extraction Plan Approval</b>	9	4	0	1	4	0	0
<b>TOTAL</b>	307	163	8	7	115	0	14

### 3.2 Non-Compliances and Observations

Observations and Non-compliances identified during the site inspection, interviews and document reviews are recorded in detail in the Compliance Registers in **Appendix B** and are summarised in Table 4. Recommendations have been made to address all identified Non-Compliances and the Observations. Please note that Table 4 excludes conditions that could not be verified as compliant during this IEA.

Table 4 Non-Compliances and Recommendations

#	Condition	Requirement	Observation / Recommendation	Risk Level
O 1	Sch. 2 Cond.9	<p><b>Structural Adequacy</b></p> <p>The Proponent shall ensure that all new buildings and structures, and any alterations or additions to existing buildings and structure, are constructed in accordance with:</p> <p>(a) the relevant requirements of the BCA; and</p> <p>(b) any additional requirements of the MSB in areas where subsidence effects are likely to occur.</p> <p>Notes;</p> <ul style="list-style-type: none"> <li>- Under Part 4A of the EP&amp;A Act, the Proponent is required to obtain construction and occupation certificates for the proposed building works.</li> <li>- Part 8 of the EP&amp;A Regulation sets out the requirements for the certification of the project.</li> </ul>	<p>In 2015, CHPP upgrade activities were undertaken, new winder house was completed and construction of a new compressor shed was commenced as per BCA requirements. The construction of the compressor shed is not mentioned in subsequent annual reports.</p>	Observation
O 2	Sch. 2 Cond.10	<p><b>Demolition</b></p> <p>The Proponent shall ensure that all demolition work is carried out in accordance with Australian Standard AS 2601-2001: The Demolition of Structures, or its latest version.</p>	<p>There were no demolition of buildings or associated structures at the site during 2015 - 2016.</p> <p>Decommissioning of transformers and associated structures have occurred near Vent Shaft 3 and also at the surface works recently. No structures were removed other than support platforms. This is not noted in the Annual Reviews.</p>	Observation

#	Condition	Requirement	Observation / Recommendation	Risk Level
NC 1	Sch. 3 Cond.1	<p><b>Performance Measures</b></p> <p>The Proponent shall ensure that the project does not cause any exceedances of the performance measures in Table 1.</p> <p>Note: The Proponent will be required to define more detailed performance indicators for each of these performance measures in the various management plans that are required under this approval (see condition 6 below).</p>	<p>Annual Review 2016 and 2017 report exceedance of the Eastern Tributary watercourse subsidence impact performance measure in relation to iron staining and pool flow / drainage behaviour downstream of the Longwall 26 maingate.</p> <p><b>Exceedance of subsidence impact performance measures need to be continuously reviewed and corrective actions implemented.</b></p>	Low
NC 2	Sch. 4 Cond. 1	<p><b>Noise impact Assessment Criteria</b></p> <p>By the end of 2014, the Proponent shall ensure that the noise generated by the project does not exceed the noise impact assessment criteria in Table 2 at any residence on privately-owned land, or on more than 25% of any privately-owned land.</p>	<p>The Annual Reviews for 2015, 2016 and 2017 have reported sustained non-compliances with the Noise Impact Assessment Criteria as recorded at two monitoring locations during 2015 and monitoring and noise modelling indicating non-compliances during 2016 and 2017.</p> <p>Annual Review 2016 proposed to conduct a technical peer review of existing noise mitigation strategy. Letter dated 30 June provided the review findings and proposed next steps. An undertaking was signed by Peabody on 19 Oct 2017 as required per letter from DPE dt 18 Oct 2017 offering no further enforcement action provided actions specified in the undertaking are achieved by agreed dates without further complaints. As per complaints register, a complaint was received on 28 November 2017 regarding noise during early morning loading of train during the weekend of 25-26 Nov 2017. The matter was investigated and communicated to the complainant.</p> <p><b>Proponent should take measures to avoid non-compliances regarding noise monitoring and noise levels.</b></p>	Low

#	Condition	Requirement	Observation / Recommendation	Risk Level
NC 3	Sch. 4 Cond. 3	<p><b>Noise Mitigation Measures</b></p> <p>It after 2014, the noise generated by the project exceeds the criteria in Table 4 at any residence on privately-owned land, then the Proponent shall, upon receiving a written request from the landowner, implement reasonable and feasible noise mitigation measures (such as double-glazing, insulation, and/or air conditioning) at the residence in consultation with the landowner. if within 3 months of receiving this request from the landowner, the Proponent 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 Director-General for resolution.</p>	<p>Helensburgh Coal breached noise limit obligations at four locations near the mine site, as per DPE issued penalty notice in December 2017. There was a noise complaint in 2015-2016 as well.</p> <p>Real time noise monitoring indicated one trigger event related to Mine operations in July 2015 (unauthorised truck delivery) and no trigger event identified in 2016 and 2017.</p> <p>Noise suppressive cladding and other measures have been implemented at the loading bay. Noise modelling has been undertaken, which indicated potential sustained non-compliances as per relevant 2016 attended noise monitoring results.</p> <p><b>Proponent should take measures to avoid further non-compliances regarding noise monitoring and noise levels.</b></p>	Low
O 3	Sch. 4 Cond. 14	<p><b>Soil &amp; Water – Discharges</b></p> <p>The Proponent shall ensure that all surface water discharges from the site comply with the discharge limits (both volume and quality) set for the project in any EPL.</p>	<p>There has been a breach of licensed discharge condition whereby a spill of hydraulic fluid (Quintolubric 818-02 not defined in the Table L2.4 of the EPL) occurred on 28 July 2016 resulting in an EPA warning letter. An observation is made to the reported water discharge breach of compliance in 2016, which should be continually monitored for compliance and reported.</p>	Observation

#	Condition	Requirement	Observation / Recommendation	Risk Level
O 4	Sch. 4 Cond. 19	<p><b>Road Transport Restrictions</b></p> <p>The Proponent shall not:</p> <p>(a) load coal or coal reject onto trucks, or transport it off site by road, outside the hours of 7am and 6pm Monday to Friday;</p> <p>(b) transport more than 170,000 tonnes of coal off site by road in a calendar year;</p> <p>(c) transport any coal off site to the Port Kembla Coal Terminal by road;</p> <p>(d) permit the departure of more than 25 trucks containing product coal for delivery to the Corrimal Cokeworks on any given day; or</p> <p>(e) permit the departure of more than 30 trucks containing product coal for delivery to the Coalcliff Cokeworks on any given day.</p>	<p>Helensburgh Coal records demonstrate that no coal was transported from the site by road during the audit period. Therefore conditions 19 (b) through to 19 (e) were not triggered.</p> <p>Annual Review 2015, 2016, 2017 Peabody website has the truck and train register which gives only the total annual tonnage. Jan-Jun 2017 record indicates approx. 81 kilotonnes of coal reject transported by road.</p> <p>Records provided to the auditor did not include information regarding the time of day that the coal rejects were transported. Note that no records of complaints regarding out of hours truck movements had been received and there is no evidence that Condition 19(a) had not been complied with.</p> <p>As per Traffic Management Plan rev G, section 8.3.1, haulage contractors will only transport during the approved hours Mon-Fri. The transported quantity is within the limit. As per information in the community newsletter, the plant is aiming to eliminate road transport of coal rejects by 2021.</p> <p><b>The truck and train register or other publicly available document is to have more pertinent information such as timing and number of truck movements per specific timeframe.</b></p>	Observation



#	Condition	Requirement	Observation / Recommendation	Risk Level
NC 4	Sch. 5 Cond. 1	If the results of the monitoring required in schedule 4 identify that impacts generated by the project are greater than the relevant impact assessment criteria in schedule 4, except where a negotiated agreement has been entered into in Relation to that impact, then the Proponent shall, within 2 weeks of obtaining the monitoring results, notify the Executive Director Mineral Resources, the affected landowners and tenants (including tenants of mine owned properties) accordingly, and provide quarterly monitoring results to each of these parties until the results show that the project is complying with the criteria in schedule 4.	Sustained noise non-compliances in 2015/2016 were not notified to the nearby residences on time until after meeting with DP&E.  <b>Sustained non-compliance in terms of noise generation and, in this case, timely monitoring, assessment and reporting to affected landowners and tenants should be continually undertaken.</b>	Administrative non-compliance

#	Condition	Requirement	Observation / Recommendation	Risk Level
O 5	Sch. 7 Cond. 10	<p><b>Access to Information</b></p> <p>From the end of 2009, the Proponent shall make the following information publicly available on its website:</p> <p>(a) a copy of all current statutory approvals;</p> <p>(b) a copy of the current environmental management strategy and associated plans and programs;</p> <p>(c) a summary of the monitoring results of the project, which have been reported in accordance with the various plans and programs approved under the conditions of this approval;</p> <p>(d) a complaints register, which is to be updated on a monthly basis;</p> <p>(e) a copy of the minutes of CCC meetings;</p> <p>(f) a copy of any Annual Reviews (over the last 5 years);</p> <p>(g) a copy of any independent Environmental Audit, and the proponent's response to the recommendations in any audit; and</p> <p>(h) any other matter required by the Director-General.</p>	<p>While most of the required information is available on Peabody website, the complaints register has only one complaint in 2017 and no historical information is publicly available.</p> <p>An observation is made regarding details on the complaints register - It is recommended to provide a detailed list of complaints and actions including closure in the complaints register. Though the historical information is noted in the annual reviews, having them in the one register will provide context and history if relevant issues.</p> <p>It is further recommended to maintain a register of incidents, actions and reporting timeframes as relevant. This is only a suggestion as an opportunity for improvement.</p>	Observation
NC 5	EPL Cond. L1.1	<p><b>Pollution of waters</b></p> <p>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.</p>	<p>There has been a breach of licensed discharge condition whereby a spill of hydraulic fluid and green marker fluid occurred on 28 July 2016. EPA had issued a warning letter on 2 August 2016 and underground personnel have been asked to report any discolourations and safety valves have been fitted to prevent further spills.</p> <p><b>The proponent is to undertake relevant action as per EPA instruction and continue to follow up/ monitor to avoid recurrence.</b></p>	Low

#	Condition	Requirement	Observation / Recommendation	Risk Level
NC 6	EPL Cond. L2.3	<p><b>Concentration Limits</b></p> <p>To avoid any doubt, this condition does not authorise the pollution of waters by any pollutant other than those specified in the table\</p>	<p>The chemical that caused the above breach, Quintolubric 818-02, is not defined in Table L2.4 of EPL No.767.</p> <p><b>It is recommended to discuss with EPA on appropriate action to avoid recurrence of this or similar incidents.</b></p>	Low
NC 7	EPL Cond. M2.1	<p><b>Requirement to monitor concentration of pollutants discharged</b></p> <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>Sampling could not be conducted at all the required monitoring points due to access restrictions and instrument breakage at three dust gauges on various occasions. Specifically, dust gauges were found to be broken at: DG4 and DG8 (Feb 2015), DG3 (Dec 2015), DG5 (July 2016), DG7 (January and March 2016).</p> <p><b>It is recommended to undertake the management measures to rectify identified non-compliances and follow up so that the issues don't repeat.</b></p>	Administrative non-compliance
NC 8	EPL Cond. M2.2	Air Monitoring Requirements at Points 1,2,3,4,5 as per Table		Administrative non-compliance
O 6	EPL Cond. M4.1	<p><b>Recording of pollution complaints</b></p> <p>The record must include details of the following:</p> <ol style="list-style-type: none"> <li>the date and time of the complaint;</li> <li>the method by which the complaint was made;</li> <li>any personal details of the complainant which were provided by the complainant or, if no such details were provided, a note to that effect;</li> <li>the nature of the complaint;</li> <li>the action taken by the licensee in relation to the complaint, including any follow-up contact with the complainant; and</li> <li>if no action was taken by the licensee, the reasons why no action was taken.</li> </ol>	<p>Complaints register on the website has details of complaints in the year. Historical details are not available, though, these are detailed in the Annual Reports.</p> <p><b>It is recommended to provide a detailed list of complaints and actions including closure in the complaints register.</b></p>	Observation

#	Condition	Requirement	Observation / Recommendation	Risk Level
07	Extraction Plan Approval CI 7	<p><b>Remediation</b></p> <p>If the Proponent does not meet the performance measures in condition 1 of Schedule 3 of approval MP 08_0149, then the Director General may issue the Proponent with a direction in writing to undertake actions or measures to mitigate or remediate subsidence impacts and/or associated environmental consequences. The Proponent must implement the direction in accordance with its terms and requirements, in consultation with the Director-General and affected agencies.</p>	<p>An observation has been made that the reasons for non-compliance and actions (undertaken and proposed) as per the directions issued by DG. The results of the proposed actions need further review and reporting</p>	<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Observation</p>

### 3.3 Opportunities for Improvement

During the detailed data review and audit, a range of observations related to environmental risk management and performance were identified. These observations and subsequent recommendations are presented below.

#### 3.3.1 Noise management

Sustained non-compliance on noise management has been identified across the audit period, as per monitoring records and modelling, complaints and Metropolitan Coal's internal reviews (as per Annual Review reports). Continued liaison, monitoring and modelling and reporting is recommended to monitor the issue while measures to reduce the impact should be implemented.

#### 3.3.2 Subsidence Management

Eastern Tributary watercourse subsidence impact performance measure (*Negligible environmental consequences over at least 70% of the stream length (that is no diversion of flows, no change in the natural drainage behaviour of pools, minimal iron staining and minimal gas releases)*) had been exceeded in relation to iron staining and pool flow/drainage behaviour downstream of the Longwall 26 maingate.

#### 3.3.3 Pollution Monitoring

Pollution monitoring equipment (dust gauges) failure has been reported across 2015 and 2016 Annual Reviews. Gauge failures have not occurred in 2017 as per Annual Review 2017; however, it is recommended to monitor dust gauges for access, integrity and usefulness.

#### 3.3.4 Records/Document Management

Some of the opportunities for improvement identified at the audit relate to details of information presented for public access. For example: complaint register lacking historic information and the truck and train register or other publicly available document related to Road Transport Restrictions is to have more pertinent information such as timing and number of truck movements per specific timeframe.

Other environmental improvement opportunities, including those identified from conditions where compliance could not be verified, have been provided as non-compliances in section 2 of this report.

## 4. Limitations

This section should be read before reliance is placed on any of the opinions, advice, recommendations or conclusions herein set out.

This report has been prepared for and at the request of Metropolitan Coal / Peabody Energy (The Client) pursuant to their appointment of Pitt & Sherry (Operations) Pty Ltd, (**pitt&sherry**), to act as its Independent Environmental Auditor. Save for the Client, no duty is undertaken or warranty or representation made to any party in respect of the opinions, advice, recommendations or conclusions herein set out.

Regard should be had to the terms and conditions of **pitt&sherry's** Proposal when considering this report and reliance to be placed on it.

All work carried out in preparing this report has used, and is based upon, **pitt&sherry's** professional knowledge and understanding of the current relevant environmental legislation.

Changes in the below may cause the opinion, advice, recommendations or conclusions set out in this report to become inappropriate or incorrect. **pitt&sherry** will have no obligation to advise the Client of any such changes, or of their repercussions.

This report is based on observations during the Environmental Audit and information provided by the client. The information collected during the audit is believed to be true and is solely based on visual inspection (or site conditions and documentation presented) and information provided by the auditee. **pitt&sherry** is of the belief that all the information provided by the auditee is correct and true at the time of the audit.

Assessment of the adequacy of any environmental management strategies, plans and programs was limited to a brief desktop review only with regards to the Audit Scope. The EMS was not reviewed against ISO14001.

The content of this report represents the professional opinion of experienced environmental consultants. **pitt&sherry** does not provide specialist legal advice and the advice of appropriate legal professionals may be required.

## Appendix A

### Site Photographs

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Metropolitan Coal



Flat Rock Crossing

1

Note iron staining



Pool F - creek bed cracking remediation site

2



Iron staining near Pool F

3



Poly Urethane Grout filled crack near Pool F

4







Poly Urethane injection point

5



Dislodged sandstone near Pool F

6



Swamp 20

7



Eastern Tributary Crossing

8

No water was flowing in the creek despite recent rain. Rock base in the creek bed is clearly cracked from mine subsidence.





Eastern Tributary

9

Cracking of surface shelf from mine subsidence.



Mine Vent Shaft

10



Vent Shaft Stormwater

11

Clean water diversion drain, up slope from the shaft discharges into the vent shaft yard. A recent audit by DP&E, DRG, EPA, and WaterNSW were concerned that this drain did not bypass the site. This audit concluded that there is no significant risk associated with the current drain setup and that no drainage changes are warranted.



Vent Shaft Transformer Pads

12

The decommissioned transfers have been removed to prevent vandalism. No sampling and testing of the soils for the presence of PCBS in this area has been undertaken. Management reported that testing of the transformer oil detected no PCBs.





Coal Washing Plant

13



Rejects Loading for off site disposal

14

Rejects trucked to Glenn Lea near Camden



Storage Yard

15

No storage issues observed. Bulk fuel is stored in self bunded tanks



General housekeeping is average at best

16



Metropolitan Coal



Decomissioned Transformers

17

Management are planning to remove these transformers. Management did not know if the transformer oils have been tested for PCB content.



Oil sheen on surface of wwtp clarifier

18



Coal stockpile.

19

Note. Turkeys Nest sedimentation pond is located behind the further most stockpile



Main sediment dam, currently being

20



## Appendix B

### Compliance Registers

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Resources Metropolitan Coal Independent Environmental Audit Detailed Findings and Recommendations					
Development Consent 08_0149 Modification 1 - 8 September 2010, Modification 2-2 July 2011, Modification 3 - 2 October 2013					
Clause	Requirement	Compliance	Audit Finding	Objective Evidence	Recommendation
<b>SCHEDULE 2 - ADMINISTRATIVE CONDITIONS OBLIGATION TO MINIMISE HARM TO THE ENVIRONMENT</b>					
1	The Proponent shall implement all reasonable and feasible measures to prevent and/or minimise any harm to the environment that may result from the construction, operation, or rehabilitation of the project	Noted			
<b>TERMS OF APPROVAL</b>					
2	The Proponent shall carry out the project generally in accordance with the (a) EA; (b) PPR; (c) EA - Mod 1; and (d) conditions of this approval.	Noted			
3	If there is any inconsistency between the above documents, the most recent document shall prevail to the extent of the inconsistency. However, the conditions of this approval shall prevail to the extent of any inconsistency.	Noted			
4	The Proponent shall comply with any reasonable requirements of the Director-General arising from the Department's assessment of:  (a) any strategies, plans, programs, reviews, audits, or correspondence that are submitted in accordance with this approval; and (b) the implementation of any actions or measures contained in these documents.	Noted			
<b>LIMITS ON APPROVAL</b>					
5	The Proponent may undertake mining operations in the mining area for up to 23 years from the date of this approval.  <i>Note: Under this approval, the Proponent is required to rehabilitate the site and perform additional undertakings to the satisfaction of the Director-General. Consequently, this approval will continue to apply in all other respects other than the right to conduct mining operations until the site has been properly rehabilitated.</i>	Compliant	Ongoing compliance - mining operations may continue till 2032 (Coal Lease 379 is valid till 2033 and the Mining Leases till 2035). Site rehabilitation is undertaken as per Rehabilitation Plans and reported in Annual Reviews.	Rehabilitation Management Plan Annual Review reports for 2015, 2016, 2017 Annual Rehabilitation Report	
6	The Proponent shall not: (a) extract more than 3.2 million tonnes of ROM coal from the mining area in a calendar year, or (b) transport more than 2.8 million tonnes of product coal from the site in a calendar year.	Compliant	a) ROM coal quantities have been 2.3Mt in 2015, 2.24Mt in 2016 and 1.37Mt in 2017. b) product coal quantities have been 1.9Mt in 2015, 1.72Mt in 2016 and 1.06Mt in 2017.	Annual Review 2015, 2016, 2017	
7	The Proponent shall not export any coal reject from the site after 2021 without the written approval of the Director-General.	Noted			
8	The Proponent shall not emplace coal reject on the surface of the site without the written approval of the Director-General.  <i>Note: This condition applies to the Camp Gully Emplacement Area, as well/ as to the rest of the surface of the site. It does not apply to the proposed additional coal reject stockpile shown in Appendix 4.</i>	Compliant	Coal reject is not emplaced on mine surface as observed during site visit. The works on Turkey's Nest using coal reject has written approval from DPI dated on 23 August 2012.	Site Inspection and discussion with Stephen Love. Annual Reviews 2015, 2016 and 2017. DP letter on Use of Coal Reject Material dated 23 August 2012.	
<b>STRUCTURAL ADEQUACY</b>					
9	The Proponent shall ensure that all new buildings and structures, and any alterations or additions to existing buildings and structure, are constructed in accordance with:  (a) the relevant requirements of the BCA; and (b) any additional requirements of the MSB in areas where subsidence effects are likely to occur.  <i>Notes:</i> - Under Part 4A of the EP&A Act, the Proponent is required to obtain construction and occupation certificates for the proposed building works. - Part 8 of the EP&A Regulation sets out the requirements for the certification of the project.	Observation	In 2015, CHPP upgrade activities were undertaken, new winder house was completed and construction of a new compressor shed was commenced as per BCA requirements. <b>The construction of the compressor shed is not mentioned in subsequent annual reports.</b> In 2016, upgrades to the backfill emplacement plant were completed. No new buildings and structures were erected during 2016-2017.	Annual Review 2015, 2016, 2017 Site inspection and discussion with Stephen Love.	
<b>DEMOLITION</b>					
10	The Proponent shall ensure that all demolition work is carried out in accordance with Australian Standard AS 2601-2001 : The Demolition of Structures, or its latest version.	Observation	As per the Annual Reviews of 2015-2016, there were no demolition of buildings or associated structures at the site during 2015 - 2016. Decommissioning of transformers and associated structures have occurred near Vent Shaft 3 and also at the surface works recently. No structures were removed other than support platforms. <b>This is not noted in the Annual Review 2017.</b>	Annual Review 2015, 2016, 2017	

OPERATION OF PLANT AND EQUIPMENT

11	<p>The Proponent shall ensure that all plant and equipment used at the site is: (a) maintained in a proper and efficient condition; and (b) operated in a proper and efficient manner.</p>	Compliant	<p>Maintenance Record extract as a data dump spreadsheet from the maintenance tracking software listing completed maintenance work orders for the Drift Winder and Koepe Winder shows details of maintenance inspections and works undertaken. Annual Review 2015, 2016, 2017 report that all plant and equipment are regularly serviced as per relevant Industry and Investment NSW Mining Design Guidelines.</p>	<p>Metropolitan Colliery Mechanical Engineering M-CMMP-049 Management System. Annual Review 2015, 2016, 2017</p>	
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STAGED SUBMISSION OF STRATEGIES, PLANS OR PROGRAMS

12	<p>With the approval of the Director-General, the Proponent may submit any strategies, plans or programs required by this approval on a progressive basis.  <i>Note: The conditions of this approval require certain strategies, plans, and programs to be prepared for the project. They also require these documents to be reviewed and audited on a regular basis to ensure they remain effective. However, in some instances, it will not be necessary or practicable to prepare these documents for the whole project at any one time; particularly as these documents are intended to be dynamic and improved over time. Consequently, the documents may be prepared and implemented on a progressive basis. In doing this however, the Proponent will need to demonstrate that it has suitable documents in place to manage the existing operations of the project.</i></p>	Compliant	<p>Various management plans, policies, strategies and programs have been submitted and referenced in the Annual Review reports DP&amp;E letter dated 25 August 2015 approving certain management plans sighted as an example of approval record - Surface Facilities Water Management Plan - Traffic Management Plan - Longwalls 23-27 Biodiversity Management Plan - Longwalls 23-27 Subsidence Monitoring Program - Longwalls 23-27 Heritage Management Plan - Construction Management Plan</p>	<p>Annual Review 2015, 2016, 2017 The following plans and programs uploaded to Peabody website DP&amp;E letters dated 25 August 2014 and 25 August 2015: - Surface Facilities Water Management Plan - Traffic Management Plan - Longwalls 23-27 Biodiversity Management Plan - Longwalls 23-27 Subsidence Monitoring Program - Longwalls 23-27 Heritage Management Plan - Construction Management Plan</p>	
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SCHEDULE 3 - SPECIFIC ENVIRONMENTAL CONDITIONS - MINING

PERFORMANCE MEASURES

1	<p>The Proponent shall ensure that the project does not cause any exceedances of the performance measures in Table 1. <i>Note: The Proponent will be required to define more detailed performance indicators for each of these performance measures in the various management plans that are required under this approval (see condition 6 below).</i></p> <table border="1" data-bbox="281 693 949 1260"> <caption>Table 1: Subsidence Impact Performance Measures</caption> <thead> <tr> <th colspan="2">Water Resources</th> </tr> </thead> <tbody> <tr> <td>Catchment yield to the Woronora Reservoir</td> <td>Negligible reduction to the quality or quantity of water resources reaching the Woronora Reservoir</td> </tr> <tr> <td>Woronora Reservoir</td> <td>No connective cracking between the surface and the mine Negligible leakage from the Woronora Reservoir Negligible reduction in the water quality of Woronora Reservoir</td> </tr> <tr> <th colspan="2">Watercourses</th> </tr> <tr> <td>Waratah Rivulet between the full supply level of the Woronora Reservoir and the maingate of Longwall 23 (upstream of Pool P)</td> <td>Negligible environmental consequences (that is, no diversion of flows, no change in the natural drainage behaviour of pools, minimal iron staining, and minimal gas releases)</td> </tr> <tr> <td>Eastern Tributary between the full supply level of the Woronora Reservoir and the maingate of Longwall 26</td> <td>Negligible environmental consequences over at least 70% of the stream length (that is no diversion of flows, no change in the natural drainage behaviour of pools, minimal iron staining and minimal gas releases)</td> </tr> <tr> <th colspan="2">Biodiversity</th> </tr> <tr> <td>Threatened species, populations, or ecological communities</td> <td>Negligible impact</td> </tr> <tr> <td>Swamps 76, 77 and 92</td> <td>Set through condition 4 below</td> </tr> <tr> <th colspan="2">Land</th> </tr> <tr> <td>Cliffs</td> <td>Less than 3% of the total length of cliffs (and associated overhangs) within the mining area experience mining-induced rock fall</td> </tr> <tr> <th colspan="2">Heritage</th> </tr> <tr> <td>Aboriginal heritage sites</td> <td>Less than 10% of Aboriginal heritage sites within the mining area are affected by subsidence impacts</td> </tr> <tr> <td>Items of historical or heritage significance at the Garrawarra Centre</td> <td>Negligible damage (that is fine or hairline cracks that do not require repair), unless the owner of the item and the appropriate heritage authority agree otherwise in writing</td> </tr> <tr> <th colspan="2">Built Features</th> </tr> <tr> <td>Built features</td> <td>Safe, serviceable and repairable, unless the owner agrees otherwise in writing</td> </tr> </tbody> </table>	Water Resources		Catchment yield to the Woronora Reservoir	Negligible reduction to the quality or quantity of water resources reaching the Woronora Reservoir	Woronora Reservoir	No connective cracking between the surface and the mine Negligible leakage from the Woronora Reservoir Negligible reduction in the water quality of Woronora Reservoir	Watercourses		Waratah Rivulet between the full supply level of the Woronora Reservoir and the maingate of Longwall 23 (upstream of Pool P)	Negligible environmental consequences (that is, no diversion of flows, no change in the natural drainage behaviour of pools, minimal iron staining, and minimal gas releases)	Eastern Tributary between the full supply level of the Woronora Reservoir and the maingate of Longwall 26	Negligible environmental consequences over at least 70% of the stream length (that is no diversion of flows, no change in the natural drainage behaviour of pools, minimal iron staining and minimal gas releases)	Biodiversity		Threatened species, populations, or ecological communities	Negligible impact	Swamps 76, 77 and 92	Set through condition 4 below	Land		Cliffs	Less than 3% of the total length of cliffs (and associated overhangs) within the mining area experience mining-induced rock fall	Heritage		Aboriginal heritage sites	Less than 10% of Aboriginal heritage sites within the mining area are affected by subsidence impacts	Items of historical or heritage significance at the Garrawarra Centre	Negligible damage (that is fine or hairline cracks that do not require repair), unless the owner of the item and the appropriate heritage authority agree otherwise in writing	Built Features		Built features	Safe, serviceable and repairable, unless the owner agrees otherwise in writing	Non Compliant	<p>Annual Review 2016 and 2017 report exceedance of the Eastern Tributary watercourse subsidence impact performance measure in relation to iron staining and pool flow / drainage behaviour downstream of the Longwall 26 maingate.</p>	<p>Longwalls 301-303 Extraction Plan: Section 3.1 and Appendix A of detail water resources and watercourses management. Section 3.3 and Appendix C detail biodiversity management plan. Section 3.2 and Appendix B detail land management plan Section 3.4 and Appendix D detail Heritage management Section 3.5 and appendix E Built-features management plans for various services eg Optus, Sydney Water, Sydney Trains, Transgrid Metropolitan coal catchment monitoring program E Annual Review 2015, 2016 and 2017.</p>	<p>Exceedance of subsidence impact performance measures need to be continuously reviewed and corrective actions implemented.</p>
Water Resources																																					
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CATCHMENT MONITORING PROGRAM

2a	<p><b>Catchment Monitoring Program</b> The Proponent shall prepare and implement a comprehensive Catchment Monitoring Program for the project to the satisfaction of the Director-General. This program must: (a) be prepared by suitably qualified and experienced experts whose appointment has been endorsed by the Director-General;</p>	Compliant	<p>Letter signed by Director of Mining and Industry on 19 Feb 2010 approved Prof Noel Merrick of Heritage Computing and Mr Lindsey Gilbert of Gilbert &amp; Assoc Pty Ltd to prepare the catchment monitoring program. DP&amp;E letter dated 25 August 2014 approved Catchment Monitoring Program and states the water management plan is under review. DPE Letter of 25 August 2015 has approved the Surface Facilities Water Management Plan Annual Review 2017 mentions the Catchment Monitoring Program is under review for consistency with Longwalls 301-303 Extraction Plan and will finalise and submit for approval by April 2018.</p>	<p>Metropolitan Coal Longwalls 20-22 catchment monitoring program rev E - prepared by Gilbert and Assoc, Heritage Computing and Metropolitan Coal. DoP letter dated 19 Feb 2010 DP&amp;E letter dated 25 August 2015 Annual Review 2015, 2016, 2017</p>	
2b	<p><b>Catchment Monitoring Program</b> This program must: (b) be prepared in consultation with NOW, SCA and OEH;</p>	Compliant	<p>Evidence of consultation with SCA, OEH and other government agencies is provided within the catchment monitoring program</p>	<p>Revision Status Register within the Catchment Monitoring Program (June 2014) indicates distribution to various entities, dates of amendments to comments and DP&amp;E approval dates</p>	
2c	<p><b>Catchment Monitoring Program</b> This program must: (c) be approved by the Director-General before the Proponent is allowed to carry out any second workings in the mining area; and</p>	Compliant	<p>Evidence of approval is indicated by Letter from DP&amp;E dated 25 August 2014, which stated the water management plan is under review. This plan has subsequently been approved via letter dated 25 August 2015. Annual Review 2017 mentions the Catchment Monitoring Program is under review for consistency with Longwalls 301-303 Extraction Plan and will finalise and submit for approval by April 2018.</p>	<p>Revision Status Register within the Catchment Monitoring Program (June 2014) indicates distribution to various entities and DP&amp;E approval dates DP&amp;E letter signed 25 Aug 2014 sighted approving the Catchment Monitoring Program</p>	

2d	<p><b>Catchment Monitoring Program</b> This program must: (d) include: • detailed baseline data of the existing surface and groundwater resources in the project area; • program for the ongoing development and use of appropriate surface and groundwater models for the project; and • a program to: -monitor and assess any impacts of the project on the quantity and quality of surface and ground water resources in the project area, and in particular the catchment yield to the Woronora Reservoir; and -validate and calibrate the surface and groundwater models.</p>	Compliant	<p>The currently approved catchment monitoring program as inspected at this audit contains: * detailed baseline data * a program for ongoing development and use of models * program to monitor and assess surface and groundwater resource quantity and quality and details of validation of relevant models</p>	<p>Metropolitan Coal Longwalls 20-22 catchment monitoring program rev E - prepared by Gilbert and Assoc, Heritage Computing and Metropolitan Coal - section 3 has details of baseline data.</p>	
<b>SPECIFIC REQUIREMENTS FOR FURTHER MODELLING &amp; ASSESSMENT</b>					
3	<p>If the subsidence effects and subsidence impacts of the project exceed the relevant predictions by more than 15% at any time after mining has progressed beyond the halfway mark of Longwall 21, or if the profile of vertical displacement does not reflect predictions, then the Proponent shall use appropriate numerical modelling to supplement the subsequent predictions of subsidence effects and subsidence impacts for the project to the satisfaction of the Director-General.  <i>Note: The aim of the numerical modelling is to give a better insight into the mechanisms that may account for the differences between predicted and actual subsidence effects and impacts.</i></p>	Compliant	<p>Longwall 27 completed in March 2017; Longwall 301 commenced in May 2017. Subsidence predictions and measurements are included in Annual review reports, section 6.1.1. The 2016 and 2017 reviews include charts showing comparison between maximum observed and maximum predicted total subsidence for Longwalls 3 to 26 under 15%. Maximum observed total subsidence along specific lines of fault have been reported as greater than predicted with reasons thereof being local geological conditions.</p>	<p>Longwall 20-21 Extraction Plan Subsidence Monitoring Program Annual Review 2015, 2016, 2017 - section 6.1.1</p>	
4	<p>The Proponent shall not undermine Swamps 76, 77 and 92 without the written approval of the Director-General. In seeking this approval, the Proponent shall submit the following information with the relevant Extraction Plan (see condition 6 below): (a) a comprehensive environmental assessment of the: . potential subsidence impacts and environmental consequences of the proposed Extraction Plan; . potential risks of adverse environmental consequences; and . options for managing these risks; (b) a description of the proposed performance measures and indicators for these swamps; and (c) a description of the measures that would be implemented to manage the potential environmental consequences of the Extraction Plan on these swamps (to be included in the Biodiversity Management Plan - see condition 6(f) below), and comply with the proposed performance measures and indicators.</p>	Compliant	<p>The area of swamps 76, 77 and 92 have not yet been undermined. As per figure 13 in Annual Review, Longwalls 301-317 are planned in the area. The currently approved Longwalls 301-303 have not reached the area.</p>	<p>Longwalls 20-21 and 23-27 Extraction Plans Longwall 301-303 Extraction Plan Subsidence Monitoring Program Annual Review 2015, 2016, 2017</p>	
<b>FIRST WORKINGS</b>					
5	<p>The Proponent shall not carry out first workings in the mining area that are not consistent with the approved mine plan without the written approval of the Director-General.</p>	Compliant	<p>Annual Reviews detail the mining works completed. First workings in the mining area, as documented in the Annual Reviews, are consistent with approved plans up to Longwalls 301-303.</p>	<p>Annual Review 2015, 2016, 2017</p>	
<b>SECOND WORKINGS</b>					
6a	<p><b>Extraction Plan</b> The Proponent shall prepare and implement an Extraction Plan for all second workings in the mining area to the satisfaction of the Director-General. This plan must: (a) be prepared by a team of suitably qualified and experienced experts whose appointment has been endorsed by the Director-General;</p>	Compliant	<p>Extraction Plans have been prepared, latest being for Longwalls 301-303 dated Nov 2016. Previous audit confirms Longwalls 23-27 Extraction plans have been prepared by team of experts originally endorsed by the DG on 23 Sept 2009. Plans for Longwalls 301-303 have been prepared by Metropolitan Coal, with assistance from Mine Subsidence Engineering Consultants (MSEC), HydroSimulations, Hydro Engineering &amp; Consulting, FloraSearch, Cenwest Environmental Services, Niche Environment and Heritage, and Resource Strategies. The appointment of the team of suitably qualified and experienced persons was endorsed by the Secretary of the DP&amp;E in June 2016. Longwalls 301-303 Extraction Plan Attachment 2 page 12 is letter from DG with endorsement of team.</p>	<p>Extraction Plans for Longwalls 20-22, 23-27 and 301-303 (Nov 2016) incl attachments and appendices for: -Water Management Plan -Land Management Plan -Biodiversity Management Plan -Heritage Management Plan -(various) built features Management Plans -Public Safety Management Plan -Subsidence Management Plan (Monitoring Program) -Coal Resource Recovery Plan and -Subsidence Report Annual Review 2016 section 4.1.2 refers to preparation of the Longwalls 301-303 Extraction plan, which supersedes the Extraction Plans for Longwalls 20-22 and 23-27. Section 1.1 and Attachments 1 &amp; 2 of Extraction Plan sighted.</p>	
6b	<p><b>Extraction Plan</b> This plan must: (b) be approved by the Director-General before the Proponent is allowed to carry out the second workings covered by the Extraction Plan;</p>	Compliant	<p>Letter signed (11 May 2017) by Executive Director of Resource Assessments and Business Systems, DPE, as nominee of the Secretary approves extraction in Longwalls 301 and 302 only, with concerns raised over Longwall 303 due to potential impacts on Woronora Reservoir and the Eastern Tributary. The Annual Reviews indicate that no workings have been carried out beyond approved Longwalls.</p>	<p>Section 1.1 and Attachments 1 &amp; 2 of Extraction Plan sighted Extraction Plan for Longwalls 301-303 Letter from DPE dated 11 May 2017 with approval of Longwalls 301-302. Annual Review 2016, 2017.</p>	
6c	<p><b>Extraction Plan</b> This plan must: (c) include a detailed plan for the second workings, which has been prepared to the satisfaction of DRE, and provides for adaptive management (from Longwall 23 onwards);</p>	Compliant	<p>The Extraction Plans for Longwalls 301-303 includes detailed plan for second workings and adaptive management. As per Annual review 2016 section 4.1.2, once approved, the Extraction Plans for Longwalls 301-303 now supersedes previous longwalls extraction plans.</p>	<p>Section 1.3, Appendix H Coal Resource Recovery Plan and Section 4.2 of Longwalls 301-303 Extraction Plan details Adaptive Management approach.</p>	
6d	<p><b>Extraction Plan</b> This plan must: (d) include detailed plans of any associated surface construction works;</p>	Compliant	<p>Extraction plan has the required details in the appendix sub plans and construction management plan rev D.</p>	<p>Section 3 and Appendix G (Subsidence Monitoring Program) of Extraction Plan for Longwalls 301-303; Construction Management Plan Rev D.</p>	



6e	<p><b>Extraction Plan</b> This plan must: (e) include the following to the satisfaction of DRE: • a coal resource recovery plan that demonstrates effective recovery of the available resource; • revised predictions of the conventional and non-conventional subsidence effects and subsidence impacts of the extraction plan, incorporating any relevant information that has been obtained since this approval; and • a Subsidence Monitoring Program to: - validate the subsidence predictions; and - analyse the relationship between the subsidence effects and subsidence impacts of the Extraction Plan and any ensuing environmental consequences;</p>	Compliant	<p>Annual review report section 6.1.1 details subsidence monitoring. DP&amp;E (Resource Assessments division) approval of subsidence monitoring program is evident via letter dated 25 August 2015. * Appendix H of the Longwalls Extraction Plan details the coal resource recovery plan as a sub plan. * Subsidence Monitoring Program and Report include details of revised predictions of the conventional and non-conventional subsidence impacts of the extraction plan, validated subsidence predictions and analysis of relationship between subsidence effects and subsidence impacts of the Extraction Plan and environmental consequences.</p>	<p>Annual Review 2015, 2016, 2017 Appendix H Coal Resource Recovery Plan Longwalls 301-303 Extraction Plan details Adaptive Management approach and Subsidence Monitoring Appendix G (Subsidence Monitoring Program) of Extraction Plan for Longwalls 301-303 Appendix I Subsidence Monitoring Report (Metropolitan Mine - Longwalls 301 to 303 Subsidence Predictions and Impact Assessments for the Natural and Built Features in Support of the Extraction Plan prepared by Mine Subsidence Engineering Consultants (MSEC, 2016)) DPE letter dated 25 Aug 2015 approving the plans as part of Longwalls 23-27 Extraction Plans; DPE letter dated 11 May 2017 approving the Longwalls 301-302 Extraction</p>
6f	<p><b>Extraction Plan</b> This plan must: (f) include a; • Water Management Plan, which has been prepared in consultation with OEH, SCA and NOW, to manage the environmental consequences of the Extraction Plan on watercourses (including the Woronora Reservoir), aquifers and catchment yield; • Biodiversity Management Plan, which has been prepared in consultation with OEH and DRE (Fisheries), to manage the potential environmental consequences of the Extraction Plan on aquatic and terrestrial flora and fauna, with a specific focus on swamps; • Land Management Plan, which has been prepared in consultation with SCA, to manage the potential environmental consequences of the Extraction Plan on cliffs, overhangs, steep slopes and land in general; • Heritage Management Plan, which has been prepared in consultation with OEH and the relevant Aboriginal groups, to manage the potential environmental consequences of the Extraction Plan on heritage sites or values; • Built Features Management Plan, which has been prepared in consultation with the owner of the relevant feature, to manage the potential environmental consequences of the Extraction Plan on any built features; and</p>	Compliant	<p>Longwalls 301-303 extraction plan attachment 2 - letter to DG detailing the various plan components and various plans are available on the peabody website including: - Appendix A Water Management Plan - Appendix C Biodiversity Management Plan - Appendix B Land Management Plan - Appendix D Heritage Management Plan - Built Features Management Plan Further pages of this document indicates responses from various agencies on these plans. Attachment 2 also includes correspondence with local aboriginal groups regarding heritage management.</p>	<p>Extraction Plans for Longwalls 20-22, 23-27 and 301-303 (Nov 2016) incl attachments and appendices for: -Water Management Plan -Land Management Plan -Biodiversity Management Plan -Heritage Management Plan -(various) built features Management Plans -Public Safety Management Plan -Subsidence Management Plan -Coal Resource Recovery Plan and -Subsidence Report Annual Review 2016 section 4.1.2 refers to preparation of the Longwalls 301-303 Extraction plan, which supersedes the Extraction Plans for Longwalls 20-22 and 23-27. DPE letter dated 25 Aug 2015 approving the plan Section 1.1 and Attachments 1 &amp; 2 of Extraction Plan sighted</p>
6g	<p><b>Extraction Plan</b> This plan must: (g) include a Public Safety Management Plan, which has been prepared in consultation with DRE and the DSC (for any mining within the DSC notification area), to ensure public safety in the mining area.</p>	Compliant	<p>Appendix F of Longwalls 301-303 extraction plan is Public Safety Management Plan dated November 2016 and attachment 2 pages 21 (DPE), 25 (DRE), 29 (WaterNSW), 52 (DSC) consultation with various government agencies.</p>	
Note	<p><i>Note: In accordance with condition 12 of schedule 2, the preparation and implementation of Extraction Plans for second workings may be staged, with each plan covering a defined area of second workings. In addition, these plans are only required to contain management plans that are relevant to the specific second workings that are being carried out</i></p>	Noted		
7	<p>In addition to the standard requirements for management plans (see condition 2 of schedule 7), the Proponent shall ensure that the management plans required under condition 6(f) above include:  (a) a program to collect sufficient baseline data for future Extraction Plans; (b) a revised assessment of the potential environmental consequences of the Extraction Plan, incorporating any relevant information that has been obtained since this approval; (c) a detailed description of the measures that would be implemented to remediate predicted impacts; and (d) a contingency plan that expressly provides for adaptive management.</p>	Compliant	<p>Previous IEA confirmed compliance for Longwall extraction plans for Longwalls 20-23 and 24-27. The specific subplans prepared as per condition 6f above include sections detailing: (a) a program to collect sufficient baseline data for future Extraction Plans; (b) assessment of the potential environmental consequences of the Extraction Plan; (c) measures to remediate predicted impacts; and (d) a contingency plan for adaptive management. As an example, Baseline heritage data for Longwalls 301-303 have been recorded by Niche Environment and Heritage.</p>	<p>Specific Water Management Plan, Biodiversity Management Plan, Land Management Plan, Heritage Management Plan and Built-Features Management Plan as sub-plans to Extraction Plans for Longwalls 301-303 (dated Nov 2016, which has superseded previous extraction plans upon completion of specific longwalls) indicate programs for baseline data collection.</p>
8	<p><b>Payment of Reasonable Costs</b> The Proponent shall pay all reasonable costs incurred by the Department to engage independent experts to review the adequacy of any aspect of the Extraction Plan.</p>	Not Triggered	Not triggered	
<b>RESEARCH PROGRAM</b>				
9	<p><b>Research Program</b> The Proponent shall prepare and implement a Research Program for the project to the satisfaction of the Director-General, and allocate \$320,000 towards the implementation of the program.</p>	Compliant	<p>The research program consisted of three research elements and the final report has been provided to DPE. As per previous IEA, and research program status updates, this condition was complied with, via research program dated 4 November 2010 approved on 27 May 2011.</p>	<p>Previous IEA report signed off on 18 January 2016 Site Audit discussions with Stephen Love and email clarification on 29 March 2018 Status update on research projects</p>
9a	<p><b>Research Program</b> This program must: (a) be prepared in consultation with NOW, SCA, OEH and DRE;</p>	Compliant	<p>As per previous IEA, This condition was complied with, via research program dated 4 November 2010 approved on 27 May 2011</p>	<p>Previous IEA report signed off on 18 January 2016 Site Audit discussions with Stephen Love and email clarification on 29 March 2018 Status update on research projects</p>
9b	<p><b>Research Program</b> This program must: (b) be submitted to the Director-General for approval by the end of 2010;</p>	Compliant	<p>As per previous IEA, this condition was complied with, via research program dated 4 November 2010 approved on 27 May 2011</p>	<p>Previous IEA report signed off on 18 January 2016 Site Audit discussions with Stephen Love and email clarification on 29 March 2018 Status update on research projects</p>
9c	<p><b>Research Program</b> This program must: (c) be targeted at genuine research, as opposed to implementing the matters required by this approval; and</p>	Compliant	<p>As per previous IEA, This condition was complied with, via research program dated 4 November 2010 approved on 27 May 2011, The research program comprised three projects that will investigate technical aspects concerning groundwater, subsidence and Eastern Ground Parrot populations on the Woronora Plateau.</p>	<p>Previous IEA report signed off on 18 January 2016 Site Audit discussions with Stephen Love and email clarification on 29 March 2018 Status update on research projects</p>

9d	<p><b>Research Program</b> This program must: (d) be directed at encouraging research into improving:</p> <ul style="list-style-type: none"> <li>the prediction of valley closure and upsidence, and the resultant subsidence impacts;</li> <li>the assessment of the environmental consequences of subsidence impacts on natural features;</li> <li>the remediation of subsidence impacts on watercourses;</li> <li>the understanding of subsidence impacts and their environmental consequences on swamps;</li> <li>the conservation of the Eastern Ground Parrot on the Woronora Plateau; or</li> <li>the environmental management of underground mining operations in the Southern Coalfield.</li> </ul>	Compliant	<p>During site inspection walk-around, remnants of research projects on pool water depth/quality were sighted. As per project summaries made available, there is evidence of the research program to satisfy this condition.</p>	<p>Research project summaries sighted:</p> <ol style="list-style-type: none"> <li>Significance of Chain Pillars on Simulated Groundwater Pressures</li> <li>Evaluation of Fundamental Geotechnical Mechanisms Contributing to Valley Closure Susidence Effects Under Irregular Topographic Conditions (PhD thesis, UNSW 2015)</li> <li>Conservation of the Eastern Ground Parrot on the Woronora Plateau (copy of final report from OEH not been provided to Metropolitan Coal - email dt 15 Jan 2015 sighted)</li> </ol>															
10	<p>The Proponent shall obtain the Director-General's approval for the allocation of any funding under this program.</p>	Compliant	<p>As per previous IEA, This condition was complied with, via reseach program dated 4 November 2010 approved on 27 May 2011 with allocation of funding approved on 3 November 2011.</p>	<p>Previous IEA report signed off on 18 January 2016 Site Audit discussions with Stephen Love and email clarification on 29 March 2018 Status update on research projects</p>															
<b>CONSTRUCTION MANAGEMENT - WORONORA SPECIAL AREA</b>																			
11	<p>The Proponent shall prepare and implement a Construction Management Plan for all surface construction works (excluding remediation or rehabilitation works) in the Woronora Special Area to the satisfaction of the Director-General. This plan must be prepared in consultation with SCA, include detailed plans of the proposed construction works., and be approved by the Director-General before the Proponent is allowed to carry out the construction works.</p>	Compliant	<p>As per section 9 of Annual Review 2017, the Construction Management Plan for surface construction works (excluding remediation or rehabilitation works) in the Woronora Special Area has been prepared. This plan is currently being reviewed by Metropolitan Coal for consistency with the Longwalls 301-303 Extraction Plan.</p>	<p>Letter from SCA re Review of the Construction Management Plan, 24 Sep 2010 Construction Management Plan Rev D, July 2015 Letter to DP&amp;I re Approval Construction Management Plan, 14 Nov 2011 DPE letter dated 25 Aug 2015 approving the plan Surface Works Register and Assessment Form – Deep Groundwater Piezometer Boreholes, Mar 2012 Surface Works Assessment Form – Swamp Piezometer Boreholes, Apr 2012 Surface Works Assessment Form – Subsidence Survey Lines, Sep 2013 Surface Works Assessment Form – Seismic Survey Lines, Jul 2014</p>															
<b>SCHEDULE 4 - SPECIFIC ENVIRONMENTAL CONDITIONS - GENERAL</b>																			
<b>NOISE</b>																			
1	<p><b>Noise Impact Assessment Criteria</b> By the end of 2014, the Proponent shall ensure that the noise generated by the project does not exceed the noise impact assessment criteria in Table 2 at any residence on privately-owned land, or on more than 25% of any privately-owned land.</p> <p><i>Notes:</i></p> <ul style="list-style-type: none"> <li>To determine compliance with the LAeq(period) noise limits, noise from the project is to be measured at the most affected point within the residential boundary, or at the most affected point within 30 metres of a dwelling (rural situations) where the dwelling is more than 30 metres from the boundary. Where it can be demonstrated that direct measurement of noise from the project is impractical, alternative means of determining compliance (see Chapter 11 of the NSW industrial Noise Policy) may be accepted. The modification factors in Section 4 of the NSW industrial Noise Policy shall also be applied to the measured noise /levels where applicable.</li> <li>To determine compliance with the LA1 (1 minute) noise limits, noise from the project is to be measured at 1 metre from the dwelling façade. Where it can be demonstrated that direct measurement of noise from the project is impractical, alternative means of determining compliance (see Chapter 11 of the NSW industrial Noise Policy) may be accepted.</li> <li>The noise emission limits identified in the above table apply under meteorological conditions of: <ul style="list-style-type: none"> <li>wind speeds of up to 3 m/s at 10 metres above ground level; or</li> <li>temperature inversion conditions of up to 3 °C/100m, and wind speeds of up to 2 m/s at 10 metres above ground level, determined in accordance with the NSW industrial Noise Policy.</li> </ul> </li> </ul>	Non Compliant	<p>In 2008-2009, noise mitigation measures were offered to residents as part of noise strategy. Undertook extensive reviews and peer reviews of noise measures by SLR Consulting for improvement for 0.1dB. Doors at the Washery are closed during operation. Further change of equipment are rolling out in 2018. SLR is reseaching changes in noise policy. Noise monitoring is done with worst case operational situation. Residents are offered noise mitigation measures at houses. The Annual Reviews for 2015, 2016 and 2017 have reported sustained non-compliances with the Noise Impact Assessment Criteria as recorded at two monitoring locations during 2015 and monitoring and noise modelling indicating non-compliances during 2016 and 2017. Annual Review 2016 proposed to conduct a technical peer review of existing noise mitigation strategy. Letter dated 30 June provided the review findings and proposed next steps. An undertaking was signed by Peabody on 19 Oct 2017 as required per letter from DPE dt 18 Oct 2017 offering no further enforcement action provided actions specified in the undertaking are achieved by agreed dates without further complaints.</p>	<p>previous audit report. Annual Review 2015, 2016, 2017 Ltr-DPE-30 June 2017 Noise Mitigation Strategy (letter to DPE regarding noise mitigation strategy) DPE letter dated 18 Oct 2017 with a Voluntary Undertaking to the Minister for Planning, given by Helensburgh Coal Pty Ltd. As per complaints register, a complaint was received on 28 November 2017 regarding noise during early morning loading of train during the weekend of 25-26 Nov 2017. The matter was investigated and communicated to the complainant.</p>	<p>Proponent should take measures to prevent non-compliances regarding noise monitoring and noise levels.</p>														
2	<p><b>Noise Acquisition Criteria</b> If after 2014, the noise generated by the project exceeds the criteria in Table 3 at any residence on privately-owned land, or on more than 25% of any privately-owned land, then the Proponent shall, upon receiving a written request for acquisition from the landowner, acquire the land in accordance with the procedures in conditions 5-7 of schedule 5.</p> <p><i>Table 2: Noise Impact Assessment Criteria</i></p> <table border="1" data-bbox="261 1318 878 1367"> <thead> <tr> <th>Day LAeq(15 min)</th> <th>Evening LAeq(15 min)</th> <th>Night LAeq(15 min)</th> <th>Night LA1(1 min)</th> </tr> </thead> <tbody> <tr> <td>50 dB(A)</td> <td>45 dB(A)</td> <td>45 dB(A)</td> <td>50 dB(A)</td> </tr> </tbody> </table> <p><i>Note: Noise generated by the project is to be measured in accordance with the notes presented below Table 2. For this condition to apply, the exceedances of the criteria must be systemic.</i></p> <p><i>Table 3: Noise Acquisition Criteria</i></p> <table border="1" data-bbox="261 1436 804 1484"> <thead> <tr> <th>Day LAeq(15 min)</th> <th>Evening LAeq(15 min)</th> <th>Night LAeq(15 min)</th> </tr> </thead> <tbody> <tr> <td>55 dB(A)</td> <td>50 dB(A)</td> <td>50 dB(A)</td> </tr> </tbody> </table>	Day LAeq(15 min)	Evening LAeq(15 min)	Night LAeq(15 min)	Night LA1(1 min)	50 dB(A)	45 dB(A)	45 dB(A)	50 dB(A)	Day LAeq(15 min)	Evening LAeq(15 min)	Night LAeq(15 min)	55 dB(A)	50 dB(A)	50 dB(A)	Compliant	<p>Helensburgh Coal breached noise limit obligations at four locations near the mine site, as per DPE issued penalty notice in December 2017. There was a noise complaint in 2015-2016 as well. Real time noise monitoring indicated one trigger event related to Mine operations in July 2015 (unauthorised truck delivery) and no trigger event identified in 2016 and 2017. Noise suppressive cladding and other measures have been implemented at the loading bay. Noise modelling has been undertaken, which indicated potential sustained non-compliances as per relevant 2016 attended noise monitoring results. No sustained non-compliance reported in the review period against noise acquisition criteria. There has been no request for land acquisition.</p>	<p>Annual Review 2015, 2016, 2017 Complaints register</p>	
Day LAeq(15 min)	Evening LAeq(15 min)	Night LAeq(15 min)	Night LA1(1 min)																
50 dB(A)	45 dB(A)	45 dB(A)	50 dB(A)																
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55 dB(A)	50 dB(A)	50 dB(A)																	
3	<p><b>Additional Noise Mitigation Measures</b> It after 2014, the noise generated by the project exceeds the criteria in Table 4 at any residence on privately-owned land, then the Proponent shall, upon receiving a written request from the landowner, implement reasonable and feasible noise mitigation measures (such as double-glazing, insulation, and/or air conditioning) at the residence in consultation with the landowner. if within 3 months of receiving this request from the landowner, the Proponent 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 Director-General for resolution.</p> <p><i>Table 4: Additional Noise Mitigation Criteria</i></p> <table border="1" data-bbox="261 1654 878 1703"> <thead> <tr> <th>Day LAeq(15 min)</th> <th>Evening LAeq(15 min)</th> <th>Night LAeq(15 min)</th> </tr> </thead> <tbody> <tr> <td>53 dB(A)</td> <td>48 dB(A)</td> <td>48 dB(A)</td> </tr> </tbody> </table> <p><i>Note: Noise generated by the project is to be measured in accordance with the notes presented below Table 2.</i></p>	Day LAeq(15 min)	Evening LAeq(15 min)	Night LAeq(15 min)	53 dB(A)	48 dB(A)	48 dB(A)	Non Compliant	<p>Helensburgh Coal breached noise limit obligations at four locations near the mine site, as per DPE issued penalty notice in December 2017. There was a noise complaint in 2015-2016 as well. Real time noise monitoring indicated one trigger event related to Mine operations in July 2015 (unauthorised truck delivery) and no trigger event identified in 2016 and 2017. Noise suppressive cladding and other measures have been implemented at the loading bay. <b>Noise modelling has been undertaken, which indicated potential sustained non-compliances as per relevant 2016 attended noise monitoring results.</b> No sustained non-compliance reported in 2017 against noise mitigation criteria. Residents were offered noise mitigation measures at houses (six of eight houses accepted previous offers).</p>	<p>Annual Review 2015, 2016, 2017 Complaints register</p>	<p>Proponent should take measures to prevent non-compliances regarding noise monitoring and noise levels.</p>								
Day LAeq(15 min)	Evening LAeq(15 min)	Night LAeq(15 min)																	
53 dB(A)	48 dB(A)	48 dB(A)																	

4	<p><b>Rail Noise</b> The Proponent shall only use locomotives that are approved to operate on the NSW rail network in accordance with noise limits 16.1 to 16.4 in RailCorp's EPL (No. 12208) and ARTC's EPL (No. 3142) or a Pollution Control Approval issued under the former Pollution Control Act 1970.</p>	Compliant	As per annual review reports all locomotives used are approved for operations as per this condition and Pacific National/ ARTC EPL 3142 Noise Limit Conditions	Annual Review 2015, 2016, 2017 Complaints register EPL 3142 to Pacific National and email dated 13 April 2018 from PN Customer Account Manager Matt Hardes confirming that all PN rolling stock used in NSW are approved in ARTC network.																								
5	<p><b>Rail Noise</b> The Proponent shall use its best endeavours to minimise night-time movements of rolling stock on the Metropolitan rail spur.</p>	Compliant	No complaints have been received related to rolling stock movement on the Metropolitan Rail Spur. Early morning loading is avoided to reduce noise impacts however this depends on the rail corridor availability to reduce impact on local passenger trains schedules. Truck and Rail Register (Dec 2017) available on website provides only annual tonnage and not schedules. Half yearly trucking records were inspected for the audit period.	Annual Review 2015, 2016, 2017 Complaints register Truck and Rail Register (six monthly).																								
6	<p><b>Rail Noise</b> In the event of any rail noise or vibration issues that may arise from the haulage of coal over the life of the Project, the Proponent shall liaise with the CCC and the rail service provider to facilitate resolution of these issues and implement additional noise reduction measures where appropriate.</p>	Compliant	One noise complaint was received during the audit period on 28 November 2017 regarding early morning loading of train on weekend of 25-26 Nov 2017. Response has been recorded that the loading was undertaken in line with best practice and an investigation into specific factors which may have contributed to noise levels as per complaint. Noise monitoring undertaken during the period of the complaint did not detect any exceedances. The audit does not consider this single incident as an indicator of an ongoing noise or vibration issue.	Annual Review 2015, 2016, 2017 Complaints register																								
7	<p><b>Blasting</b> The Proponent shall not undertake blasting operations at the surface facilities area without the written approval of the Director-General.</p>	Not Triggered	No Blasting has occurred on the mine during the review period	Annual Review 2015, 2016, 2017 Complaints register Noise Management plan rev D was prepared to address blasting related recommendations in the previous IEA.																								
8	<p><b>Noise Management Plan</b> The Proponent shall prepare and implement a Noise Management Plan for the project to the satisfaction of the Director-General. This plan must be prepared in consultation with OEH by a suitably qualified expert whose appointment has been approved by the Director-General, and submitted to the Director-General for approval by the end of June 2010. It must also provide for real-time noise monitoring.</p>	Compliant	Noise Management Plan has been approved by DPE. Implementation is evidenced by monitoring results and reviews in Annual Reviews. Prepared by Heggies Pty Ltd (Heggies) and Metropolitan Coal, the Rev B of this Noise Management Plan had been initially approved on 25 August 2010.	Annual Review 2015, 2016, 2017 Noise Management Plan rev E approved (as per revision status table in the plan) 25 August 2014, including real-time noise performance indicator. This revision was on the peabody website at the time of audit. Noise Management Plan rev E approval is evidenced by DPE letter dated 25 August 2014.																								
<b>AIR QUALITY &amp; GREENHOUSE GAS</b>																												
9	<p><b>Odour</b> The Proponent shall not cause or permit the emission of offensive odours from the site, as defined under Section 129 of the POEO Act.</p>	Compliant	No odour complaints received during the review period	Annual Review 2015, 2016, 2017 Complaints register																								
10	<p><b>Greenhouse Gas Emissions</b> The Proponent shall implement all reasonable and feasible measures to minimise: (a) energy use on site; and (b) the scope 1, 2 and 3 greenhouse gas emissions produced on site, to the satisfaction of the Director-General.</p>	Compliant	Energy savings action plan is contained within the approved air quality and greenhouse gas management plan. The plan was written and approved in 2011, no further review has taken place.	Annual Review 2015, 2016, 2017 Air quality and Greenhouse Gas management plan rev D dated Dec 2010, DoP approval via letter dated 14 April 2011.																								
11	<p><b>Air Quality impact Assessment Criteria</b> The Proponent shall ensure that dust generated by the project does not cause additional exceedances of the air quality impact assessment criteria listed in Tables 5, 6, and 7 at any residence on privately-owned land, or on more than 25 percent of any privately-owned land.</p> <p><i>Table 5: Long term impact assessment criteria for particulate matter</i></p> <table border="1" data-bbox="201 1199 804 1310"> <thead> <tr> <th>Pollutant</th> <th>Averaging period</th> <th>Criterion</th> </tr> </thead> <tbody> <tr> <td>Total suspended particulate (TSP) matter</td> <td>Annual</td> <td>90 µg/m<sup>3</sup></td> </tr> <tr> <td>Particulate matter &lt; 10 µm (PM<sub>10</sub>)</td> <td>Annual</td> <td>30 µg/m<sup>3</sup></td> </tr> </tbody> </table> <p><i>Table 6: Short term impact assessment criterion for particulate matter</i></p> <table border="1" data-bbox="201 1331 804 1394"> <thead> <tr> <th>Pollutant</th> <th>Averaging period</th> <th>Criterion</th> </tr> </thead> <tbody> <tr> <td>Particulate matter &lt; 10 µm (PM<sub>10</sub>)</td> <td>24 hour</td> <td>50 µg/m<sup>3</sup></td> </tr> </tbody> </table> <p><i>Table 7: Long term impact assessment criteria for deposited dust</i></p> <table border="1" data-bbox="201 1415 804 1478"> <thead> <tr> <th>Pollutant</th> <th>Averaging period</th> <th>Maximum increase in deposited dust level</th> <th>Maximum total deposited dust level</th> </tr> </thead> <tbody> <tr> <td>Deposited dust</td> <td>Annual</td> <td>2 g/m<sup>2</sup>/month</td> <td>4 g/m<sup>2</sup>/month</td> </tr> </tbody> </table> <p><small>Note: Deposited dust is 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, or its latest version.</small></p>	Pollutant	Averaging period	Criterion	Total suspended particulate (TSP) matter	Annual	90 µg/m <sup>3</sup>	Particulate matter < 10 µm (PM <sub>10</sub> )	Annual	30 µg/m <sup>3</sup>	Pollutant	Averaging period	Criterion	Particulate matter < 10 µm (PM <sub>10</sub> )	24 hour	50 µg/m <sup>3</sup>	Pollutant	Averaging period	Maximum increase in deposited dust level	Maximum total deposited dust level	Deposited dust	Annual	2 g/m <sup>2</sup> /month	4 g/m <sup>2</sup> /month	Compliant	<p>Dust suppression measures implemented - Coal loading with smooth top in trains to reduce wind erosion effects Dust monitoring Water cart No chemicals are used for dust suppression</p> <p>As per HVAS records, annual average TSP, PM10 and maximum annual dust deposition related to mine activities are noted to be within these limits. One exceedance of 24-hour average PM10 criterion during 14 October 2015 and 23 May 2016 were traced to bushfire hazard reduction burning activities in the area.</p> <p>Based on confirmation from Illawarra district of RFS, there was bush fire or hazard reduction burning during October 2015 in the area</p>	<p>Annual Review 2015, 2016, 2017 Air quality and Greenhouse Gas management plan rev D dated Dec 2010, DoP approval 14 April 2011 section 6 Annual Review 2015 appendix M and Annual review 2016 appendix R - air quality monitoring and environmental performance assessment report Annual Review 2017 appendix N gives HVAS data on PM10 monitoring data. EPL monitoring summary</p> <p>Independent consultation with Rural Fire Service - confirmation from Illawarra District Officer</p>	
Pollutant	Averaging period	Criterion																										
Total suspended particulate (TSP) matter	Annual	90 µg/m <sup>3</sup>																										
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Pollutant	Averaging period	Maximum increase in deposited dust level	Maximum total deposited dust level																									
Deposited dust	Annual	2 g/m <sup>2</sup> /month	4 g/m <sup>2</sup> /month																									

12	<p><b>Land Acquisition Criteria</b> if the dust generated by the project exceeds the criteria in Tables 8, 9, and 10 at any residence on privately-owned land, or on more than 25 percent of any privately-owned land, the Proponent shall, upon receiving a written request for acquisition from the landowner, acquire the land in accordance with the procedures in conditions 5-7 of schedule 5.</p> <p><i>Table 8. Long term land acquisition criteria for particulate matter</i></p> <table border="1"> <thead> <tr> <th>Pollutant</th> <th>Averaging period</th> <th>Criterion</th> </tr> </thead> <tbody> <tr> <td>Total suspended particulate (TSP) matter</td> <td>Annual</td> <td>90 µg/m<sup>3</sup></td> </tr> <tr> <td>Particulate matter &lt; 10 µm (PM<sub>10</sub>)</td> <td>Annual</td> <td>30 µg/m<sup>3</sup></td> </tr> </tbody> </table> <p><i>Table 9. Short term land acquisition criteria for particulate matter</i></p> <table border="1"> <thead> <tr> <th>Pollutant</th> <th>Averaging period</th> <th>Criterion</th> <th>Percentile*</th> <th>Basis</th> </tr> </thead> <tbody> <tr> <td>Particulate matter &lt; 10 µm (PM<sub>10</sub>)</td> <td>24 hour</td> <td>150 µg/m<sup>3</sup></td> <td>99<sup>th</sup></td> <td>Total<sup>†</sup></td> </tr> <tr> <td>Particulate matter &lt; 10 µm (PM<sub>10</sub>)</td> <td>24 hour</td> <td>50 µg/m<sup>3</sup></td> <td>98.6</td> <td>Increment<sup>‡</sup></td> </tr> </tbody> </table> <p><i>Table 10. Long term land acquisition criteria for deposited dust</i></p> <table border="1"> <thead> <tr> <th>Pollutant</th> <th>Averaging period</th> <th>Maximum increase in deposited dust level</th> <th>Maximum total deposited dust level</th> </tr> </thead> <tbody> <tr> <td>Deposited dust</td> <td>Annual</td> <td>2 g/m<sup>2</sup>/month</td> <td>4 g/m<sup>2</sup>/month</td> </tr> </tbody> </table> <p><small>Note: Deposited dust is 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.</small></p>	Pollutant	Averaging period	Criterion	Total suspended particulate (TSP) matter	Annual	90 µg/m <sup>3</sup>	Particulate matter < 10 µm (PM <sub>10</sub> )	Annual	30 µg/m <sup>3</sup>	Pollutant	Averaging period	Criterion	Percentile*	Basis	Particulate matter < 10 µm (PM <sub>10</sub> )	24 hour	150 µg/m <sup>3</sup>	99 <sup>th</sup>	Total <sup>†</sup>	Particulate matter < 10 µm (PM <sub>10</sub> )	24 hour	50 µg/m <sup>3</sup>	98.6	Increment <sup>‡</sup>	Pollutant	Averaging period	Maximum increase in deposited dust level	Maximum total deposited dust level	Deposited dust	Annual	2 g/m <sup>2</sup> /month	4 g/m <sup>2</sup> /month	Not Triggered	This condition has not been triggered	Annual Review 2015, 2016, 2017 Air quality and Greenhouse Gas management plan rev D dated Dec 2010, DoP approval 14 April 2011 section 6 Annual Review 2015 appendix M and Annual review 2016 appendix R - air quality monitoring and environmental performance assessment report	
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13	<p><b>Air Quality &amp; Greenhouse Gas Management Plan</b> The Proponent shall prepare and implement an Air Quality &amp; Greenhouse Gas Management plan for the project to the satisfaction of the Director-General. This plan must be prepared in consultation with OEH by a suitably qualified expert whose appointment has been approved by the Director-General, and submitted to the Director-General for approval by the end of June 2010. It must also provide for real-time air quality monitoring.</p>	Compliant	Air quality and Greenhouse Gas management plan includes details of real-time air quality monitoring. This condition was Compliesat the previous IEA.	Air quality and Greenhouse Gas management plan rev D dated Dec 2010, DoP approval via letter dated 14 April 2011	
SOIL & WATER					
14	<p><b>Discharges</b> The Proponent shall ensure that all surface water discharges from the site comply with the discharge limits (both volume and quality) set for the project in any EPL.</p>	Observation	<p>All surface water discharges from the site are monitored for compliance with the discharge limits (both volume and quality) in EPL 767 conditions L1.1, L2 and M6.1. As per section 12.4 of Annual Review 2016, there has been a breach of licensed discharge condition whereby a spill of hydraulic fluid ( Quintolubric 818-02 not defined in the Table L2.4 of the EPL) occurred on 28 July 2016. On 2 August 2016, EPA had issued a warning letter and underground personnel have been asked to report any discolourations and safety valves have been fitted to prevent further spills from Quintolubric 818-02 storage tank.</p>	<p>Annual Review 2015, 2016, 2017 EPL Monitoring Summary  As per the Annual Review, To ensure that a similar incident does not occur in the future, underground personnel have been asked to report any spills that occur underground to the Environment and Community Superintendent. In addition, safety valves (with an automatic shut off) have been fitted to prevent supply from the Quintolubric 818-02 storage tank to the underground in the event of a spill.</p>	An observation is made to the reported water discharge breach of compliance in 2016, which should be continually monitored for compliance and reported.
15	<p><b>Surface Facilities Water Management Plan</b> The Proponent shall prepare and implement a Water Management Plan for the surface facilities area and two ventilation shaft sites to the satisfaction of the Director-General. This plan must be prepared in consultation with NOW and OEH by a suitably qualified expert whose appointment has been endorsed by the Director-General, and submitted to the Director-General for approval by the end of June 2010. In addition to the standard requirements for management plans (see condition 2 of schedule 7), this plan must:</p> <p>(a) include a comprehensive water balance for the project; and (b) ensure that suitable measures are implemented to minimise water use, control erosion, prevent groundwater contamination, and comply with any surface water discharge limits.</p> <p><i>Note: The water balance in this plan must be suitably integrated with both the Catchment Monitoring Program and the Water Management Plans that form part of the Extraction Plan.</i></p>	Compliant	<p>The initial submission of the Surface Facilities Water Management Plan had been assessed as Compliesin the previous IEA. The plan has since been updated as Rev D, approved via DPE letter dated 25 August 2015 The plan contains description of water uses, water balance modelling, monitoring program, water management performance indicators, baseline data etc. Table 11 in Annual Review 2015, section 7 and Table 17 of Annual Review 2016 and Table 18 of Annual Review 2017 indicate compliance as per internal review.</p>	<p>Surface Facilities Water Management Plan Rev D Longwalls 301-303 Extraction Plan Appendix A Water Management Plan rev C (Nov 2016) Annual Review 2015, 2016, 2017 EPL Monitoring Summary DPE letter dated 25 Aug 2015 approving the plan</p>	

METEOROLOGICAL					
16	During the life of the project, the Proponent shall ensure that there is a suitable meteorological station in the vicinity of the surface facilities area that complies with the requirements in the <i>Approved Methods for Sampling of Air Pollutants in New South Wales guideline</i> .	Compliant	Previous IEA had confirmed compliance. Annual Review 2016 and 2017 identifies monitoring sites 68028 at Helensburgh, 568069 at Reverces and 68024 at Darkes Forest. The location of the automatic weather station installed at the Metropolitan Colliery at Robertson Street Helensburgh was assessed by Novocom in May 2011 and considered representative of the receiving environment. The weather station includes wind speed and direction, temperature, (2m and 10m), relative humidity and rainfall. This station is not listed on ROM records.	Automatic weather station at 12 Robertson St. Helensburgh was witnessed. Annual Reports 2016, 2017	
TRANSPORT					
17	<b>Parkes Street Intersection</b> By the end of 2010, the Proponent shall: (a) undertake a road safety audit of the Parkes Street and Colliery Road intersection, in consultation with the RTA and WCC; and (b) implement any recommendations of this audit, to the satisfaction of the Director-General.	Compliant	Found to be Compliant the previous IEA as per timeline of end of 2010.		
18	<b>Road Maintenance Contributions</b> From the end of 2009, the Proponent shall make a suitable annual contribution to WCC, WSC, and CC for the maintenance of local roads that are used as haulage routes by the project. If there is any dispute over the amount of the contribution, the matter must be referred to the Director-General for resolution.	Compliant	Contributions made to relevant entities have been paid as due.	Payment register for 2015, 2016 and 2017 sighted for: Wollongong City Council, Wollondilly Shire Council and Campbelltown City Council.	
19	<b>Road Transport Restrictions</b> The Proponent shall not: (a) load coal or coal reject onto trucks, or transport it off site by road, outside the hours of 7am and 6pm Monday to Friday; (b) transport more than 170,000 tonnes of coal off site by road in a calendar year; (c) transport any coal off site to the Port Kembla Coal Terminal by road; (d) permit the departure of more than 25 trucks containing product coal for delivery to the Corrimal Cokeworks on any given day; or (e) permit the departure of more than 30 trucks containing product coal for delivery to the Coalcliff Cokeworks on any given day.	Observation	Helensburgh Coal records demonstrate that no coal was transported from the site by road during the audit period. Therefore conditions 19 (b) through to 19 (e) were not triggered.  Peabody website has the truck and train register which gives only the total six monthly tonnage - Jan to June 2017 road haulage was 81 kilotonnes of coal reject.  Records provided to the auditor did not include information regarding the time of day that the coal rejects were transported. Note that no records of complaints regarding out of hours truck movements had been received and there is no evidence that Condition 19(a) had not been complied with.  As per Traffic Management Plan rev G, section 8.3.1, haulage contractors will only transport during the approved hours Mon-Fri. The transported quantities is within the limit.  As per information in the community newsletter, the plant is aiming to eliminate road transport of coal rejects by 2021.	Traffic Management Plan rev G Annual Review 2015, 2016, 2017 peabody website Truck and Rail Registers	The truck and train register should include information on the timing and number of truck movements to demonstrate future compliance with 19(a).
20	During emergencies (such as the disruption of rail services) the Proponent may exceed the restrictions in condition 19 above with the written approval of the Director-General.	Not Triggered	Not triggered	Annual Review 2015, 2016, 2017	
21	<b>Monitoring</b> The Proponent shall monitor the amount of coal and coal reject transported from the site by road and rail each year, and report the results of this monitoring on its website every six months.	Compliant	The annual review reports production summary in Table 4 and mentions this information is on the website and updated six monthly.	Annual Review 2015, 2016, 2017	
22	<b>Traffic Management</b> The Proponent shall prepare and implement a Traffic Management Plan for the project to the satisfaction of the Director-General. This plan must be prepared in consultation with the RTA, WCC, local schools and the CCC, and submitted to the Director-General for approval by the end of February 2010. The primary aim of this plan is to minimise the traffic impacts of the project on the residential areas and schools within Helensburgh.	Compliant	Traffic management plan rev G, amended from rev F approved by DP&E on 25 August 2015, addressing comments on transport of coal reject to the Calderwood Urban Development project.	Traffic Management Plan rev G, dt Feb 2016; DPE letter dated 25 Aug 2015 approving the plan	
TRANSPORT					
23	The Proponent shall minimise the visual impacts, and particularly the off-site lighting impacts, of the surface facilities area and two ventilation shaft sites to the satisfaction of the Director-General.	Compliant	There were no complaints related to visual impacts during the review period. Lights are controlled by timers to reduce impacts.	Annual Review 2015, 2016, 2017 Complaints register	
WASTE					
24	The Proponent shall: (a) minimise the waste (including coal reject) generated by the project; and (b) ensure that the waste generated by the project is appropriately stored, handled, and disposed of, to the satisfaction of the Director-General.	Compliant	Waste generation has changed in quantities based on the waste type. As per annual review reports section, general waste generated has increased after 2014 exceeding the 2012 levels in 2016 (280,847 tonnes) and in 2017 (288,255 tonnes). Coal reject, scrap metal and paper/plastics have reduced after 2014 while waste oil has increased manifold. Scrap wood, as per 2016 report Figure 23 was only 20kg in 2016, a reduction from nearly 5000kg in 2015. During 2016, Metropolitan Coal transported 125,148 tonnes of coal reject to the Lend Lease Calderwood Urban Development Project for the beneficial re-use of the coal reject as fill material. This indicates waste was appropriately stored, handled and disposed of.	Annual Review 2015 (section 6.2.4), 2016 (section 6.2.4), 2017 (section 7.4)	
25	The Proponent shall prepare and implement a Waste Management Plan for the project to the satisfaction of the Director-General. This plan must be submitted to the Director-General for approval by the end of June 2010.	Compliant	WMP Rev A had been approved in August 2010 and Rev B in April 2011, while Rev C is yet to receive DP&E approval. The Rev C was prepared addressing transport of coal reject to the Lend Lease Calderwood Urban Development project for beneficial reuse onsite.	Current version of Waste Management Plan rev C dated February 2016 under review DoP Letter dated 14 April 2011 indicates approval of the Waste Management Plan Rev B. Annual Review reports assess environmental performance for waste management by reporting against various performance indicators as per the WMP.	

SCHEDULE 5 - ADDITIONAL PROCEDURES FOR AIR QUALITY AND NOISE MANAGEMENT					
NOTIFICATION OF LANDOWNERS					
1	If the results of the monitoring required in schedule 4 identify that impacts generated by the project are greater than the relevant impact assessment criteria in schedule 4, except where a negotiated agreement has been entered into in relation to that impact, then the Proponent shall, within 2 weeks of obtaining the monitoring results, notify the Executive Director Mineral Resources, the affected landowners and tenants (including tenants of mine owned properties) accordingly, and provide quarterly monitoring results to each of these parties until the results show that the project is complying with the criteria in schedule 4.	<b>Non Compliant</b>	Sustained noise non-compliances in 2015/2016 were not notified to the nearby residences on time until after meeting with DP&E. This delay was caused by waiting for noise modelling results. Residences were notified once noise monitoring report from SLR consulting for 2016 Quarter 3 was available. In 2017, the Quarter 1 and Quarter 2 conditional sustained non-compliances were not identified until after the Quarter 4 conditional sustained con-compliance was identified. Notification to nearby residences were made in March 2018 after conclusive identification of sustained non-compliances and review of noise modelling results.	Annual Review 2015, 2016, 2017	Sustained non-compliance in terms of noise generation and, in this case, timely monitoring, assessment and reporting to affected landowners and tenants must be continually undertaken.
2	If the results of monitoring required in Schedule 4 identify that impacts generated by the project are greater than the relevant air quality impact assessment criteria in schedule 4, then the Proponent shall send the relevant landowners and tenants (including tenants of mine owned properties) a copy of the NSW Health fact sheet entitled "Mine Dust and You" (and associated updates) in conjunction with the notification required in condition 1.	<b>Not Triggered</b>	Not triggered	Annual Review 2015, 2016, 2017 Complaints register	
INDEPENDENT REVIEW					
3	If a landowner considers the project to be exceeding the impact assessment criteria in schedule 4, then he/she may ask the Director-General in writing for an independent review of the impacts of the project on his/her land.  If the Director-General is satisfied that an independent review is warranted, the Proponent shall within 2 months of the Director-General's decision;  (a) consult with the landowner to determine his/her concerns; (b) commission a suitably qualified, experienced and independent person, whose appointment has been approved by the Director-General, to conduct monitoring on the land, to: • determine whether the project is complying with the relevant impact assessment criteria in schedule 4; and • identify the source(s) and scale of any impact on the land, and the project's contribution to this impact; and (c) give the Director-General and landowner a copy of the independent review.	<b>Not Triggered</b>	Not triggered	Annual Review 2015, 2016, 2017 Complaints register Discussions with Stephen Love	
4	If the independent review determines that the project is complying with the relevant impact assessment criteria in schedule 4, then the Proponent may discontinue the independent review with the approval of the Executive Director Mineral Resources.  If the independent review determines that the project is not complying with the relevant impact assessment criteria in Schedule 4, then the Proponent shall: (a) implement all reasonable and feasible measures, in consultation with the landowner, to ensure that the project complies with the relevant criteria, and conduct further monitoring to determine whether these measures ensure compliance; or (b) secure a written agreement with the landowner to allow exceedances of the relevant impact assessment criteria, to the satisfaction of the Executive Director Mineral Resources.  However, if the further monitoring referred to under paragraph (a) above determines that the project is complying with the relevant impact assessment criteria, then the Proponent may discontinue the independent review with the approval of the Executive Director Mineral Resources.  If the independent review determines that the project is not complying with the relevant land acquisition criteria in schedule 4, then the Proponent shall offer to acquire all or part of the landowner's land in accordance with the procedures in conditions 5-7 below, to the satisfaction of the Executive Director Mineral Resources.	<b>Not Triggered</b>	Not triggered		
LAND ACQUISITION					

5	<p>Within 3 months of receiving a written request from a landowner with acquisition rights, the Proponent shall make a binding written offer to the landowner based on:</p> <p>(a) the current market value of the landowner/s interest in the property at the date of this written request, as if the property was unaffected by the project the subject of the project application, having regard to the:</p> <ul style="list-style-type: none"> <li>existing and permissible use of the land, in accordance with the applicable planning instruments at the date of the written request; and</li> <li>presence of improvements on the property and/or any approved building or structure which has been physically commenced at the date of the landowners written request, and is due to be completed subsequent to that date, but excluding any improvements that have resulted from the implementation of 'reasonable and feasible measures' in condition 3 of schedule 4 or condition 4(a) of this schedule;</li> </ul> <p>(b) the reasonable costs associated with:</p> <ul style="list-style-type: none"> <li>relocating within the Wollongong local government areas, or to any other local government area determined by the Director-General;</li> <li>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</li> </ul> <p>(c) reasonable compensation for any disturbance caused by the land acquisition process.</p> <p>However, if following this period, the Proponent 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 Director-General for resolution.</p>	Not Triggered	Not triggered	
5 (cont.)	<p>Upon receiving such a request, the Director-General shall request the President of the NSW Division of the Australian Property Institute (the API) to appoint a qualified independent valuer to:</p> <p>(a) consider submissions from both parties;</p> <p>(b) 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;</p> <p>(c) prepare a detailed report setting out the reasons for any determination; and</p> <p>(d) provide a copy of the report to both parties.</p> <p>Within 14 days of receiving the independent value/s report, the Proponent shall make a binding written offer to the landowner to purchase the land at a price not less than the independent value/s determination.</p> <p>However, if either party disputes the independent value/s determination, then within 14 days of receiving the independent value/s report, they may refer the matter to the Director-General for review. Any request for a review must be accompanied by a detailed report setting out the reasons why the party disputes the independent value/s determination. Following consultation with the independent valuer and both parties, the Director-General shall determine a fair and reasonable acquisition price for the land, having regard to the matters referred to in paragraphs (a)-(c) above and the independent value/s report. Within 14 days of this determination, the Proponent shall make a binding written offer to the landowner to purchase the land at a price not less than the Director-General's determination.</p> <p>If the landowner refuses to accept the Proponent's binding written offer under this condition within 6 months of the offer being made, then the Proponent's obligations to acquire the land shall cease, unless the Director-General determines otherwise.</p>	Not Triggered	Not triggered	
6	The Proponent shall pay all reasonable costs associated with the land acquisition process described in condition 5 above.	Not Triggered	Not triggered	
7	If the Proponent and landowner agree that only part of the land shall be acquired, then the Proponent shall also pay all reasonable costs associated with obtaining Council approval for any plan of subdivision (where permissible), and registration of the plan at the Office of the Registrar-General.	Not Triggered	Not triggered	

SCHEDULE 6 - REHABILITATION & OFFSETS

REHABILITATION																						
1	<p><b>Rehabilitation Objectives</b> The Proponent shall achieve the rehabilitation objectives in Table 1 1 to the satisfaction of the Executive Director Mineral Resources.</p> <table border="1"> <caption>Table 11: Rehabilitation Objectives</caption> <thead> <tr> <th>Domain</th> <th>Rehabilitation objective</th> </tr> </thead> <tbody> <tr> <td>Surface Facilities Area</td> <td>Set through condition 2 below</td> </tr> <tr> <td>Waratah Rivulet, between the downstream edge of Flat Rock Swamp and the full supply level of the Woronora Reservoir</td> <td>Restore surface flow and pool holding capacity as soon as reasonably practicable</td> </tr> <tr> <td>Eastern Tributary, between the maingate of Longwall 26 and the full supply level of the Woronora Reservoir</td> <td></td> </tr> <tr> <td>Cliffs</td> <td>Ensure that there is no safety hazard beyond that existing prior to mining</td> </tr> <tr> <td>Other land affected by the project</td> <td>Restore ecosystem function, including maintaining or establishing self-sustaining native ecosystems:  <ul style="list-style-type: none"> <li>comprised of local native plant species; with</li> <li>a landform consistent with the surrounding environment</li> </ul> </td> </tr> <tr> <td>Built features</td> <td>Repair/restore to pre-mining condition or equivalent</td> </tr> <tr> <td>Community</td> <td>Minimise the adverse socio-economic effects associated with mine closure including the reduction in local and regional employment</td> </tr> <tr> <td></td> <td>Ensure public safety</td> </tr> </tbody> </table>	Domain	Rehabilitation objective	Surface Facilities Area	Set through condition 2 below	Waratah Rivulet, between the downstream edge of Flat Rock Swamp and the full supply level of the Woronora Reservoir	Restore surface flow and pool holding capacity as soon as reasonably practicable	Eastern Tributary, between the maingate of Longwall 26 and the full supply level of the Woronora Reservoir		Cliffs	Ensure that there is no safety hazard beyond that existing prior to mining	Other land affected by the project	Restore ecosystem function, including maintaining or establishing self-sustaining native ecosystems: <ul style="list-style-type: none"> <li>comprised of local native plant species; with</li> <li>a landform consistent with the surrounding environment</li> </ul>	Built features	Repair/restore to pre-mining condition or equivalent	Community	Minimise the adverse socio-economic effects associated with mine closure including the reduction in local and regional employment		Ensure public safety	Compliant	<p>A review of the Annual Reviews indicate that these objectives have been met. Annual Review reports section 9.1 and 9.3 detail rehabilitation status including stream remediation measures undertaken. Table 13 of Annual Review 2015, Table 19 of the Annual Review 2016 and Table 20 of Annual Review 2017 provides self assessment of Environmental Performance - Rehabilitation.</p> <p>As per the 2016 annual review, in January 2017, the natural drainage behaviour of additional pools on the Eastern Tributary was observed to have been impacted by mine subsidence. Metropolitan Coal provided DP&amp;E (21 Feb 2017) a proposed course of action in relation to the resulting exceedance of watercourse performance measure of Eastern Tributary between the maingate of Longwall 26 and the full supply level of the Woronora Reservoir.</p>	<p>Annual Review 2015, 2016, 2017 Extraction plans for Longwalls 23-27 and 301-303 Rehabilitation Management Plan rev E, April 2014 Subsidence Monitoring Program Rev A, Nov 2016 Rehabilitation Strategy rev A, Oct 2011</p>
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	Ensure public safety																					
2	<p><b>Rehabilitation Strategy - Surface Facilities Area</b> By the end of October 2011, the Proponent shall prepare a Rehabilitation Strategy for the surface facilities area to the satisfaction of the Director-General.</p> <p>This strategy must:</p> <p>(a) be prepared by a team suitably qualified and experienced experts whose appointment has been endorsed by the Director-General;</p> <p>(b) be prepared in consultation with relevant stakeholders, including WCC and the CCC;</p> <p>(c) investigate options for the future use of the area upon the completion of mining;</p> <p>(d) describe and justify the proposed rehabilitation strategy for the area; and</p> <p>(e) define the rehabilitation objectives for the area, as well as the proposed completion criteria for this rehabilitation.</p>	Compliant	<p>This condition was assessed as Complies at the previous IEA for the relevant time period.</p>	<p>2014 IEA report Rehabilitation Strategy rev A, Oct 2011</p>																		
3	<p><b>Progressive Rehabilitation</b> To the extent that mining operations permit, the Proponent shall carry out rehabilitation progressively, that is, as soon as reasonably practicable following the disturbance.</p>	Compliant	<p>Metropolitan Coal has undertaken progressive rehabilitation works as relevant</p>	<p>Annual Review 2015, 2016 and 2017</p>																		



4	<p><b>Rehabilitation Management Plan</b> The Proponent shall prepare and implement a Rehabilitation Management Plan for the project to the satisfaction of the Executive Director Mineral Resources. This plan must be prepared in consultation with the relevant stakeholders, and submitted to DRE for approval prior to carrying out any second workings in the mining area.</p> <p><i>Note: In accordance with condition 12 of schedule 2, the preparation and implementation of Rehabilitation Management Plans is likely to be staged, with each plan covering a defined area (or domain) for rehabilitation. In addition, while mining operations are being carried out, some of the proposed remediation or rehabilitation measures may be included in the detailed management plans that form part of the Extraction Plan. If this is the case, however, then the Proponent will be required to ensure that there is good cross-referencing between the various management plans.</i></p>	Compliant	<p>Rehabilitation management Plan rev E, prepared to amend previous version in response to comments from DRE and SCA was approved by DP&amp;E as of 22 May 2014 - this was assessed as complying in the previous IEA. This plan has not been updated in this review period.</p>	<p>Rehabilitation Management Plan rev E, April 2014 - approved 22 May 2014 Rehabilitation Strategy Rev A dated Oct 2011 DP&amp;E Letter of 19 Aug 2014 approving the Rehabilitation Management Plan in review of the Grouting Protocol and Grouting Procedure. DRE letter dated 22 May 2014 approving rev E of the plan.</p>	
<b>OFFSETS</b>					
5	<p><b>Catchment improvement Works</b> The Proponent shall: (a) pay SCA \$100,000 by the end of 2011 to carry out catchment improvement works within the Woronora catchment area; or (b) carry out catchment improvement works within this area that have an equivalent value to the satisfaction of SCA,</p>	Compliant	<p>a) Complies during the relevant timeframe as per previous IEA. b) As per annual review 2015 and 2016 sections 9.1, 9.4 and 9.5, two catchment improvement works projects were carried out.</p>	<p>Annual Review 2015, 2016, 2017 2014 IEA report Rehabilitation Management Plan rev E, April 2014 Subsidence Monitoring Program Rev A, Nov 2016 Rehabilitation Strategy rev A, Oct 2011</p>	
6	<p><b>Offsets</b> If the Proponent exceeds the performance measures in Table 1 of this approval, and either (a) the contingency measures implemented by the Proponent have failed to remediate the impact; or (b) the Director-General determines that it is not reasonable or feasible to remediate the impact, then the Proponent shall provide a suitable offset to compensate for the impact to the satisfaction of the Director-General.</p> <p><i>Note: Any offsets required under this condition must be proportionate with the significance of the impact.</i></p>	Compliant	<p>As per Section 9.5 of Annual review 2016, in October 2016 Metropolitan Coal identified the subsidence impact performance measure for the Eastern Tributary, between the full supply level of the Woronora Reservoir and the Longwall 26 maingate in Table 1, Condition 1, Schedule 3 of the Project Approval had been exceeded in relation to iron staining. In early 2017 the same performance measure was identified as being exceeded in relation to pool drainage behaviour. Metropolitan Coal has proposed to conduct stream remediation measures on the Eastern Tributary in accordance with the Longwalls 23-27 Water Management Plan Contingency Plan.</p>	<p>Annual Review 2015, 2016, 2017 Letter dated 20 April 2018 indicating submission of Rehabilitation Management Plan for Longwalls 301-302. Discussion with Stephen Love - Implemented remediation measures without any failures as per internal reviews and there have been no direction from DPE to-date.</p>	
<b>SCHEDULE 7 - ENVIRONMENTAL MANAGEMENT, REPORTING AND AUDITING</b>					
<b>ENVIRONMENTAL MANAGEMENT</b>					
1a	<p><b>Environmental Management Strategy</b> The Proponent shall prepare and implement an Environmental Management Strategy for the project to the satisfaction of the Director-General.  The strategy must: (a) be submitted to the Director-General for approval by the end of September 2009;</p>	Compliant	<p>This condition was assessed as Compliant at the previous IEA for the relevant time period.</p>	<p>Environmental Management Strategy rev A2 dated January 2013, as approved by DP&amp;E on 20 May 2013 2014 IEA report</p>	
1b	<p><b>Environmental Management Strategy</b> The strategy must: (b) provide the strategic framework for environmental management of the project;</p>	Compliant	<p>Environmental Management Strategy document provides strategic framework in various sections of the document.</p>	<p>Environmental Management Strategy rev A2 dated January 2013, as approved by DP&amp;E on 20 May 2013 2014 IEA report</p>	
1c	<p><b>Environmental Management Strategy</b> The strategy must: (c) identify the statutory approvals that apply to the project;</p>	Compliant	<p>Environmental Management Strategy section 3</p>	<p>Environmental Management Strategy rev A2 dated January 2013, as approved by DP&amp;E on 20 May 2013 2014 IEA report</p>	
1d	<p><b>Environmental Management Strategy</b> The strategy must: (d) describe the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the project;</p>	Compliant	<p>Environmental Management Strategy section 5</p>	<p>Environmental Management Strategy rev A2 dated January 2013, as approved by DP&amp;E on 20 May 2013 2014 IEA report</p>	
1e	<p><b>Environmental Management Strategy</b> The strategy must: (e) describe the procedures that would be implemented to: • keep the local community and relevant agencies informed about the operation and environmental performance of the project; • receive, handle, respond to, and record complaints; • resolve any disputes that may arise during the course of the project; • respond to any non-compliance; and • respond to emergencies;</p>	Compliant	<p>Environmental Management Strategy document provides the required procedures in various sections (6-9) of the document.</p>	<p>Environmental Management Strategy rev A2 dated January 2013, as approved by DP&amp;E on 20 May 2013 2014 IEA report</p>	
1f	<p><b>Environmental Management Strategy</b> The strategy must: (f) include: • copies of the various strategies, plans and programs that are required under the conditions of this approval once they have been approved; and • a clear plan depicting all the monitoring currently being carried out within the project area.</p>	Compliant	<p>Environmental Management Strategy section 3.1 and attachment</p>	<p>Environmental Management Strategy rev A2 dated January 2013, as approved by DP&amp;E on 20 May 2013 2014 IEA report</p>	
2a	<p><b>Management Plan Requirements</b> The Proponent shall ensure that the management plans required under this approval are prepared in accordance with any relevant guidelines, and include: (a) detailed baseline data;</p>	Compliant	<p>Section 6-7 of the various management plans (excl Environmental Management Strategy) examined and Section 3 of Catchment Monitoring Plan address this requirement</p>		

2b	<p><b>Management Plan Requirements</b> The Proponent shall ensure that the management plans include: (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 project or any management measures;</li> </ul>	Compliant	Sections 3 - 6 of various plans examined address this requirement		
2c	<p><b>Management Plan Requirements</b> The Proponent shall ensure that the management plans include: (c) a description of the measures that would be implemented to comply with the relevant statutory requirements, limits, or performance measures/criteria ;</p>	Compliant	Sections 5 and 8 of various plans examined address this requirement		
2d	<p><b>Management Plan Requirements</b> The Proponent shall ensure that the management plans include: (d) a program to monitor and report on the:</p> <ul style="list-style-type: none"> <li>impacts and environmental performance of the project;</li> <li>effectiveness of any management measures (see c above);</li> </ul>	Compliant	Sections 8-9 of various plans as reviewed address this requirement	<ul style="list-style-type: none"> <li>Environmental Management Strategy</li> <li>Catchment Monitoring Program Rev E</li> <li>Extraction Plan longwalls 23-27, 301-303</li> <li>Subsidence Monitoring Program (including a Coal Resource Recovery Plan);</li> <li>Water Management Plan Rev C</li> <li>Biodiversity Management Plan Rev C</li> <li>Land Management Plan Rev C</li> <li>Heritage Management Plan</li> <li>Built Features Management Plan;</li> <li>Public Safety Management Plan</li> <li>Construction Management Plan – Woronora Special Area</li> <li>Construction Management Plan – Woronora Special Area</li> <li>Noise Management Plan</li> <li>Rehabilitation Management Plan</li> </ul>	
2e	<p><b>Management Plan Requirements</b> The Proponent shall ensure that the management plans include: (e) a contingency plan to manage any unpredicted impacts and their consequences;</p>	Compliant	Sections 9-10 of various plans examined address this requirement		
2f	<p><b>Management Plan Requirements</b> The Proponent shall ensure that the management plans include: (f) a program to investigate and implement ways to improve the environmental performance of the project over time;</p>	Compliant	Sections 12-13 of various plans examined address this requirement		
2g	<p><b>Management Plan Requirements</b> The Proponent shall ensure that the management plans include: (g) a protocol for managing and reporting any:</p> <ul style="list-style-type: none"> <li>incidents;</li> <li>complaints;</li> <li>non-compliances with statutory requirements; and</li> <li>exceedances of the impact assessment criteria and/or performance criteria; and</li> </ul>	Compliant	Sections 13-14 of various plans examined detail the protocol for managing and reporting incidents, complaints, non-compliance and exceedances as relevant to each plan.		
2h	<p><b>Management Plan Requirements</b> The Proponent shall ensure that the management plans include: (h) a protocol for periodic review of the plan.</p>	Compliant	Section 2 of various plans address review timeframes		
3a	<p><b>Annual Review</b> By the end of March each year, the Proponent shall review the environmental performance of the project to the satisfaction of the Director-General. This review must: (a) describe the works that were carried out in the past calendar year, and the works that are proposed to be carried out over the current calendar year;</p>	Compliant	Annual review reports for 2015 and 2016 have been made available at the audit. The review documents detail the works carried out and proposed as required. Approval for Annual review 2017 is awaited at the time of audit.	Annual Review 2015, 2016 and 2017 DPE letter dated 5 Oct 2016 approving the 2015 Annual Review DPE letter dated 26 July 2017 approving the 2016 Annual Review	
3b	<p><b>Annual Review</b> This review must: (b) include a comprehensive review of the monitoring results and complaints records of the project over the past calendar year, which includes a comparison of these results against the</p> <ul style="list-style-type: none"> <li>the relevant statutory requirements, limits or performance measures/criteria;</li> <li>the monitoring results of previous years; and</li> <li>the relevant predictions in the EA, PPR, and Extraction Plan;</li> </ul>	Compliant	Annual review reports include review of monitoring results, complaints and comparison of results for the calendar year.	Annual Review 2015, 2016 and 2017	
3c	<p><b>Annual Review</b> This review must: (c) identify any non-compliance over the last year, and describe what actions were (or are being) taken to ensure compliance;</p>	Compliant	Annual review reports include review of monitoring results, complaints and comparison of results for the calendar year.	Annual Review 2015, 2016 and 2017	
3d	<p><b>Annual Review</b> This review must: (d) identify any trends in the monitoring data over the life of the project;</p>	Compliant	Annual review reports include review of monitoring results, complaints and comparison of results for the calendar year.	Annual Review 2015, 2016 and 2017	
3e	<p><b>Annual Review</b> This review must: (e) identify any discrepancies between the predicted and actual impacts of the project, and analyse the potential cause of any significant discrepancies; and</p>	Compliant	Annual review reports include review of monitoring results, complaints and comparison of results for the calendar year.	Annual Review 2015, 2016 and 2017	
3f	<p><b>Annual Review</b> This review must: (f) describe what measure will be implemented over the next year to improve the environmental performance of the project.</p>	Compliant	Annual review reports include actions plan for improving environmental performance of the project (eg section 14 n 2017 Annual Review)	Annual Review 2015, 2016 and 2017	

4	<p><b>Revision of Strategies, Plans &amp; Programs</b>                  Within 3 months of the submission of an:                  (a) audit under condition 8 of schedule 7;                  (b) incident report under condition 6 of schedule 7;                  (c) annual review under condition 3 of schedule 7, or                  (d) modification to the project approval,                  the Proponent shall review, and if necessary revise, the strategies, plans, and programs required under this approval to the satisfaction of the Director-General.</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 project.</i></p>	Not Triggered	The previous IEA did not require any updates to any plans. There were no incident reports that warranted updates to any plans. Annual review requirements for updates to plans are detailed in section 5 of Annual Review reports - there were no related updates to any plans. There was no modification to project approval that warranted updates to any plans.	Annual Review 2015, 2016 and 2017; Previous IEA report	
5	<p><b>Community Consultative Committee</b>                  The Proponent shall establish a Community Consultative Committee (CCC) for the project to the satisfaction of the Director-General. This CCC must be operated in general accordance with the Guidelines for Establishing and Operating Community Consultative Committees for Mining Projects (Department of Planning, 2007, or its latest version) to the satisfaction of the Director-General.</p> <p><i>Note: The CCC is an advisory committee. The Department and other relevant agencies are responsible for ensuring that the Proponent complies with this approval. In accordance with the Guideline, the Committee should comprise an independent chair and appropriate representation from the Proponent, affected councils, recognised environmental groups and the general community in Helensburgh and the area of the project.</i></p>	Compliant	The Community Consultative Committee (CCC) for the Metropolitan Colliery Mine project has been set up and meets quarterly in the Metropolitan Coal Administration Office (Boardroom). The Metropolitan Coal CCC is run in accordance with the NSW Department of Planning & Environment Community Consultative Committee Guidelines (Nov 2016 at the time of this audit). Meeting minutes are available on peabody website. The management processes for CCC is detailed in Annual Review, eg Section 11 in Annual Review 2017.	Annual Review 2015, 2016 and 2017 Peabody website - CCC weblink  <a href="https://www.peabodyenergy.com/Peabody/media/MediaLibrary/Operations/Australia%20Mining/New%20South%20Wales%20Mining/Metropolitan%20Mine/community-consultative-committee-guidelines-state-significant-projects-2.pdf">https://www.peabodyenergy.com/Peabody/media/MediaLibrary/Operations/Australia%20Mining/New%20South%20Wales%20Mining/Metropolitan%20Mine/community-consultative-committee-guidelines-state-significant-projects-2.pdf</a>	
<b>REPORTING</b>					
6	<p><b>Incident</b>                  The Proponent shall notify the Director-General and any other relevant agencies of any incident associated with the project as soon as practicable after the Proponent becomes aware of the incident. Within 7 days of the date of the incident, the Proponent shall provide the Director-General and any relevant agencies with a detailed report on the incident.</p>	Compliant	Section 12 of the Annual Review 2015 and 2016 and section 13 of Annual Review 2017 reports detail incident reporting. A separate incident register is not maintained. The exceedance of the subsidence impact performance measure was reported to the Secretary of the DP&E and other relevant agencies on the 14 October 2016.	Annual Review 2015, 2016 and 2017; Complaints register; Incident reports sampled - Minimal iron staining on the Eastern Tributary - detailed incident report, initial notification to DPE on 14 Oct 2016 and cover letter for detailed incident report sent to DPE on 21 Oct 2016.	It is <b>recommended</b> to maintain a register of incidents, actions (including updates to any plans as per condition 4 above) and reporting timeframes as relevant. This will assist in tracking them all in once place rather than distributed across various Annual Reviews.
7	<p><b>Regular</b>                  The Proponent shall provide regular reporting on the environmental performance of the project on its website, in accordance with the reporting arrangements in any plans or programs approved under the conditions of this approval, and to the satisfaction of the Director-General.</p>	Compliant	Annual review reports include environmental performance reporting. These reports are available on the peabody website.	Annual Review 2015, 2016 and 2017 Peabody website <a href="https://www.peabodyenergy.com/Operations/Australia-Mining/New-South-Wales-Mining/Metropolitan-Mine/Approvals,-Plans-Reports">https://www.peabodyenergy.com/Operations/Australia-Mining/New-South-Wales-Mining/Metropolitan-Mine/Approvals,-Plans-Reports</a>	
<b>INDEPENDENT ENVIRONMENTAL AUDIT</b>					
8	<p>By end of December 2011, and every 3 years thereafter, unless the Director-General directs otherwise the Proponent shall commission and pay the full cost of an independent Environmental Audit of the project. This audit must:</p> <p>(a) be conducted by suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Director-General;</p> <p>(b) include consultation with the relevant agencies;</p> <p>(c) assess the environmental performance of the project and assess whether it is complying with the relevant requirements in this approval and any relevant EPL or Mining Lease (including any assessment, plan or program required under these approvals);</p> <p>(d) review the adequacy of strategies, plans or programs required under these approvals; and, if appropriate; and</p> <p>(e) recommend measures or actions to improve the environmental performance of the project, and/or any assessment, plan or program required under these approvals.</p> <p><i>Note: This audit team must be led by a suitably qualified auditor and include experts in any fields specified by the Director-General.</i></p>	Compliant	Previous IEA was undertaken by Trevor Brown & Associates in May 2015 for the period 2012-2014 with report finalised in January 2016, against the relevant requirements.	Previous IEA report signed off on 18 January 2016	
9	<p>Within 6 weeks of the completing of this audit, or as otherwise agreed by the Director-General, the Proponent shall submit a copy of the audit report to the Director-General, together with its response to any recommendations contained in the audit report.</p>	Compliant	Previous audit report was submitted to DPE on 25 Feb 2016	Letter from Peabody Energy (Ryan Pascoe, Manager Safety and Environmental Services) to DP&E (Mike Young, Director Resource Assessments) dated 24 February 2016	
<b>ACCESS TO INFORMATION</b>					
10	<p>From the end of 2009, the Proponent shall make the following information publicly available on its website:</p> <p>(a) a copy of all current statutory approvals;</p> <p>(b) a copy of the current environmental management strategy and associated plans and programs;</p> <p>(c) a summary of the monitoring results of the project, which have been reported in accordance with the various plans and programs approved under the conditions of this approval;</p> <p>(d) a complaints register, which is to be updated on a monthly basis;</p> <p>(e) a copy of the minutes of CCC meetings;</p> <p>(f) a copy of any Annual Reviews (over the last 5 years);</p> <p>(g) a copy of any independent Environmental Audit, and the proponent's response to the recommendations in any audit; and</p> <p>(h) any other matter required by the Director-General.</p>	Observation	All the required information is publicly accessible at the Peabody website for Metropolitan Coal Mine project. Summary of monitoring results are included in the Annual Review reports. Complaints register has only one complaint in 2017 and no historical information is publicly available.	<a href="https://www.peabodyenergy.com/Operations/Australia-Mining/New-South-Wales-Mining/Metropolitan-Mine/Approvals,-Plans-Reports">https://www.peabodyenergy.com/Operations/Australia-Mining/New-South-Wales-Mining/Metropolitan-Mine/Approvals,-Plans-Reports</a>	An observation is made regarding details on the complaints register - It is recommended to provide a detailed list of complaints and actions including closure in the complaints register. It is recommended to maintain a register of incidents, actions (including updates to any plans as per condition 4 above) and reporting timeframes as relevant.

Resources Metropolitan Coal  
Independent Environmental Audit  
Detailed Findings and Recommendations  
Environment Protection Licence No 767

Clause	Requirement	Compliance	Audit Finding	Objective Evidence	Recommendation																																																
<b>Administrative Conditions</b>																																																					
A1.1	<p><b>What the licence authorises and regulates</b></p> <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.</p> <table border="1"> <thead> <tr> <th>Scheduled Activity</th> <th>Fee Based Activity</th> <th>Scale</th> </tr> </thead> <tbody> <tr> <td>Coal Works</td> <td>Coal works</td> <td>&gt; 2000000 - 5000000 T handled</td> </tr> <tr> <td>Mining for Coal</td> <td>Mining for coal</td> <td>&gt; 2000000 - 3500000 T produced</td> </tr> </tbody> </table> <p>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>	Scheduled Activity	Fee Based Activity	Scale	Coal Works	Coal works	> 2000000 - 5000000 T handled	Mining for Coal	Mining for coal	> 2000000 - 3500000 T produced	Noted																																										
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A2.1	<p><b>Premises or plant to which this licence applies</b></p> <p>The licence applies to the following premises:</p> <table border="1"> <thead> <tr> <th>Premises Details</th> </tr> </thead> <tbody> <tr> <td>METROPOLITAN COLLIERY</td> </tr> <tr> <td>PARKES STREET</td> </tr> <tr> <td>HELENSBURGH</td> </tr> <tr> <td>NSW 2508</td> </tr> <tr> <td>LOT 1 DP 229817, LOT 342 DP 752033, LOT 617 DP 752033</td> </tr> <tr> <td>MINING PURPOSES LEASE 276, 725 AND 1344</td> </tr> </tbody> </table>	Premises Details	METROPOLITAN COLLIERY	PARKES STREET	HELENSBURGH	NSW 2508	LOT 1 DP 229817, LOT 342 DP 752033, LOT 617 DP 752033	MINING PURPOSES LEASE 276, 725 AND 1344	Noted																																												
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A3.1	<p><b>Information supplied to the EPA</b></p> <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.</p> <p>In this condition the reference to "the licence application" includes a reference to:</p> <p>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</p> <p>b) the licence information form provided by the licensee to the EPA to assist the EPA in connection with the issuing of this licence.</p>	Noted																																																			
<b>Discharges to Air and Water and Applications to Land</b>																																																					
P1.1	<p><b>Location of monitoring/discharge points and areas</b></p> <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> <table border="1"> <thead> <tr> <th>EPA Ident- Station no.</th> <th>Type of Monitoring Point</th> <th>Type of Discharge Point</th> <th>Location Description</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Dust Monitoring</td> <td>Point</td> <td>Dust gauge located at 101 The Colonnade located on DOJ on the map sheet "Figure 4 - Location of Air Quality Monitoring Sites" EPA ref. DOC1332043</td> </tr> <tr> <td>2</td> <td>Dust Monitoring</td> <td>Point</td> <td>Dust gauge located at 26 Old Station Road located as DOJ on the map sheet "Figure 4 - Location of Air Quality Monitoring Sites" EPA ref. 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P1.2	<p><b>Location of monitoring/discharge points and areas</b></p> <p>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.</p>	Noted																																																			
P1.3	<p><b>Location of monitoring/discharge points and areas</b></p> <p>The following points referred to in the table below 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> <table border="1"> <thead> <tr> <th>EPA Ident- Station no.</th> <th>Type of Monitoring Point</th> <th>Type of Discharge Point</th> <th>Location Description</th> </tr> </thead> <tbody> <tr> <td>6</td> <td></td> <td>Discharge to Waters</td> <td>The pipe outlet to Camp Creek upstream of the existing weir wall shown on drawing No. M518 titled "EPA Monitoring Points" dated 10/11/06 and contained in EPA file no. 28020A22</td> </tr> <tr> <td>7</td> <td></td> <td>Discharge to Waters</td> <td>The outlet of the concrete flume (from the water treatment plant) to Camp Creek shown on drawing No. M518 titled "EPA Monitoring Points" dated 10/11/06 and contained in EPA file no. 28020A22</td> </tr> <tr> <td>8</td> <td></td> <td>Discharge to Waters</td> <td>The overflow from the Turkey Nest Dam to Camp Creek shown on drawing No. M518 titled "EPA Monitoring Points" dated 10/11/06 and contained in EPA file no. 28020A22</td> </tr> <tr> <td>9</td> <td>Effluent Quality Monitoring</td> <td></td> <td>The clean water tank of the water treatment plant shown on Drawing No. SADA-G-013 titled "Water Clean-up Plant General Arrangement" dated 12/11/2001 and contained in EPA file no. 28020A15</td> </tr> <tr> <td>10</td> <td>Volume Monitoring</td> <td></td> <td>The flowmeter on the pipeline discharging from the clean water tank in the water treatment plant shown on Drawing No. SADA-G-013 titled "Water Clean-up Plant General Arrangement" dated 12/11/2001 and contained in EPA file no. 28020A15</td> </tr> </tbody> </table>	EPA Ident- Station no.	Type of Monitoring Point	Type of Discharge Point	Location Description	6		Discharge to Waters	The pipe outlet to Camp Creek upstream of the existing weir wall shown on drawing No. M518 titled "EPA Monitoring Points" dated 10/11/06 and contained in EPA file no. 28020A22	7		Discharge to Waters	The outlet of the concrete flume (from the water treatment plant) to Camp Creek shown on drawing No. M518 titled "EPA Monitoring Points" dated 10/11/06 and contained in EPA file no. 28020A22	8		Discharge to Waters	The overflow from the Turkey Nest Dam to Camp Creek shown on drawing No. M518 titled "EPA Monitoring Points" dated 10/11/06 and contained in EPA file no. 28020A22	9	Effluent Quality Monitoring		The clean water tank of the water treatment plant shown on Drawing No. SADA-G-013 titled "Water Clean-up Plant General Arrangement" dated 12/11/2001 and contained in EPA file no. 28020A15	10	Volume Monitoring		The flowmeter on the pipeline discharging from the clean water tank in the water treatment plant shown on Drawing No. SADA-G-013 titled "Water Clean-up Plant General Arrangement" dated 12/11/2001 and contained in EPA file no. 28020A15	Noted																											
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Limit Conditions																													
L1.1	<p><b>Pollution of waters</b> 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.</p>	Non Compliant	As per section 12.4 of Annual Review 2016, there has been a breach of licensed discharge condition whereby a spill of hydraulic fluid and green marker fluid occurred on 28 July 2016. EPA had issued a warning letter on 2 August 2016 and underground personnel have been asked to report any discolourations and safety valves have been fitted to prevent further spills.	Annual Returns and Annual Reviews for 2015, 2016 and 2017	The proponent is to undertake relevant action as per EPA instruction and continue to follow up/ monitor to avoid recurrence.																								
L2.1	<p><b>Concentration Limits</b> For each monitoring/discharge point or utilisation area specified in the table/s 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.</p>	Compliant	Water quality parameters have not been reported to have breached limits as per this condition.	Annual Returns and Annual Reviews for 2015, 2016 and 2017																									
L2.2	<p><b>Concentration Limits</b> Where a pH quality limit is specified in the table, the specified percentage of samples must be within the specified ranges.</p>	Compliant	This condition is not deemed to have breached.	Annual Returns and Annual Reviews for 2015, 2016 and 2017																									
L2.3	<p><b>Concentration Limits</b> 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>	Non Compliant	There has been a breach of licensed discharge condition whereby a spill of hydraulic fluid and green marker fluid occurred on 28 July 2016. EPA had issued a warning letter on 2 August 2016, on the basis that Quintolubric 818-02 is not defined in Table L2.4 of EPL No.767, and underground personnel have been asked to report any discolourations and safety valves have been fitted to prevent further spills.	Annual Returns and Annual Reviews for 2015, 2016 and 2017; EPL summary on EPA website	The proponent is to undertake relevant action as per EPA instruction and continue to follow up/ monitor to avoid recurrence.																								
L3.3	<p><b>Concentration Limits</b> Water and/or Land Concentration Limits</p> <p><b>POINT 6,7</b></p> <table border="1"> <thead> <tr> <th>Pollutant</th> <th>Units of Measure</th> <th>90 percentile concentration limit</th> <th>90 percentile concentration limit</th> <th>3DCM concentration limit</th> <th>100 percentile concentration limit</th> </tr> </thead> <tbody> <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>30</td> </tr> </tbody> </table>	Pollutant	Units of Measure	90 percentile concentration limit	90 percentile concentration limit	3DCM concentration limit	100 percentile concentration limit	Oil and Grease	milligrams per litre				10	pH	pH				6.5-8.5	Total suspended solids	milligrams per litre				30	Compliant	Water quality parameters have not been reported to have breached limits as per this condition.	Annual Returns and Annual Reviews for 2015, 2016 and 2017	
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Note:	Note: The monitoring at Point 9 required by condition M2 is conducted by the licensee to determine compliance with the limits specified for Points 6 & 7 in condition L2.4. A non-compliance is only taken to have occurred if the results of water quality monitoring required by the licence at point 9 are greater than the limits in L2.4 and there is a discharge occurring from Points 6 & 7 at the time of sampling	Noted																											
Operating Conditions																													
O1.1	<p><b>Activities must be carried out in a competent manner</b> Licensed activities must be carried out in a competent manner. This includes: a) the processing, handling, movement and storage of materials and substances used to carry out the activity; and b) the treatment, storage, processing, reprocessing, transport and disposal of waste generated by the activity.</p>	Noted		Site Inspection (13/12/2016)	See Project Approval C10.																								
O2.1	<p><b>Maintenance of plant and equipment</b> 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>	Compliant	While all plant and equipment installed for the licensed activity are maintained, as evidenced by Critical Plant maintenance record for 2015-2018, dust gauges have been reported as damaged resulting in missing dust measurement data.	Critical Plant 2015-2018 maintenance register	The proponent should ensure all monitoring equipment are functioning as intended.																								
O3.1	<p><b>Dust</b> The premises must be maintained in a condition which minimises or prevents the emission of dust from the premises.</p>	Noted																											
Monitoring and Recording Conditions																													
M1.1	<p><b>Monitoring records</b> 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.</p>	Noted																											
M1.2	<p><b>Monitoring records</b> 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.</p>	Noted																											
M1.3	<p><b>Monitoring records</b> 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.</p>	Compliant	ALS lab Chain of Custody has the details required.	ALS CoC dated 26 April 2018 ALS CoC dated 25 August 2016																									

M2.1	<p><b>Requirement to monitor concentration of pollutants discharged</b> 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>	Non Compliant		Annual Returns and Annual Reviews for 2015, 2016 and 2017	Undertake the management measures to rectify identified non-compliances and follow up so that the issues don't repeat.																																								
M2.2	<p><b>Requirement to monitor concentration of pollutants discharged</b> Air Monitoring Requirements <b>POINT 1,2,3,4,5</b></p> <table border="1" data-bbox="231 373 804 491"> <thead> <tr> <th>Pollutant</th> <th>Units of measure</th> <th>Frequency</th> <th>Sampling Method</th> </tr> </thead> <tbody> <tr> <td>Ash</td> <td>grams per square metre per month</td> <td>Monthly</td> <td>Australian Standard 3580.10.1-2003</td> </tr> <tr> <td>Combustible solids</td> <td>grams per square metre per month</td> <td>Monthly</td> <td>Australian Standard 3580.10.1-2003</td> </tr> <tr> <td>Insoluble solids</td> <td>grams per square metre per month</td> <td>Monthly</td> <td>Australian Standard 3580.10.1-2003</td> </tr> </tbody> </table> <p><b>POINT 11,12,13,14,15</b></p> <table border="1" data-bbox="231 527 804 644"> <thead> <tr> <th>Pollutant</th> <th>Units of measure</th> <th>Frequency</th> <th>Sampling Method</th> </tr> </thead> <tbody> <tr> <td>Ash</td> <td>grams per square metre per month</td> <td>Monthly</td> <td>Australian Standard 3580.10.1-2003</td> </tr> <tr> <td>Combustible solids</td> <td>grams per square metre per month</td> <td>Monthly</td> <td>Australian Standard 3580.10.1-2003</td> </tr> <tr> <td>Insoluble solids</td> <td>grams per square metre per month</td> <td>Monthly</td> <td>Australian Standard 3580.10.1-2003</td> </tr> </tbody> </table> <p><b>POINT 16</b></p> <table border="1" data-bbox="231 680 804 730"> <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>Monthly</td> <td>AS/NZS 3580.9.6:2003</td> </tr> </tbody> </table>	Pollutant	Units of measure	Frequency	Sampling Method	Ash	grams per square metre per month	Monthly	Australian Standard 3580.10.1-2003	Combustible solids	grams per square metre per month	Monthly	Australian Standard 3580.10.1-2003	Insoluble solids	grams per square metre per month	Monthly	Australian Standard 3580.10.1-2003	Pollutant	Units of measure	Frequency	Sampling Method	Ash	grams per square metre per month	Monthly	Australian Standard 3580.10.1-2003	Combustible solids	grams per square metre per month	Monthly	Australian Standard 3580.10.1-2003	Insoluble solids	grams per square metre per month	Monthly	Australian Standard 3580.10.1-2003	Pollutant	Units of measure	Frequency	Sampling Method	PM10	micrograms per cubic metre	Monthly	AS/NZS 3580.9.6:2003	Non Compliant	<p>As per Annual Reviews 2015 and 2016, sampling could not be conducted at all the required monitoring points due to access restrictions and instrument breakage at three dust gauges on various occasions. Specifically, dust gauges were found to be broken at: DG4 and DG8 (Feb 2015), DG3 (Dec 2015), DG5 (July 2016), DG7 (January and March 2016). This issue was not encountered during 2017.</p> <p>Relatively higher than average (but within limits) dust deposition rates were recorded at some sites in 2015. The annual average dust deposition rate at each gauge in 2017 was within or below the range previously recorded for the dust gauges.</p> <p>As per EPL Annual Returns for the audit period, there was no non-compliance during 2017 however there were during 2015 and 2016.</p>	Annual Returns and Annual Reviews for 2015, 2016 and 2017	Undertake the management measures to rectify identified non-compliances and follow up so that the issues don't repeat.
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M2.3	<p><b>Requirement to monitor concentration of pollutants discharged</b> Water and/or Land Monitoring Requirements <b>POINT 9</b></p> <table border="1" data-bbox="231 827 733 919"> <thead> <tr> <th>Pollutant</th> <th>Units of measure</th> <th>Frequency</th> <th>Sampling Method</th> </tr> </thead> <tbody> <tr> <td>Oil and Grease</td> <td>milligrams per litre</td> <td>Monthly during discharge</td> <td>Grab sample</td> </tr> <tr> <td>pH</td> <td>pH</td> <td>Monthly during discharge</td> <td>Grab sample</td> </tr> <tr> <td>Total suspended solids</td> <td>milligrams per litre</td> <td>Monthly during discharge</td> <td>Grab sample</td> </tr> </tbody> </table>	Pollutant	Units of measure	Frequency	Sampling Method	Oil and Grease	milligrams per litre	Monthly during discharge	Grab sample	pH	pH	Monthly during discharge	Grab sample	Total suspended solids	milligrams per litre	Monthly during discharge	Grab sample	Compliant	The EPL was varied by EPA during this audit period on 4 Aug 2015 as: "A non-compliance is only taken to have occurred if the results of water quality monitoring required by the licence at point 9 are greater than the limits in L2.4, and there is a discharge occurring from Points 6 & 7 at the time of sampling". There is evidence that water quality is tested at Point 9 as per this condition.	EPL 767 variation on EPL website; Annual Returns and Annual Reviews for 2015, 2016 and 2017; ALS Certificate of Analysis for water sample from point 9 on 29 Sept 2016																									
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M3.1	<p><b>Testing methods - concentration limits</b> 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.</p>	Compliant	Air quality measurements are undertaken by NATA accredited laboratory ALS. There has been no specific method prescribed by EPA in writing.	ALS Certificate of Analysis for sample from point 9 on 29 Sept 2016																																									
Note:	Note: The Protection of the Environment Operations (Clean Air) Regulation 2010 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".	Noted																																											
M3.2	<p><b>Testing methods - concentration limits</b> 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.</p>	Compliant	As per details on the ALS Lab Certificate of Analysis, Approved Methods have been employed for water quality testing. There has been no specific method prescribed by EPA in writing.	Annual Returns 2015, 2016 and 2017; ALS Certificate of Analysis for water sample from point 9 on 29 Sept 2016																																									
M4.1	<p><b>Recording of pollution complaints</b> 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.</p>	Observation	Complaints register on the website has details of complaints in the year. Historical details are not available though these are detailed in the Annual Reports.	Annual Returns 2015, 2016 and 2017; Complaints Register	It is recommended to maintain a register of incidents, actions (including updates to any plans as per condition 4 above) and reporting timeframes as relevant. It is recommended to provide a detailed list of complaints and actions including closure in the complaints register.																																								
M4.2	<p><b>Recording of pollution complaints</b> 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.</p>	Compliant	Complaints register on the website has details of complaints in the year.	Annual Returns 2015, 2016 and 2017; Complaints Register																																									
M4.3	<p><b>Recording of pollution complaints</b> The record of a complaint must be kept for at least 4 years after the complaint was made.</p>	Compliant	Complaints register on the website has details of complaints in the year.	Annual Returns 2015, 2016 and 2017; Complaints Register																																									
M4.4	<p><b>Recording of pollution complaints</b> The record must be produced to any authorised officer of the EPA who asks to see them.</p>	Compliant	Complaints register on the website has details of complaints in the year.	Annual Returns 2015, 2016 and 2017; Complaints Register																																									

M5.1	<b>Telephone complaints line</b> 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.	Compliant	Community complaint hotline number 1800 115 003 is listed on the mine website	<a href="https://www.peabodyenergy.com/Operations/Australia-Mining/New-South-Wales-Mining/Metropolitan-Mine">https://www.peabodyenergy.com/Operations/Australia-Mining/New-South-Wales-Mining/Metropolitan-Mine</a>						
M5.2	<b>Telephone complaints line</b> 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.	Compliant	Community complaint hotline number 1800 115 003 is listed on the mine website	<a href="https://www.peabodyenergy.com/Operations/Australia-Mining/New-South-Wales-Mining/Metropolitan-Mine">https://www.peabodyenergy.com/Operations/Australia-Mining/New-South-Wales-Mining/Metropolitan-Mine</a>						
M5.3	<b>Telephone complaints line</b> The preceding two conditions do not apply until 3 months after the date of the issue of this licence.	noted								
M6.1	<b>Requirement to monitor volume or mass</b> 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.  <b>POINT 10</b>  <table border="1"> <thead> <tr> <th>Frequency</th> <th>Unit of Measure</th> <th>Sampling Method</th> </tr> </thead> <tbody> <tr> <td>Continuous</td> <td>kilolitres per day</td> <td>Magnetic flow meter</td> </tr> </tbody> </table>	Frequency	Unit of Measure	Sampling Method	Continuous	kilolitres per day	Magnetic flow meter	Compliant	Flowmeter is used to measure kilolitres per day of water flow from water treatment plant to Camp Creek. This is clarified in the Annual Return summaries submitted to EPA.	Annual Returns 2015, 2016 and 2017
Frequency	Unit of Measure	Sampling Method								
Continuous	kilolitres per day	Magnetic flow meter								
<b>Reporting Conditions</b>										
R1.1	<b>Annual return documents</b> 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.	Compliant	Annual Return 2016 has been examined and found to have the required format including certification and signatures.	Annual Return 2017						
R1.2	<b>Annual return documents</b> An Annual Return must be prepared in respect of each reporting period, except as provided below.	Noted								
Note:	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.	Noted								
R1.3	<b>Annual return documents</b> 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.	noted	Not triggered							
Note:	Note: An application to transfer a licence must be made in the approved form for this purpose.	noted								
R1.4	<b>Annual return documents</b> 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	Not triggered							
R1.5	<b>Annual return documents</b> 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').	Compliant	As per the Licence summary on EPA website, the Annual Returns have been filed within 60 days after the end of each reporting period.	Annual Returns 2015, 2016 and 2017; EPA Licence database website						
R1.6	<b>Annual return documents</b> 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.	Compliant	Copies of annual returns are maintained in the company servers and in hardcopy by the Environment & Community Superintendent	Site inspection (13/12/2016) discussions						
R1.7	<b>Annual return documents</b> 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.	Compliant	Annual Return 2016 has been examined and found to have the required format including certification and signatures by Peter Baker, SVP Operations and Geoffrey David Harvey, Director.	Annual Return 2017						

Note:	<b>Notification of environmental harm</b> Note: The licensee or its employees must notify all relevant authorities of incidents causing or threatening material harm to the environment immediately after the person becomes aware of the incident in accordance with the requirements of Part 5.7 of the Act.																																													
R2.1	<b>Notification of environmental harm</b> Notifications must be made by telephoning the Environment Line service on 131 555.		Noted																																											
R2.2	<b>Notification of environmental harm</b> The licensee must provide written details of the notification to the EPA within 7 days of the date on which the incident occurred.		Compliant	The water quality breach of condition L1.1 of 28 July 2016 was reported timely and EPA had issued a warning letter on 2 August 2016.	Annual Report 2016																																									
R3.1	<b>Written report</b> 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.		Noted																																											
R3.2	<b>Written report</b> 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.		Noted																																											
R3.3	<b>Written report</b> 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.		Noted																																											
R3.4	<b>Written report</b> 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.		Noted																																											
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G1.1	<b>Copy of licence kept at the premises or plant</b> A copy of this licence must be kept at the premises to which the licence applies.		Compliant	A hardcopy is maintained in the Environment and Community Superintendent office with all management plans, annual reviews etc. This is available for inspection. Auditee mentioned that the EPS inspected during their visits.	Site Inspection (13/12/2016)																																									
G1.2	<b>Copy of licence kept at the premises or plant</b> The licence must be produced to any authorised officer of the EPA who asks to see it.		Noted																																											
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G2.1	<b>Other general conditions</b> Completed Pollution Studies and Reduction Programs (PRPs)		Noted	Not relevant for the audit period.																																										
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Resources Metropolitan Coal  
Independent Environmental Audit  
Detailed Findings and Recommendations  
Consolidated Coal Lease #703

Clause	Requirement	Compliance	Audit Finding	Objective Evidence	Recommendation
<b>SCHEDULE OF CONDITIONS OF AUTHORITY (COAL) (1999)</b>					
<b>Extraction of Coal</b>					
1	<b>Extraction of Coal</b> The lease holder shall extract as large a percentage of the coal in the subject area as is practicable consistent with the provisions of the Coal Mines Regulations Act 1982 and the Regulations thereunder and shall comply with any direction given or which may be given in this regard by the Minister.	<b>Noted</b>			
<b>Mining, Rehabilitation, Environmental Management Process (MREMP)</b>					
2 (1)	<b>Mining Operations Plan (MOP)</b> (1) Mining operations, including mining purposes, must be conducted in accordance with a Mining Operations Plan (the Plan) satisfactory to the Director-General. The Plan together with environmental conditions of development consent and other approvals will form the basis for: (a) ongoing mining operations and environmental management; and (b) ongoing monitoring of the project.	<b>Compliant</b>	The Mining Operations Plan (MOP) approved via letter from Department of Trade and Investment, Resources and Energy (DTIRE); however has no document control page indicating date of preparation, date and signature of approval, revision number etc.	Mining Operations Plan 2012-2019; DTIRE signed letter of approval MCV12/140 dated 10 Jan 2013	
2 (2)	<b>Mining Operations Plan (MOP)</b> (2) The Plan must be prepared in accordance with the Director-General's guidelines, current at the time of lodgement.	<b>Compliant</b>	As per the MOP approval letter from DTIRE, the MOP has been modified to address changes requested in review and has addressed comments from OEH, SCA and EPA.	Mining Operations Plan 2012-2019; DTIRE signed letter of approval MCV12/140 dated 10 Jan 2013	
2 (3)	<b>Mining Operations Plan (MOP)</b> (3) A Plan must be lodged with the Director-General: (a) prior to the commencement of operations; (b) subsequently as appropriate prior to the expiry of any current Plan; and (c) in accordance with any direction issued by the Director-General.	<b>Compliant</b>	MOP has been submitted and approved via letter from Department of Trade and Investment, Resources and Energy (DTIRE)	Mining Operations Plan 2012-2019; DTIRE signed letter of approval MCV12/140 dated 10 Jan 2013	
2 (4)	<b>Mining Operations Plan (MOP)</b> (4) The Plan must present a schedule of proposed mine development for a period of up to seven (7) years and contain diagrams and documentation which identify:- (a) area(s) proposed to be disturbed under the Plan; (b) mining and rehabilitation method(s) to be used and their sequence; (c) areas to be used for disposal of tailings/waste; (d) existing and proposed surface infrastructure; (e) progressive rehabilitation schedules; (f) areas of particular environmental sensitivity; (g) water management systems (including erosion and sediment controls); (h) proposed resource recovery; and (i) where the mine will cease extraction during the term of the Plan, a closure plan including final rehabilitation objectives/methods and post mining land use/vegetation	<b>Compliant</b>	As per the MOP approval letter from DTIRE, the MOP has been modified to address changes requested in review and has addressed comments from OEH, SCA and EPA.	Mining Operations Plan 2012-2019; DTIRE signed letter of approval MCV12/140 dated 10 Jan 2013	
2 (5)	<b>Mining Operations Plan (MOP)</b> (5) The plan when lodged will be reviewed by the Department of Mineral Resources	<b>Compliant</b>	MOP has been submitted and approved via letter from Department of Trade and Investment, Resources and Energy (DTIRE)	Mining Operations Plan 2012-2019; DTIRE signed letter of approval MCV12/140 dated 10 Jan 2013	
2 (6)	<b>Mining Operations Plan (MOP)</b> (6) The Director-General may within two (2) months of the lodgement of a Plan, require modification and relodgement.	<b>Compliant</b>	MOP has been submitted and approved via letter from Department of Trade and Investment, Resources and Energy (DTIRE)	Mining Operations Plan 2012-2019; DTIRE signed letter of approval MCV12/140 dated 10 Jan 2013	

2 (7)	<b>Mining Operations Plan (MOP)</b> (7) If a requirement in accordance with clause (6) is not issued within two months of the lodgement of a Plan, lease holder may proceed with implementation of the Plan submitted subject to the lodgement of the required security deposit within the specified time.	Compliant	MOP has been submitted, reviewed and commented on by DTIRE, SCA, OEH and EPA and approved via letter from Department of Trade and Investment, Resources and Energy (DTIRE)	Mining Operations Plan 2012-2019; DTIRE signed letter of approval MCV12/140 dated 10 Jan 2013	
2 (8)	<b>Mining Operations Plan (MOP)</b> (8) During the life of the Mining Operations Plan Proposed modifications to the Plan must be lodged with the Director-General and will be subject to the review process outlines in clauses (5) - (7) above.	Compliant	The Mining Operations Plan (MOP) r has no document control page indicating date of preparation, date and signature of approval, revision number etc. It is understood that the previous IEA reviewed MOP 2005 - 2012.	Mining Operations Plan 2012-2019; Previous IEA report	
<b>Annual Environmental Management Report (AEMR)</b>					
3 (1)	<b>Annual Environmental Management Report (AEMR)</b> (1) Within 12 months of the commencement of mining operations and thereafter annually or, at such other times as may be allowed by the Director-General, the lease holder must lodge an Annual Environmental Management Report (AEMR) with the Director-General.	Compliant	Annual Reviews are prepared every year	Annual Reviews 2015, 2016 and 2017	
3 (2)	<b>Annual Environmental Management Report (AEMR)</b> (2) The AEMR must be prepared in accordance with the Director-General's guidelines current at the time of reporting and contain a review and forecast of performance for the preceding and ensuing twelve months in terms of:- (a) the accepted Mining Operations Plan; (b) development consent requirements and conditions; (c) Environment Protection Authority and Department of Land and Water Conservation licences and approvals; (d) any other statutory environmental requirements; (e) details of any variations to environmental approvals applicable to the lease area. and (f) where relevant, progress towards final rehabilitation objectives.	Compliant	Annual Reviews for 2015 and 2016 have been prepared as required and approved by DG. Annual Review 2017 is currently under review	Annual Reviews 2015, 2016 and 2018	
3 (3)	<b>Annual Environmental Management Report (AEMR)</b> (3) After considering an AEMR the Director-General may, by notice in writing, direct the lease holder to undertake operations, remedial actions or supplementary studies in the manner and within the period specified in the notice to ensure that operations on the lease area are conducted in accordance with sound mining and environmental practice.	Compliant	Annual Reviews for 2015 and 2016 have been prepared as required and approved by DG. Annual Review 2017 is currently under review	Annual Reviews 2015, 2016 and 2018	
3 (4)	<b>Annual Environmental Management Report (AEMR)</b> (4) The lease holder shall, as and when directed by the Minister, co-operate with the Director-General to conduct and facilitate review of the AEMR involving other government agencies.	Noted			

Barriers					
9	<p><b>Barriers</b> The lease holder shall not work or cause to be worked any seam of coal within the subject area without leaving, if the Minister, so directs, a barrier of such width or. A protective pillar or pillars of such size or sizes against any surface improvements of any feature whether natural or artificial.</p>	Noted			
11	<p><b>Barriers</b> The lease holder unless with the consent of the Minister and subject to such conditions as the Minister may impose shall not work or cause to be worked any seam of coal by underground methods within the subject area within the barrier defined as follows: The land within the zone beneath and adjacent to the <b>Illawarra Railway</b> enclosed by an angle o drawn 35o from the vertical plane of the boundary parallel to an thirty (30) metres horizontally distant from either side of the railways lands, such angle of draw being measured outwards from the point on the vertical plane of the said boundary at the surface or at the level of the horizontal plane of the railway track, whichever may be the higher, to the floor of the coal seam in which mining operations are being carried out.</p>	Compliant	<p>Planning line has been drawn 30m parallel to Illawarra railway, projected down to coal seam at 35 degrees (roughly 500m depth) equates to a sterilised zone of approximately 380m from red rail line shown on diagram inspected. (actual zone varies with changing topography, but largest number possible shown here at 380m) The mining operations are 1.47km away at the closet approach, well outside this criteria.</p>	Metropolitan Coal Longwalls 301-303 Sydney Trains drawing MSEC844-07b Rev A dated 2 May 2017	
13	<p><b>Barriers</b> the lease holder shall not prospect or mine for coal within the area(s) shown on the plan annexed hereto and marked "B" insofar as such area(s) relate(s) to the surface and land below the surface to the depth(s) specified on that plan other than the mining f coal for purposes of a shaft in the red coloured area.</p>	Compliant	<p>Annual Reviews have mining area maps included, which comply with this condition. The Longwalls 23-27 and 301-302 Extraction Plans have been approved.</p>	Annual Reviews 2015, 2016 and 2018; Long walls 23-27 and 301-302 Extraction Plans	
Shafts, Drifts, Adits					
14	<p><b>Shafts, Drifts, Adits</b> Operations shall be conducted in such a manner as not to cause any danger to persons or stock and the lease holder shall provide and maintain adequate protection to the satisfaction of the Minister around each shaft or excavation opened up or used by the lease holder.</p>	Noted			
Dumps					
15	<p><b>Dumps</b> The lease holder shall comply with any direction, given or which may be given by the Inspector regarding the dumping, depositing or removal of material extracted as well as the stabilisation and revegetation of any dumps of coal, minerals, mine residues, tailings or overburden situated on the subject area or the associated colliery holding.</p>	Noted			
16	<p><b>Dumps</b> The lease holder shall comply with any direction given which may be given by the Minster regarding the spraying of coal dumps on the subject area.</p>	Noted			

Dust					
17	<b>Dust</b> The lease holder shall take such precautions as are necessary to abate any dust nuisance.	<b>Compliant</b>	Dust management measures are being implemented as per Air Quality and Greenhouse gas Management Plan.	Air Quality and Greenhouse Gas Management Plan Rev D; Complaints Register; Annual Reviews 2015, 2016, 2017; site inspection on 13 Dec 2017	
Management and Rehabilitation of Lands (General)					
18	<b>Management and Rehabilitation of Lands (General)</b> The lease holder shall not interfere in any way with any fences on or adjacent to the subject area unless with the prior written approval of the owner thereof or the Minister and subject to such conditions as the Minister may stipulate	<b>Noted</b>			
19	<b>Management and Rehabilitation of Lands (General)</b> The lease holder shall observe any instruction given or which may be given by the Minister with a view to minimising or preventing public inconvenience or damage to public or private property.	<b>Noted</b>			
20	<b>Management and Rehabilitation of Lands (General)</b> If required to do so by the Minister and within such time as may be stipulated by the Minister the lease holder shall carry out to the satisfaction of the Minister surveys of structures, buildings and pipelines on adjacent landholding to determine the effect of operations on any such structures, buildings and pipelines.	<b>Noted</b>			
21	<b>Management and Rehabilitation of Lands (General)</b> If so directed by the Minister the lease holder shall rehabilitate to the satisfaction of the Minister any lands within the subject area which may have been disturbed by the lease holder.	<b>Noted</b>			
22	<b>Management and Rehabilitation of Lands (General)</b> Upon completion of operations on the surface of the subject area or upon the expiry or sooner determination of this authority or any renewal thereof, the lease holder shall remove from such surface such buildings, machinery, plant, equipment, constructions and works as may be directed by the Minister and such surface shall be rehabilitated and left in a clean, tidy and safe condition to the satisfaction of the Minister.	<b>Compliant</b>	Surface rehabilitation plan is being implemented as required.	Mining Operations Plan; Extraction Plans and sub-plans; rehabilitation management strategy sections 4, 6 and 7; Environmental Management Strategy Rev A2; Annual Reviews 2015, 2016 and 2017	
23	<b>Management and Rehabilitation of Lands (General)</b> If so directed by the Minister the lease holder shall rehabilitate to the satisfaction of the Minister and within such time as may be allowed by the Minister any lands within the subject area which may have been disturbed by mining or prospecting operations whether such operations were or were not carried out by the lease holder.	<b>Noted</b>			
24	<b>Management and Rehabilitation of Lands (General)</b> The lease holder shall take all precautions against causing outbreak of fire on the subject area.	<b>Compliant</b>	As part of Emergency Response plan in the Environmental Management Strategy, Firefighting Management and Bushfire Preparedness Plan have been prepared. Biodiversity Management Plan also discusses Bushfire hazard management	Mining Operations Plan 2012-2019; Environmental Management Strategy section 9; Longwalls 301-303 Biodiversity Management Plan section 9.4	

25	<p><b>Management and Rehabilitation of Lands (General)</b>                  The lease holder shall provide and maintain to the satisfaction of the Minister efficient means to prevent contamination, pollution, erosion or sedimentation of any river, stream, creek, tributary, lake, dam, reservoir, watercourse or catchment area or any undue interference to fish or their environment and shall observe any instruction given or which may be given by the Minister with a view to preventing or minimising the contamination, pollution, erosion or sedimentation of any river, stream, creek, tributary, lake, dam, reservoir, watercourse or catchment area or any undue interference to fish or their environment.</p>	Compliant	Measures taken to prevent contamination and pollution, erosion and sediment management etc are detailed in various management plans. Pollution is monitored as required in the EPL 767 and reported in the Annual Returns to EPA and Annual Reviews.	Longwalls 301-303 Water Management Plan Rev C; Mining Operations Plan 2012-2019; Construction Management Plan rev D section 6.3 (erosion and sediment management); EPL Annual Returns; Annual Reviews.	
Trees (Planting and Protections of) Flora and Fauna and Arboreal Screens					
27	<p><b>Trees (Planting and Protections of) Flora and Fauna and Arboreal Screens</b>                  If so directed by the Minister, the lease holder shall ensure that operations are carried out in such manner so as to minimise disturbance to flora and fauna within the subject area.</p>	Compliant	Biodiversity Management Plan section 4.3 details plans for biodiversity management	Longwalls 301-303 Biodiversity Management Plan	
29	<p><b>Trees (Planting and Protections of) Flora and Fauna and Arboreal Screens</b>                  The lease holder shall maintain an arboreal screen to the satisfaction of the Minister within such parts of the subject area as may be specified by the Minister and shall plant such trees or shrubs as may be required by the Minister to preserve the arboreal screen in a condition satisfactory to the Minister.</p>	Compliant	Annual Review 2017 section 6.3 and Annual Review 2016 section 6.1.3 refer to vegetation monitoring.	Longwalls 301-303 Biodiversity Management Plan; Annual Reviews	
Soil Erosion					
30	<p><b>Soil Erosion</b>                  The lease holder shall conduct operations in such a manner as not to cause or aggravate soil erosion and the lease holder shall observe and perform any instructions given or which may be given by the Minister with a view to minimising or preventing soil erosion.</p>	Compliant	Construction Management Plan rev D section 6.3 (erosion and sediment management) and SFWMP section 8 detail plans to control soil erosion, reviewing water quality impacts from erosion. Annual Reviews report on monitoring (visual inspections) and actions regarding erosion control such as for Turkeys Nest dam upgrade and road maintenance activities.	Construction Management Plan rev D; Surface Facilities Water Management Plan (SFWMP); Annual Reviews and EPL Annual Returns	

Roads					
31	<p><b>Roads</b> The lease holder shall pay to <b>Wollongong City Council</b>, Department of Land and Water Conservation or the Chief Executive, Roads and Traffic Authority the cost incurred by such Council or Department or Chief Executive of making good any damage caused by operations carried on by or under the authority of the lease holder to any road adjoining or traversing the surface or the excepted surface, as the case may be of the subject area.</p> <p>Provided however that the amount to be paid by the lease holder as aforesaid shall be reduced by such sum of money if any as may be paid to the said Council the Department of Land and Water Conservation or the Chief Executive, Roads and Traffic Authority as the case may be from the Mine Subsidence Compensation Fund constituted under the Mine Subsidence Compensation Act, 1961, in settlement of a claim for compensation for the same damage.</p>	Compliant	Contributions have been paid to Wollongong City Council, Wollondilly Shire Council and Campbelltown City Council for 2015, 2016 and 2017	Council payment extract for 2015-2017 period; Built Features Management Plan, Wollongong City Council [Old Princess Highway] rev B Traffic Management Plan Rev G	
32	In the event of operations being conducted on the surface of any road, track or fire trail traversing the subject area or in the event of such operations causing damage to or interference with any such road, track or fire trail the lease holder, at his own expense, shall if directed to do so by the Minister provide to the satisfaction of the Minister an alternate road, track or fire trail in a position as required by the Minister and shall allow free and uninterrupted access along such alternate road, track or fire trail and, if required to do so by the Minister, the lease holder shall upon completion of operations rehabilitate the surface of the original road, track or fire trail to a condition satisfactory to the Minister.	Noted		Traffic Management Plan Rev G	
Catchment Area					
34 (a)	<p><b>Catchment Area</b> (a) The lease holder shall carry out operations within the <b>Woronora Special Area</b> in such a way as to conform strictly to all provisions of the Sydney Water Catchment Management Act, 1998 and the regulations made and currently in force under that Act so that: (i) no catchment infrastructure works and buildings owned by or vested in the Sydney Catchment Authority [SCA], or the stored waters, are willfully, accidentally or negligently destroyed, damaged or interfered with; (ii) the <b>Woronora Special Area</b> is not polluted by operations of the lease holder; (iii) the purity of the stored waters within the Woronora Dam are preserved; (iv) any requirements notified by the SCA to the lease holder, made in accordance with the provisions of the Sydney Water Catchment Management Act, 1998 and the regulations made thereunder, are complied with.</p>	Compliant	Letter signed (11 May 2017) by Executive Director of Resource Assessments and Business Systems, DPE, as nominee of the Secretary approves extraction in longwalls 301 and 302 only, with concerns raised over longwall 303 due to potential impacts on Woronora Reservoir and the Eastern Tributary. Currently no workings are carried out beyond approved Longwalls. As per section 9 of Annual Review 2017, the Construction Management Plan for surface construction works (excluding remediation or rehabilitation works) in the Woronora Special Area is under review to be consistent with Longwalls 301-303 Extraction Plan. Two catchment improvement works projects have been carried out in the Woronora catchment area: 1. Rehabilitation of former quarry on Fire Road 9H and 2. Rehabilitation of a disused access track to the Darkes Forest Mine	Annual Reviews 2015, 2016, 2017; Section 1.1 and Attachments 1 & 2 of Extraction Plan sighted Extraction Plan for Longwalls 301-303 Letter from DPE dated 11 May 2017 with approval of Longwalls 301-302.  Letter from SCA re Review of the Construction Management Plan, 24 Sep 2010 Construction Management Plan Rev D, July 2015 Letter to DP&I re Approval Construction Management Plan, 14 Nov 2011 DPE letter dated 25 Aug 2015 approving the plan Surface Works Register and Assessment Form – Deep Groundwater Piezometer Boreholes, Mar 2012	
34 (b)	<p><b>Catchment Area</b> (b) If the lease holder shall at all times and at the first available opportunity notify the SCA of its current use or its intended use of any process which is likely to pollute the <b>Woronora Special Area</b>, the stored waters of the <b>Woronora Dam</b> or cause damage to the catchment infrastructure works, buildings and stored waters owned by the SCA situated on the Special Area.</p>	Noted			

34 (c)	<p><b>Catchment Area</b> (c) The SCA shall within five (5) working days following the receipt of the lease holder's notification as referred to in Condition 34 (b), inform the lease holder and the Minister of its opinion of the likely impact of the process to pollute the <b>Woronora Special Area</b> and stored waters and to cause damage to the catchment infrastructure works, buildings and stored waters owned by the SCA.</p>	Noted			
34 (d)	<p><b>Catchment Area</b> (d) The lease holder, upon service of a notice under the hand of the Minister to do so shall: (i) immediately discontinue the use of such process (and in all cases within twenty-four (24) hours); or (ii) thereafter refrain from adopting such process at any time, as the case may require.</p>	Noted			
34 (e)	<p><b>Catchment Area</b> (e) The lease holder shall undertake environmental assessment for all surface works (including exploration, drilling, clearing of vegetation, and construction of access tracks) within the <b>Woronora Special Area</b>. The assessments are to be to the satisfaction of the SCA.</p>	Compliant	<p>Details of environmental assessment undertaken for surface works in the Woronora Special Area are included in the Annual Reviews. Surface Works Assessment Forms details processes for drilling, clearing of vegetation and installation of equipment.</p>	<p>Longwalls 301-303 Water Management Plan Catchment Management Plan Annual Reviews 2015, 2016, 2107 Surface Works Assessment Form of 6 Aug 2014 for Seismic Survey Surface Works Assessment Form dated 1 April 2016</p>	
34 (f)	<p><b>Catchment Area</b> (f)The lease holder is to obtain the permission of the SCA to enter the <b>Woronora Special Area</b>.</p>	Noted			
34 (g)	<p><b>Catchment Area</b> (g) The lease holder shall provide and maintain to the satisfaction of the Minister efficient means to prevent the contamination, pollution, erosion or sedimentation of any stream or watercourse or Special Area and shall observe any instruction given or which may be given by the Minister with a view to preventing or minimising the contamination, pollution or sedimentation of any stream watercourse or Special Area.</p>	Compliant	<p>Erosion and other pollution control measures are in place as per relevant management plans and reviewed/reported in Annual Reviews.</p>	<p>Longwalls 301-303 Water Management Plan Catchment Management Plan Construction Management Plan Annual Reviews 2015, 2016, 2107</p>	
34 (h)	<p><b>Catchment Area</b> (h) The lease holder hereby covenant the Us Our Heirs and Successors and as a separate covenant the lease holder hereby covenant with the SCA and its Successors that the lease holder shall at all times hereafter save harmless and keep Us and the said SCA and Our Heirs and Successors and the Successors of the said Authority indemnified from payment of compensation and from and against all actions proceedings claims and demands in respect of any injury loss of damage arising out of or in any way connected with any interference with or deprivation or loss of access to the land and premises of this authority which may occur by reason of any works or operations undertaken or carried out by the said SCA or arising out of or in any way connected with any discontinuance or alteration of any process consequent upon the service of a notice in pursuance of the provisions of Condition 34(b) or arising out of or in any way connected the operation of any regulations relating to Special Area in force at the hereof or made by the said SCA at any hereafter the lease holder hereby agrees that for the purpose of this condition the said SCA shall be deemed to be a party to the authority.</p>	Noted			

35	<p><b>Catchment Area</b> The lease holder shall:</p> <p>(a) Make such provisions for sanitation as may be directed by the SCA and shall at all times observe and perform any requirements of the said Authority respecting sanitation</p> <p>(b) Not establish any camps or habitations with any area under the control of the Authority unless with the consent of the SCA.</p> <p>(c) Not sink any drill hole within the stored waters on the subject area nor within <b>40</b> metres of the top water level thereof unless with the consent of the SCA.</p> <p>(d) Not sink any drill hole within any watercourse on the <b>Woronora Special Area</b> nor within <b>800</b> metres thereof unless with the consent of the SCA.</p> <p>(e) Not interfere with or impede the use of the SCA's tracks or endanger their stability in any way by reason of the operations.</p> <p>(g) Not interfere in any way with any fences on or adjacent to the Woronora</p>	Noted			
Transmission Lines, Communication Lines and Pipelines					
41	<p><b>Transmission Lines, Communication Lines and Pipelines</b> The lease holder shall as far as is practicable so conduct operations as not to interfere with or impair the stability or efficiency of any transmission line, communication line or pipeline traversing the surface or the excepted surface of the subject area and shall comply with any direction given or which may be given by the Minister in this regard.</p>	Compliant	The Subsidence Management Program details monitoring of works regarding surface features. The Metropolitan Coal Longwalls 23-27 Subsidence Monitoring Program was revised during the reporting period to include additional subsidence monitoring at transmission towers located at the end of Longwall 26 and Longwall 27.	Built Features Management Plan includes specific managemnet plans for TransGrid, Endeavour Energy, Telstra, Optus etc. Longwalls 301-303 Subsidence Monitoring Program Annual Reviews 2015, 2016, 2017	
Aboriginal Place or Aboriginal Object					
43	<p><b>Aboriginal Place or Aboriginal Object</b> The lease holder shall not knowingly destroy, deface or damage any Aboriginal object or Aboriginal place within the subject area except in accordance with an authority issued under the National Parks and Wildlife Act, 1974, and shall take every precaution in drilling, excavating or disturbing the land against any such destruction, defacement or damage.</p>	Compliant	Aboriginal places and Objects are maintained and managed, monitored and reported as per Heritage Management plan. Monitoring results are included in Appendices of Annual Reviews as submitted to DPE. Annual Review 2016, example sited, confirms the Aboriginal heritage subsidence impact performance measure, <i>less than 10% of Aboriginal heritage sites within the mining area are affected by subsidence impacts</i> , has not been exceeded.	Heritage Management Plan (Longwalls 301-303) rev C; Annual Reviews 2015, 2016, 2017 Appendices O1 and O2 Longwalls 23-27 Rounds 2 and 3 Monitoring of Aboriginal Heritage Sites prepared by Niche Environment and Heritage, August 2016	
Labour/Expenditure					
44	<p><b>Labour/Expenditure</b> The lease holder shall during each year of the term of the authority:</p> <p>(a) Ensure at least <b>208</b> workers are efficiently employed on the subject area; or</p> <p>(b) expend on operation carried out in the course of prospecting or mining the subject area, an amount of not less than <b>\$3,640,000.00</b>.</p> <p>The Minister may, at any time after a period of two (2) years from the date on which this authority has effect or from the date on which the renewal of this authority has effect, increase or decrease the amount of expenditure or labour required.</p>	Noted			
Additional Information					



45	<p><b>Additional Information</b>                  The lease holder shall if directed by the Minister and within such as the Minister may stipulate furnish to the Minister:</p> <p>(a) Information regarding the ownership of the land within the subject area;                  (b) Information regarding the ownership of the coal within the subject area prior to 1st January, 1982;                  (c) an indemnity in a form approved by the Minister indemnifying the Crown and the Minister against any wrong payment effected as a result of incorrect information furnished by the lease holder;                  (d) Information regarding the financial viability of the lease holder and operations within and associated with the subject area; and                  (e) information regarding shareholdings in the lease holder.</p>	<b>Noted</b>			
<b>Service of Notices</b>					
46	<p><b>Service of Notices</b>                  Within a period of three (3) months from the date of service of the notice of renewal of this authority, or within such further time as the Director General may allow, the lease holder shall serve on each landholder within the subject area a notice in writing indicating that this authority has been renewed and whether the authority includes the surface. The notice shall be accompanied by an adequate plan and description of the subject area.                  If there are ten (10) or more landholders affected the lease holder may serve the notice by publication in a newspaper circulating in the region where the subject area is situated. The notice shall indicate that this authority has been renewed, state whether the authority includes the surface and shall contain an adequate plan and description of the subject area.</p>	<b>Noted</b>			
<b>Inspectors</b>					
47	<p><b>Inspectors</b>                  (a) Where an Inspector under the Mining Act 1992 is of the opinion that any condition of this authority relating to operations within the subject area, or any provision of the Mining Act, 1992, relating to operations within the subject area are not being complied with by the lease holder, the Inspector may serve on the lease holder a notice stating that and give particulars of the reason why and may in such notice direct the lease holder:                  (i) to cease operation within the subject area in contravention of that condition or Act; and                  (ii) to carry out within the specified time works necessary to rectify or remedy the situation.                  (b) The lease holder shall comply with the directions contained in any notice served pursuant to sub paragraph (a) of this condition. The Director General may confirm, Vary or revoke any such direction.                  (c) A notice referred to in his condition may be served on the Colliery Manager.</p>	<b>Noted</b>			

Indemnities				
48	<p><b>Indemnities</b> The lease holder shall indemnify and keep indemnified the Crown from and against all actions suits and claims and demands of whatsoever nature and all costs charges and expense which may be brought against the lease holder or which the lease holder may incur 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 boundaries of the subject area or in connection with any of the operations notwithstanding that all other conditions of this authority 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 hereunder.</p>	Noted		
49	<p><b>Indemnities</b> The lease holder shall save harmless the Crown from payment of compensation and from and against all claims, actions, suits or demands whatsoever in the event of any damage resulting from mining operations under or near the subject area.</p>	Noted		
Prospecting (General)				
50	<p><b>Prospecting (General)</b> (a) Where the lease holder desires to commence prospecting operations in the subject area the lease holder shall notify the Director General in writing and shall comply with such additional conditions as the Minister may impose including any condition requiring the lodgement of an additional bond or other form of security for rehabilitation of the area affected by such operations.  (b) Where the lease holder notifies the Director General pursuant to sub paragraph (a) of this condition the lease holder shall furnish with that notification details of the type of prospecting methods that would be adopted and the extent and location of the area that would be affected by them.</p>	Noted		
Security Deposit				
51	<p><b>Security Deposit</b> (a) The lease holder shall, upon request by the Director General, lodge with the Minister the sum of <b>\$2,700,000.00 ( two million seven hundred thousand dollars)</b> as security for the fulfilment of the obligations of the lease holder under Consolidated Coal Lease 703 (Act 1973), Mining Purposes Lease 320 (Act 1973) and Coal Lease 379 (Act 1973). In the event that the lease holder fails to fulfil any of the lease holder's obligations under these authorities the said sum may be applied at the discretion of the Minister towards the cost of fulfilling such obligations. For the purposes of the clause a lease holder shall be deemed to have failed to fulfil the lease holder's obligations under these authorities, if the lease holder fails to comply with any condition or provision of this authority any provision of the Act or regulations made there under or any condition or direction imposed or given pursuant to a condition or provision of these authorities or any provision of the Act or regulations made thereunder.  (b) The lease holder must provide the security required by sub-clause (a) hereof in one of the following forms:- (i) cash, or (ii) a security certificate in such form and given by such surety as may from time to time be approved by the Minister.  (c) The minister may at any time after commencement of these authorities or any renewal thereof, vary the amount of security required in accordance with this condition.</p>	Noted		
		Noted		

Royalty at Additional Rate				
54	<p><b>Royalty at Additional Rate</b>                      The lease holder shall during the term of this authority pay to the Minister royalty at the additional rate as prescribed by the Regulations for coal recovered by open cut mining methods from the area.</p>	Noted		
Methods of Operation (Prescribed DAMS)				
55	<p><b>Methods of Operation (Prescribed DAMS)</b>                      The lease holder shall comply with the conditions as set out in the attached Annexure "A".</p>	Noted		
Prior Barrier & Mining Approvals				
58	<p><b>Prior Barrier &amp; Mining Approvals</b>                      Any approval or consent previously given by the Minister to the effect the lease holder may mine for, work, win or remove coal from any part of the subject area including any approval or consent given pursuant to any barrier condition contained in leases consolidated into this lease, shall be deemed to be a consent given subject to the same conditions of that approval or consent under this lease.</p>	Noted		

Details of Lands, Purposes and Additional Conditions

59	<p><b>Details of Lands, Purposes and Additional Conditions</b> The lease holder shall be limited to the following operations and conditions within the specified areas described on the plan annexed hereto and marked "B".</p> <table border="1" data-bbox="249 302 842 787"> <thead> <tr> <th>COLUMN 1</th> <th>COLUMN 2</th> <th>COLUMN 3</th> </tr> </thead> <tbody> <tr> <td>Lands shown by dark blue colour on the plan annexed hereto and marked "B".</td> <td>1. Construction, maintenance or use (in or in connection with mining operations) of any building, mining plant, pipeline or railway. 2. the storage of machinery</td> <td>Condition No.60 a) of this Schedule.</td> </tr> <tr> <td>lands shown by yellow colour on the plan annexed hereto and marked "B".</td> <td>1. the construction, maintenance or use (in or in connection with mining operations) of any dam, drain, pipeline or reservoir 2. the stockpiling or depositing of overburden, ore or tailings</td> <td>NIL.</td> </tr> <tr> <td>Lands shown by light green colour on the plan hereto and marked "B".</td> <td>Construction, maintenance or use (in or in connection with mining operations) of: any dam or drain</td> <td>NIL.</td> </tr> <tr> <td>Lands shown by dark green colour on the plan hereto and marked "B".</td> <td>Construction, maintenance or use (in or in connection with mining operations) of any road</td> <td>Condition No.60 b) of this Schedule</td> </tr> <tr> <td>Lands shown by red colour on the plan hereto and marked "B".</td> <td>1. Construction, maintenance or use (in or in building, connection with mining operations) of any building, machinery, road or telephone line 2. the storage of machinery 3. the generation and transmission of electricity for use in or in connection with mining operations.</td> <td>Condition No.60 c) to y) of this Schedule</td> </tr> </tbody> </table>	COLUMN 1	COLUMN 2	COLUMN 3	Lands shown by dark blue colour on the plan annexed hereto and marked "B".	1. Construction, maintenance or use (in or in connection with mining operations) of any building, mining plant, pipeline or railway. 2. the storage of machinery	Condition No.60 a) of this Schedule.	lands shown by yellow colour on the plan annexed hereto and marked "B".	1. the construction, maintenance or use (in or in connection with mining operations) of any dam, drain, pipeline or reservoir 2. the stockpiling or depositing of overburden, ore or tailings	NIL.	Lands shown by light green colour on the plan hereto and marked "B".	Construction, maintenance or use (in or in connection with mining operations) of: any dam or drain	NIL.	Lands shown by dark green colour on the plan hereto and marked "B".	Construction, maintenance or use (in or in connection with mining operations) of any road	Condition No.60 b) of this Schedule	Lands shown by red colour on the plan hereto and marked "B".	1. Construction, maintenance or use (in or in building, connection with mining operations) of any building, machinery, road or telephone line 2. the storage of machinery 3. the generation and transmission of electricity for use in or in connection with mining operations.	Condition No.60 c) to y) of this Schedule	Noted			
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60 (a)	<p><b>Details of Lands, Purposes and Additional Conditions</b> With regard to Condition No. 59 and the plan annexed hereto and marked "B", the lease holder: (a) shall comply with any direction given or which may be given by the Minister regarding any railway within the subject lands.</p>	Noted																					
60 (b)	<p><b>Details of Lands, Purposes and Additional Conditions</b> With regard to Condition No. 59 and the plan annexed hereto and marked "B", the lease holder: (b) shall permit free and uninterrupted access along any road within the subject lands.</p>	Noted																					
60 (c)	<p><b>Details of Lands, Purposes and Additional Conditions</b> With regard to Condition No. 59 and the plan annexed hereto and marked "B", the lease holder: (c) shall submit to the Sydney Catchment Authority [the SCA] for it's approval, full sets of the survey and design plans of all proposed surface installations well in advance of the time intended to commence construction thereof, and no work shall commence until the SCA's approval is given thereto.</p>	Noted																					
60 (d)	<p><b>Details of Lands, Purposes and Additional Conditions</b> With regard to Condition No. 59 and the plan annexed hereto and marked "B", the lease holder: (d) shall comply with any restrictions and / or requirements by the SCA as to ground surface disturbance, scrub or tree cutting and removal, clearing burning off and other related activities.</p>	Noted																					
60 (e)	<p><b>Details of Lands, Purposes and Additional Conditions</b> With regard to Condition No. 59 and the plan annexed hereto and marked "B", the lease holder: (e) shall stabilise all fill and cut banks by guniting or other process approved by the SCA. The lease holder shall place as directed by the SCA all excavated material cut and not required for fill purposes.</p>	Compliant		<p>Longwalls 301-303 Water Management Plan Catchment Management Plan Construction Management Plan Annual Reviews 2015, 2016, 2107</p>																			

60 (f)	<p><b>Details of Lands, Purposes and Additional Conditions</b> With regard to Condition No. 59 and the plan annexed hereto and marked "B", the lease holder: f) shall ensure that: a) The shaft and other surface operational sites are drained to the SCA's satisfaction in such manner as will prevent the discharger therefrom of rainwater, surface water and other drainage by a direct route to stored water or any watercourse. b) The drains are equipped with sediment arrestor pits of adequate capacity, constructed so as to permit cleaning without the accidental escape of sediment therefrom. c) No drainage from underground mine workings is pumped up the shafts onto the <b>Woronora Special Area</b> unless it is impractical to dispose of it otherwise, and in such a case, special treatment may be required or the drainage pumped clear of the <b>Woronora Special Area</b>, as the SCA may decide.</p>	Noted		Site Inspection and discussion with Stephen Love. Annual Reviews 2015, 2016, 2017.	
60 (g)	<p><b>Details of Lands, Purposes and Additional Conditions</b> With regard to Condition No. 59 and the plan annexed hereto and marked "B", the lease holder: (g) Shall not lease deposited on the surface of any mine residues, tailings or refuse without specific approval from the SCA and shall, if directed by the SCA, remove or all thereof from the <b>Woronora Special Area</b>.</p>	Noted			
60 (h)	<p><b>Details of Lands, Purposes and Additional Conditions</b> With regard to Condition No. 59 and the plan annexed hereto and marked "B", the lease holder: (h) (a) shall submit to the Authority for approval full sets of survey and design plans for all access or other roads proposed to be located on the <b>Woronora Special Area</b> well in advance of the time intended to commence construction thereof and no work shall commence thereon until approval has been given by the SCA. b) shall ensure that such roads are properly drained and constructed at the lease holder's expense. The SCA reserves the right to use for it's own lawful purposes and without cost to itself any roads so constructed on the <b>Woronora Special Area</b></p>	Noted			
60 (i)	<p><b>Details of Lands, Purposes and Additional Conditions</b> With regard to Condition No. 59 and the plan annexed hereto and marked "B", the lease holder: (i) In respect of such roads, shall ensure that: a) cut and fill road formations are kept to a minimum b) all material cut and not required as fill is disposed of as approved, or directed, by the SCA. c) all embankments are stabilised by guniting, or other process as approved by the SCA so as prevent erosion. d) vegetation is re-established as directed by the SCA. e) fencing and gates with locks are provided at locations approved by the SCA so as to prevent unauthorised entry to the <b>Woronora Special Area</b> or any operational area.</p>	Noted			
60 (j)	<p><b>Details of Lands, Purposes and Additional Conditions</b> With regard to Condition No. 59 and the plan annexed hereto and marked "B", the lease holder: (j) shall observe any requirement of the SCA as to the method or order of construction of any road works approved in accordance with these conditions so as to prevent erosion or sedimentation or pollution of the <b>Woronora Special Area</b> or any watercourse or the stored waters of any dam.</p>	Compliant	Relevant management plans refer to WaterNSW (SCA) requirements for maintenance of surface facilities	Longwalls Built Features Management Plan - Roads and Maritime Services Built Features Management Plan - WCC - Old Princes Highway Construction Management Plan	

60 (k)	<p><b>Details of Lands, Purposes and Additional Conditions</b>                  With regard to Condition No. 59 and the plan annexed hereto and marked "B", the lease holder:                  (k) shall ensure road making operations are limited strictly to the width approved by the SCA to be cleared for the route of any such roads.                  The parking of plant or stockpiling of material beyond the approved width shall be prohibited except in areas specially approved in advance by the SCA for such purposes.</p>	Noted			
60 (l)	<p><b>Details of Lands, Purposes and Additional Conditions</b>                  With regard to Condition No. 59 and the plan annexed hereto and marked "B", the lease holder:                  (l) shall ensure that the use of any airshaft by personnel is subject to the provision of satisfactory hygiene arrangements and shall provide for the disposal of sewage and waste water outside the <b>Woronora Special Area</b>.</p>	Noted			
60 (m)	<p><b>Details of Lands, Purposes and Additional Conditions</b>                  The lease holder:                  (m) at his own expense, shall carry out at the site or access thereto any structural or civil engineering works which may be directed by the SCA with a view to avoiding pollution or sedimentation of the SCA's water supply or the <b>Woronora Special Area</b>.</p>	Noted			
60 (n)	<p><b>Details of Lands, Purposes and Additional Conditions</b>                  The lease holder:                  (n) shall keep the area in a clean condition, maintain ground cover vegetation and establish it artificially where directed, the satisfaction of the SCA</p>	Noted			
60 (o)	<p><b>Details of Lands, Purposes and Additional Conditions</b>                  With regard to Condition No. 59 and the plan annexed hereto and marked "B", the lease holder:                  o) shall limit the use of petrol, pol, grease or similar materials to the minimum essential and shall arrange that the use of these materials shall be carried out in locations specifically provided to the satisfaction of the SCA.</p>	Noted			
60 (p)	<p><b>Details of Lands, Purposes and Additional Conditions</b>                  With regard to Condition No. 59 and the plan annexed hereto and marked "B", the lease holder:                  p) shall accept responsibility for the control and conduct of his employees or other persons engaged in business with the lease holder at all times whilst they are on that part of the <b>Woronora Special Area</b> embraced by the subject lands whether actually working or not. If any erosion in the employ of the lease holder is guilty of offence under any of the SCA's by-laws governing the control or use of the area of the <b>Woronora Special Area</b> embraced by the subject lands the lease holder shall take all possible steps to transfer that employee to work outside the area.</p>	Noted			

60 (q)	<p><b>Details of Lands, Purposes and Additional Conditions</b>                  With regard to Condition No. 59 and the plan annexed hereto and marked "B", the lease holder:                  (q) shall allow entrance by authorised officers or employees of the SCA to the surface works at any time for the purposes of their official duties and the production of an official identification as issued by the SCA shall be accepted by the lease holder as sufficient proof of identity.</p>	Noted			
60 (r )	<p><b>Details of Lands, Purposes and Additional Conditions</b>                  With regard to Condition No. 59 and the plan annexed hereto and marked "B", the lease holder:                  (r ) a) shall ensure that entry onto the <b>Woronora Special Area</b> from the point at which the access road leaves the public road is controlled so that only persons engaged in bona-fide business with the lease holder enter onto the <b>Woronora Special Area</b> at this point.                  b) shall be responsible for the provisions of fencing, gates and locks and the manning of the entrance and the locking of the entrance gate when personnel are not engaged at the site and shall be carried out to the satisfaction of the SCA.</p>	Noted			
60 (s)	<p><b>Details of Lands, Purposes and Additional Conditions</b>                  With regard to Condition No. 59 and the plan annexed hereto and marked "B", the lease holder:                  (s) shall provide and maintain suitable signs of a type approved by the SCA at the airshaft and access road junction, outlining regulations pursuant to the Sydney Water Catchment Management Act, 1998 for Special Areas.</p>	Noted			
60 (t)	<p><b>Details of Lands, Purposes and Additional Conditions</b>                  With regard to Condition No. 59 and the plan annexed hereto and marked "B", the lease holder:                  (t) shall provide and maintain at his own expense man proof mesh and barbed wire fencing around the whole perimeter of the airshaft site enclosing all buildings, paved areas and works.</p>	Noted			
60 (u)	<p><b>Details of Lands, Purposes and Additional Conditions</b>                  With regard to Condition No. 59 and the plan annexed hereto and marked "B", the lease holder:                  (u) shall not permit any fireplace to be constructed unless protected by stone wallings and fires lit therein shall not be left unattended.</p>	Noted			
60 (v)	<p><b>Details of Lands, Purposes and Additional Conditions</b>                  With regard to Condition No. 59 and the plan annexed hereto and marked "B", the lease holder:                  (v) shall take adequate precautions for the prevention of fire to the satisfaction of the SCA and in the event of any fire caused by the operations of the lease holder within the <b>Woronora Special Area</b>, the lease holder shall be responsible for the cost of fire suppression activities incurred by the SCA and shall be responsible for the cost of any damage to property resulting from the fire.</p>	Noted			
60 (w)	<p><b>Details of Lands, Purposes and Additional Conditions</b>                  With regard to Condition No. 59 and the plan annexed hereto and marked "B", the lease holder:                  (w) shall ensure that no fires are lit on the site for the purposed of clearing vegetation or other materials without the prior approval of and subject to such conditions as may be stipulated by the Sydney Catchment Authority's General Manager Catchment Operations and Major Projects.</p>	Noted			

60 (x)	<p><b>Details of Lands, Purposes and Additional Conditions</b>                  With regard to Condition No. 59 and the plan annexed hereto and marked "B", the lease holder:                  (x) shall give to the Sydney Catchment Authority's General Manager Catchment Operations and Major Projects, Three days' prior notice of its intention to commence any phase of the works hereby authorised.</p>	<b>Noted</b>			
60 (y)	<p><b>Details of Lands, Purposes and Additional Conditions</b>                  With regard to Condition No. 59 and the plan annexed hereto and marked "B", the lease holder:                  (y) shall, if so directed by the Minister, carry out such improvements as may be required by the Minister to the junction of the road and the Princes Highway pavement.</p>	<b>Noted</b>			
<b>Subsidence Management</b>					
61	<p>(a) The leaseholder shall prepare a Subsidence Management Plan prior to commencing any underground mining operations which will potentially lead to subsidence of the land surface.                  (b) Underground mining operations which will potentially lead to subsidence include secondary extraction panels such as long walls or mini walls, associated first workings (gate roads, installation roads and associated main headings, etc), and pillar extractions, and are otherwise defined by the Guideline for Applications for Subsidence Management Approvals.                  (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-General, an approval under the Coal Mines Regulation Act 1982, or the document Transitional Provisions for the New Subsidence Management Plan Approval Process.                  (d) Subsidence Management Plans are to be prepared in accordance with the Guideline for Applications for Subsidence Management Approvals.                  (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.</p>	<b>Compliant</b>	<p>Subsidence Monitoring Programs are in place and approved by DPE                  Subsidence Monitoring results are included and discussed in Annual Reviews. Subsidence Monitoring Program is part of Longwalls Extraction Plan documentation.</p>	<p>Longwalls 23-27 Subsidence Monitoring Program approval letter from DPE dated 25 August 2015;                  Longwalls 301-303 Subsidence Management Program;                  Subsidence Report Longwalls 301-303;                  Annual Reviews 2015, 2016, 2017 reporting                  Subsidence Monitoring results</p>	



Resources Metropolitan Coal  
Independent Environmental Audit  
Detailed Findings and Recommendations  
Mining Lease #1610

Clause	Requirement	Compliance	Audit Finding	Objective Evidence	Recommendation
<b>SCHEDULE OF CONDITIONS OF AUTHORITY (COAL) (1999) EXTRACTION OF COAL</b>					
<b>Notice to Landholders</b>					
1 (a)	<b>Notice to Landholders</b> (a) Within a period of three months from the date of grant/renewal of the mining lease, the lease holder must serve on each landholder a notice in writing indicating that this mining lease has been granted/renewed and whether the lease includes the surface. A plan identifying each landholder and individual land parcel subject to the lease area, and a description of the lease area must accompany the notice.	<b>Noted</b>			
1 (b)	<b>Notice to Landholders</b> (b) If there are ten or more landholders, the lease holder 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 mining lease has been granted/renewed; state whether the lease included the surface and must contain a plan and description of the lease area. If a notice is made under condition 1 (b), compliance with condition 1(a) is not required.	<b>Noted</b>			
<b>Rehabilitation</b>					
2	<b>Rehabilitation</b> Any disturbance resulting from the activities carried out under this mining lease must be rehabilitated to the satisfaction of the Minister.	<b>Compliant</b>	Land rehabilitation is undertaken as per approved Rehabilitation management plan; reviewed and reported in Annual Reviews	Rehabilitation Management Plan; Annual reviews 2015, 2016, 2017	
<b>Mining Operations Plan and Annual Rehabilitation Report</b>					
3 (a)	<b>Mining Operations Plan and Annual Rehabilitation Report</b> (a) The lease holder must comply with an approved Mining Operations Plan (MOP) in carrying out any significant surface disturbing activities, including mining operations, mining purposes and prospecting. The lease holder must apply to the Minister for approval of a MOP. An approved MOP must be in place prior to commencing any significant surface disturbing activities, including mining operations, mining purposes and prospecting,	<b>Compliant</b>	As per the MOP approval letter from DTIRE, the MOP has been modified to address changes requested in review and has addressed comments from OEH, SCA and EPA. Rehabilitation status is reported in Annual Reviews	Mining Operations Plan 2012-2019; DTIRE signed letter of approval MCV12/140 dated 10 Jan 2013; Annual reviews 2015, 2016, 2017	
3 (b)	<b>Mining Operations Plan and Annual Rehabilitation Report</b> (b) The MOP must identify the post mining land use and set out a detailed rehabilitation strategy which: (i) identifies areas that will be disturbed; (ii) details the staging of specific mining operations, mining purposes and prospecting; (iii) identifies how the mine will be managed and rehabilitated to achieve the post mining land use; (iv) identifies how mining operations, mining purposes and prospecting will be carried out in order to prevent and or minimise harm to the environment; and (v) reflects the conditions Of approval under: (vi) the Environmental Planning and Assessment Act 1979; (vii) the Protection of the Environment Operations Act 1997; and (viii) any other approvals relevant to the development including the conditions of this mining lease.	<b>Compliant</b>	As per the MOP approval letter from DTIRE, the MOP has been modified to address changes requested in review and has addressed comments from OEH, SCA and EPA. Rehabilitation status is reported in Annual Reviews	Mining Operations Plan 2012-2019; DTIRE signed letter of approval MCV12/140 dated 10 Jan 2013; Annual reviews 2015, 2016, 2018	
3 (c)	<b>Mining Operations Plan and Annual Rehabilitation Report</b> (c) The MOP must be prepared in accordance with the ESG3: Mining Operations Plan (MOP) Guidelines September 2013 published on the Department's website at: <a href="http://www.mresources.nsw.gov.au/environment">www.mresources.nsw.gov.au/environment</a>	<b>Compliant</b>	As per the MOP approval letter from DTIRE, the MOP has been modified to address changes requested in review and has addressed comments from OEH, SCA and EPA.	Mining Operations Plan 2012-2019; DTIRE signed letter of approval MCV12/140 dated 10 Jan 2013	

3 (d)	<p><b>Mining Operations Plan and Annual Rehabilitation Report</b> (d) The lease holder may apply to the Minister to amend an approved MOP at any time.</p>	Compliant	As per the MOP approval letter from DTIRE, the MOP has been modified to address changes requested in review and has addressed comments from OEH, SCA and EPA.	Mining Operations Plan 2012-2019; DTIRE signed letter of approval MCV12/140 dated 10 Jan 2013	
3 (e)	<p><b>Mining Operations Plan and Annual Rehabilitation Report</b> (e) It is not a breach of this condition if: (i) the operations which, but for this condition 3(e) would be a breach of condition 3(a), were necessary to comply with a lawful order or direction given under the Environmental Planning and Assessment Act 1979, the Protection of the Environment Operations Act 1997, the Mine Health and Safety Act 2004 / Coal Mine Health and Safety Act 2002 and Mine Health and Safety Regulation 2007 / Coal Mine Health and Safety Regulation 2006 or the Work Health and Safety Act 2011; and (ii) the Minister had been notified in writing of the terms of the order or direction prior to the operations constituting the breach being carried out.</p>	Noted			
3 (f)	<p><b>Mining Operations Plan and Annual Rehabilitation Report</b> (f) The lease holder must prepare a Rehabilitation Report to the satisfaction of the Minister. The report must: (i) provide a detailed review of the progress of rehabilitation against the performance measures and criteria established in the approved MOP; (ii) be submitted annually on the grant anniversary date (or at such other times as agreed by the Minister); and (iii) be prepared in accordance with any relevant annual reporting guidelines published on the Department's website at <a href="http://www.resources.nsw.qov.au/environment">www.resources.nsw.qov.au/environment</a>. (iv)Note: The Rehabilitation Report replaces the Annual Environmental Management Report.</p>	Compliant	Rehabilitation Report is included in Annual Reviews - section 9 in Annual review 2015-2016 and section 10 in Annual review 2017. The report includes assessment of environmental performance against monitoring components and performance indicators. Annual Reviews are submitted for DPE review with 2015-2016 reports having been approved. Annual Review 2017 is under review at the time of this audit.	Annual Reviews 2015, 2016 and 2017	
<b>Compliance Report</b>					
4	<p><b>Compliance Report</b> (a) The lease holder must submit a Compliance Report to the satisfaction of the Minister. The report must be prepared in accordance with any relevant guidelines or requirements published by the Minister for compliance reporting. (b) The Compliance Report must include: (i) the extent to which the conditions of this mining lease or any provisions of the Act or the regulations applicable to activities under this mining lease, have or have not been complied with; (ii) particulars of any non-compliance with any such conditions or provisions, (iii) the reasons for any such non-compliance; (iv) any action taken, or to be taken, to prevent any recurrence, or to mitigate the effects, of that non-compliance. (c)The Compliance Report must be lodged with the Department annually on the grant anniversary date for the life of this mining lease. (d) In addition to annual lodgement under condition 4(c) above, a Compliance Report: (i) must accompany any application to renew this mining lease under the Act; (ii) must accompany any application to transfer this mining lease under the Act; and (iii) must accompany any application to cancel, or to partially cancel, this mining lease under the Act. (e) Despite the submission of any Compliance Report under (c) or (d) above, the titleholder must lodge a Compliance Report with the Department at any date or dates otherwise required by the Minister. (f) A Compliance Report must be submitted one month prior to the expiry of this mining lease where the licence holder is not seeking to renew or cancel this mining lease.</p>	Compliant	This condition, as per the auditee, has been incorporated into CCL 703. Compliance reports are included in the Annual Reviews from the internal review undertaken.	Annual Reviews 2015, 2016 and 2017	

Environmental Incident Report				
5 (a)	<p><b>Environmental Incident Report</b></p> <p>(a) The lease holder must notify the Department of all:</p> <p>(i) breaches of the conditions of this mining lease or breaches of the Act causing or threatening material harm to the environment; and</p> <p>(ii) breaches of environmental protection legislation causing or threatening material harm to the environment (as defined in the Protection of the Environment Administration Act 1991), arising in connection with significant surface disturbing activities, including mining operations, mining purposes and prospecting operations, under this mining lease. The notification must be given immediately after the lease holder becomes aware of the breach.</p>	Compliant	As per Condition 6, Schedule 7 of the Proeject Approval 08_0149: Section 12 of the Annual Review 2015 and 2016 and section13 of Annual Review 2017 reports detail incident reporting. A separate incident register is not maintained. The exceedance of the subsidence impact performance measure was reported to the Secretary of the DP&E and other relevant agencies on the 14 October 2016.	Annual Review 2015, 2016 and 2017; Complaints register; Incident reports sampled - Minimal iron staining on the Eastern Tributary - detailed incident report, initial notification to DPE on 14 Oct 2016 and cover letter for detailed incident report sent to DPE on 21 Oct 2016.
5 (b)	<p><b>Environmental Incident Report</b></p> <p>(b)The lease holder must submit an Environmental Incident Report to the Department within seven (7) days of all breaches referred to in condition 5(a)(i) and (ii). The Environmental Incident Report must include:</p> <p>(i) the details of the mining lease;</p> <p>(ii) contact details for the lease holder;</p> <p>(iii) a map identifying the location of the incident and where material harm to the environment has or is likely to occur</p> <p>(iv) a description of the nature of the incident or breach, likely causes and consequences;</p> <p>(v) a timetable showing actions taken or planned to address the incident and to prevent future incidents or breaches referred to in 5(a).</p> <p>(vi) a summary of all previous incidents or breaches which have occurred in the previous 12 months relating to significant surface .disturbing activities, including mining operations, mining purposes and prospecting operations under this mining lease.</p>	Compliant	As per Condition 6, Schedule 7 of the Proeject Approval 08_0149: Section 12 of the Annual Review 2015 and 2016 and section13 of Annual Review 2017 reports detail incident reporting. A separate incident register is not maintained. The exceedance of the subsidence impact performance measure was reported to the Secretary of the DP&E and other relevant agencies on the 14 October 2016.	Annual Review 2015, 2016 and 2017; Complaints register; Incident reports sampled - Minimal iron staining on the Eastern Tributary - detailed incident report, initial notification to DPE on 14 Oct 2016 and cover letter for detailed incident report sent to DPE on 21 Oct 2016.
5 ( c )	<p><b>Environmental Incident Report</b></p> <p>( c)In addition to the requirements set out in conditions 5(a) and (b), the lease holder must immediately advise the Department of any notification made under section 148 of the Protection of the Environment Operations Act 1997 arising in connection with significant surface disturbing activities including mining operations, mining purposes and prospecting operations, under this mining lease.</p>	Noted		
Subsidence Management				
6	<p><b>Subsidence Management</b></p> <p>The lease holder must not commence or undertake underground mining operations that may cause subsidence of the surface other than in accordance with an Eligible Subsidence Management Plan approved by the Director-General. For the purposes of this condition, an 'Eligible Subsidence Management Plan' means:</p> <p>(i) A Subsidence Management Plan prepared in accordance with current government guidelines for the preparation of Subsidence Management Plans; or</p> <p>(ii) Those parts of an Extraction Plan or another type of plan:</p> <ul style="list-style-type: none"> <li>• prepared, either in whole or in part, with reference to current government guidelines for the preparation of a Subsidence Management Plan; and</li> <li>• approved for the purposes of the Environmental Planning and Assessment Act 1979 (or any planning legislation which replaces that Act) by the Minister or Director-General of the Department of Planning &amp; Infrastructure, or another officer of that Department authorised to approve such a plan, which relate to issues of subsidence.</li> </ul>	Compliant	Subsidence Monitoring Programs are in place and approved by DPE Subsidence Monitoring results are included and discussed in Annual Reviews. Subsidence Monitoring Program is part of Longwalls Extraction Plan documentation.	Longwalls 23-27 Subsidence Monitoring Program approval letter from DPE dated 25 August 2015; Longwalls 301-303 Subsidence Management Program; Subsidence Report Longwalls 301-303; Annual Reviews 2015, 2016, 2017 reporting Subsidence Monitoring results

Resource Recovery				
7	<p><b>Resource Recovery</b> The lease holder must optimise recovery of the minerals that are the subject of this mining lease to the extent economically feasible.</p>	Noted		
Group Security				
8	<p><b>Group Security</b> The lease holder is required to provide and maintain a security deposit to secure funding for the fulfilment of obligations of all or any kind under the mining lease, including obligations of all or any kind under the mining lease that may arise in the future. The amount of the security deposit to be provided as a group security has been assessed by the Minister at <b>\$4,725,000</b>. The leases covered by the group security include: <b>Consolidated Coal Lease No.703, Coal Lease No.379, Mining Purposes Lease No.320 (Act 1973) and Mining Lease No.1610 (Act 1992)</b>.</p>	Noted		
Cooperation Agreement				
9	<p><b>Cooperation Agreement</b> The lease holder must make every reasonable attempt, and be able to demonstrate its attempts, to enter into a cooperation agreement with the holder(s) of any overlapping title(s). The cooperation agreement should address but not be limited to issues such as:</p> <ul style="list-style-type: none"> <li>• Access arrangements</li> <li>• operational interaction procedures</li> <li>• dispute resolution</li> <li>• information exchange</li> <li>• well location</li> <li>• timing of drilling</li> <li>• potential resource extraction conflicts; and</li> <li>• rehabilitation issues.</li> </ul>	Noted		
Exploration Reporting				
Note	<p>Note: Exploration Reports (Geological and Geophysical) The lease holder must lodge reports to the satisfaction of the Minister in accordance with section 163C of the Mining Act 1992 and in accordance with 57 of the Mining Regulation 2010. Reports must be prepared in accordance with Exploration Reporting: A guide for reporting on exploration and prospecting in New South Wales (Department of Trade and Investment; Reginal Infrastructure and Services 2010).</p>	Noted		
Special Conditions				
Note	<p>Note: The standard conditions apply to all mining leases. The Division of Resources &amp; Energy (DRE) reserves the right to impose special conditions, based on individual circumstances, where appropriate.</p>	Noted		
Drainage				
10	<p><b>Drainage</b> Any proposed activity from time to time in regards to methane drainage and capture should be advised to the Department's Mine Safety Operations and Environmental Sustainability Unit for consideration and possible imposition of conditions relative to each site specific case.</p>	Noted	<p>Gas releases from Pool ETAG and ETAI are mainly methane however no environmental effects have been noted, as per Annual Review (Table 10 in Annual Review 2017). No activity is proposed as methane is not captured, rather vented through the vent shaft. Vent shaft 3 was visually inspected during site visit. Auditee mentioned that methane is usually less than 1% and the vented gas is mainly CO2. Online data monitoring system (Carbon Emissions Monitoring) confirms 0.06% methane in the vented gas.</p>	<p>Site inspection discussions with Stephen Love; Gas releases from Pool ETAG and ETAI mentioned in Annual Review; Vent shaft gas analyser data as screen shot of online data management system</p>

Resources Metropolitan Coal					
Independent Environmental Audit					
Detailed Findings and Recommendations					
Groundwater Licence 10BL603595					
Clause	Requirement	Compliance	Audit Finding	Objective Evidence	Recommendation
<b>Conditions statement referred to on 10BL603595</b>					
<b>Issued under part V of the <i>Water Act, 1912 ON 25-Jan-2013</i></b>					
1	The Licence holder must develop and implement a methodology to estimate the annual volume of all groundwater intercepted (water budget) approved by the office of water (surface water, alluvial and hard rock groundwater volumes must be determined and presents seperately). Water budgets must be set and approved one month prior to the beginning of each water year to enable implementation.	<b>Compliant</b>	Details of water estimation is included in the Surface Facilities Water Management Plan and monitoring details are in the Annual Reviews (eg section 6.2.5-6.2.9 in Annual Review 2017). As per SFWMP, <i>mine water make (i.e. groundwater that is captured in the underground mine workings) is calculated from the difference between total mine inflows (reticulated water into the mine, moisture in the downcast ventilation and the ROM coal in situ moisture content) and mine outflows (reticulated water out of the mine, moisture in the exhaust ventilation, and moisture in the ROM coal).</i> Moisture content in the air vented out is measured manually using a digital psychrometer and a moisture scanning device is used on Main Drift Belt No1 to measure ROM coal moisture content. An average estimate of 7% moisture content in ROM coal moisture is used in calculating the daily water make. This is detailed in Annual Reviews (eg section 6.2.11 in Annual Review 2017).	Longwalls 301-303 Extraction Plan; Water Management Plan; Annual Reviews 2015, 2016, 2017	
2	The licence holder must provide the office of water with a map of the licensed site showing areas of alluvial sediments and the limits to the mine works, including any alluvium intercepted or excavated by the mining operations.	<b>Compliant</b>	This condition is met via relevant map(s) provided in the Extraction Plan – Biodiversity Management Plan	Extraction Plan – Biodiversity Management Plan	
3	The licence holder must implement measure to prevent surface and/or alluvial groundwater flows entering the mine <b>within six (6) months from the licence issue date</b> , as approved by the office of water. The licence holder must also comply with any directions issued by the office of water with respect to installation and operation of necessary works to isolate the mine works from any surface and/or alluvial groundwater sources.	<b>Noted</b>	A disused rail tunnel north of the sediment pond contains runoff and groundwater seepage. Water pumped from the rail tunnel is also used as feed to the water treatment plant and as makeup to the washery tailings thickener. Mine groundwater inflow is minimal as underground mine is essentially dry. As per SFWMP, since May 2006, Metropolitan Coal has no available underground water storage capacity.	Surface Facilities Water Management Plan rev D	
4	The licence holder must develop and implement a management plan in consultation with the office of water, and provide for approval within six months of issuing the licence. The management plan must include:- A) A groundwater monitoring plan including baseline data for water level and quality, and trigger criteria, B) A groundwater dependent ecosystem and stream monitoring plan C) A contingency plan including mitigation and remedial measure, and reporting schedule for exceedences in trigger criteria, and D) The identification of measure to be used to minimise ongoing seepage of surface and/or alluvial water to the mine works and for restoring the mine works above the final water level for when the pits are no longer being used. E) The additional information Requested in the template provided by the office of water.	<b>Compliant</b>	Baseline data and monitoring information are included in the Surface Facilities Water Management Plan and Annual Reviews. Groundwater Piezometer verification forms were sighted. These forms include detailed construction and management plans for groundwater monitoring. Detailed groundwater assessment, current status of groundwater model are included in Annual Reviews (eg Appendix C and section 6.1.2 of Annual Review 2016), as per request from WaterNSW. Groundwater monitoring and assessment is undertaken by NPM Technical Pty Ltd T/a Hydro Simulations and reported to Metropolitan Coal. The data is discussed in and appended to the Annual Reviews. Appendix C to 2016 Annual Review and Appendix C1 to 2017 Annual Review were reviewed in this audit.	Longwalls 301-303 Extraction Plan and appendices; Surface Facilities Water Management Plan rev D; Annual Reviews 2015, 2016, 2017; various swamp and surface piezometer verification forms	
5	The licence holder will provide the office of water an annual compliance report, to report on the results of the groundwater monitoring and contingency plan, within one month of the end of the water year being reported on. The annual compliance report must:- A) Assess compliance with the licence, B) Summary of new bored or pits constructed during that year including a map of locations, C) Provide details analysis of the monitoring data collected for each bore for the last water year and compared with baseline data and trigger criteria D) A digital copy of all the data collected in the last water year to be presents to the office of water in excel format, E) Present contingency events that have impacted on groundwater during the last water year, Including actions taken to remedy the situation and extra monitoring results, F) Any recommendations for improvements for the new water year, and G) A review of the management plan for the new water year.	<b>Compliant</b>	Baseline data and monitoring information are included in the Surface Facilities Water Management Plan and Annual Reviews. Groundwater Piezometer verification forms were sighted. These forms include detailed construction and management plans for groundwater monitoring. Detailed groundwater assessment, current status of groundwater model are included in Annual Reviews (eg Appendix C and section 6.1.2 of Annual Review 2016), as per request from WaterNSW.	Annual Reviews 2015, 2016, 2017	

6	An extraction measurement device must be installed and maintained on each extraction device (pump) used for extraction of water under this licence, and such devices must be a type and standard, and must be maintained in a manner, which is acceptable to the office of water.	<b>Compliant</b>	Groundwater monitoring information are included in the Surface Facilities Water Management Plan and Annual Reviews (eg section 6.2.5-6.2.9 in Annual Review 2017). Groundwater Piezometer verification forms were sighted. These forms include detailed construction and management plans for groundwater monitoring. Detailed groundwater assessment, current status of groundwater model are included in Annual Reviews (eg Appendix C and section 6.1.2 of Annual Review 2016), as per request from WaterNSW. As per section 14 of Annual Review 2017, additional gauging stations and additional deep groundwater bores are planned to be installed in 2018.	Longwalls 301-303 Extraction Plan and appendices; Surface Facilities Water Management Plan rev D; Annual Reviews 2015, 2016, 2017; various swamp and surface piezometer verification forms	
7	The licence holder must ensure that an independent environmental (water) audit is carried out at the end of the 5-years licence period and submitted to the office of water as a comprehensive report (Environmental Audit Report). The audit must:- A) Be carried out in accordance with guidelines and general principles for environmental auditing and procedures for environmental auditing approved by the office of water, B) Assess compliance with the requirements of the licence, including the management plan, C) Review actual impacts of the extractions on any aquifers, groundwater dependant exo-systems and any streams in the area, D) Make comparisons between actual and predicted impacts on groundwater F) Be conducted by an independent certified auditor, nominated by the licence holder, and G) Be carried out at the cost of the licence holder.	<b>Compliant</b>	Independent Environmental Audits, initially undertaken at the end of the 5-year licence period, are undertaken on a three-yearly basis where water data as reported is reviewed against relevant licence conditions and management plans.		
8	The Volume of groundwater extracted from the works authorised by the licence, (and by licence(s) N/A, shall not exceed 182.5 megalitres (ML) in any 12 month period commencing 1st July. (This is referred to as the "groundwater only allocation").	<b>Compliant</b>	Mine water make is discussed in each year's Annual Reviews. 182.5ML works out at 0.5ML/day - measured on a 20 day average. This is discussed in section on Mine Water Make in the Annual Review (section 6.1.2 in Annual Reviews 2015 and 2016, section 6.2.11 in Annual Review 2017) with Mine Water Balance chart (Annual Review 2015 chart 67, Annual Review 2016 chart 77 and Annual Review 2017 chart 81).	Annual Reviews 2015, 2016, 2017; Site discussions with Stephen Love	
9	This a special purpose (mine de-watering) licence. As such, the licence, including the volumetric groundwater allocation, is not transferrable and the licence will lapse at the conclusion of mining operations upon the office of water providing confirmation that satisfactory compliance with these conditions has been achieved.	<b>Noted</b>			

Resources Metropolitan Coal  
Independent Environmental Audit  
Detailed Findings and Recommendations  
Longwalls 23-27 Subsidence Management Plan Approval

Clause	Requirement	Compliance	Audit Finding	Objective Evidence	Recommendation
<b>Limits on Approval</b>					
1	<b>Limits on Approval</b> The Leaseholder must carry out the activity strictly in accordance with the SMP Approved Plan.	<b>Noted</b>	Subsidence Monitoring Programs are in place and approved by DPE Subsidence Monitoring results are included and discussed in Annual Reviews. Subsidence Monitoring Program is part of Longwalls Extraction Plan documentation.	Longwalls 23-27 Subsidence Monitoring Program approval letter from DPE dated 25 August 2015; Longwalls 301-303 Subsidence Management Program dated November 2016; Subsidence Report Longwalls 301-303; Annual Reviews 2015, 2016, 2017 reporting Subsidence Monitoring results	
2	<b>Limits on Approval</b> The Leaseholder must carry out the activity generally in accordance with the SMP and subject to the conditions of this Approval.	<b>Noted</b>			
3	<b>Limits on Approval</b> Where this Approval requires actions to be undertaken by the Leaseholder, including remediation of subsidence impacts, the obligation continues until the Secretary notified the Leaseholder that the action has been completed to his or her satisfaction.	<b>Noted</b>			
4	<b>Limits on Approval</b> The secretary may vary the conditions of this Approval by notice in writing.	<b>Noted</b>			
5	<b>Limits on Approval</b> The secretary may, at his or her discretion, suspend or revoke this Approval if: a) the leaseholder fails to adhere to any condition of the Approval; or b) the head of any other government authority requests suspension or revocation on the basis of the Leaseholder's non-compliance, or potential non-compliance, with legislation administered by that agency in relation to this approval.	<b>Noted</b>			

General Obligation to Minimise Harm to the Environment				
6	<p><b>General Obligation to Minimise Harm to the Environment</b> The Leaseholder must implement the SMP (as amended by the conditions of this Approval) and carry out any additional practicable measures necessary to prevent any harm to the environment that may result from the construction, operations, or rehabilitation of the activity. Where prevention can not be achieved the leaseholder is to demonstrate minimisation of harm to the environment that may result from the construction, operation or rehabilitation of the activity.</p>	Compliant	<p>Subsidence Monitoring Programs are in place and approved by DPE Subsidence Monitoring results are included and discussed in Annual Reviews. Subsidence Monitoring Program is part of Longwalls Extraction Plan documentation.</p>	<p>Longwalls 23-27 Subsidence Monitoring Program approval letter from DPE dated 25 August 2015; Longwalls 301-303 Subsidence Monitoring Program; Subsidence Report Longwalls 301-303; Annual Reviews 2015, 2016, 2017 reporting Subsidence Monitoring results</p>
Notification of Approval				
7	<p><b>Notification of Approval</b> The Proponent must give notice of this SMP approval within 30 days to the DP&amp;I, NOW, OEH, Council, MSB, the local Aboriginal Land Council's, the owners/operators of any infrastructure, and landowners in the application area and any other relevant government agencies or stakeholders that the Secretary's approval of the SMP has been granted.</p>	Compliant	<p>Approved plans are publicly accessible via peabody website. Longwalls 23-27 Extraction Plans and associated subsidence management program had been approved. Longwalls 301-303 Extraction Plan and subsidence management program has been approved and are available on the website.</p>	<p><a href="https://www.peabodyenergy.com/Operations/Australia-Mining/New-South-Wales-Mining/Metropolitan-Mine/Approvals,-Plans-Reports">https://www.peabodyenergy.com/Operations/Australia-Mining/New-South-Wales-Mining/Metropolitan-Mine/Approvals,-Plans-Reports</a></p>
Implementation of Approval				
8	<p><b>Implementation of Approval</b> Any plans, programmes, reports or strategies required as a condition of this Approval must be developed having regard to any guidelines adopted by the Secretary fit the purpose of Subsidence management and mine rehabilitation.</p>	Compliant	<p>Approval letters for various plans and programs have been sighted for compliance to relevant Project Approval conditions. Annual Reviews and attached reports indicate implementation of approved plans. All plans and reports are available on peabody website.</p>	<p>Management Plan approval letters Longwalls 301-303 Extraction plan, Subsidence Monitoring Program rev A, Rehabilitation Management Plan rev E Annual Reviews</p>
9	<p><b>Implementation of Approval</b> The Leaseholder must implement any plan, programme or strategy required and approved pursuant to this Approval.  <i>Note: The Leaseholder may, at any time, submit an amended plan, programme or strategy for approval. Once approved, the amended plan, programme or strategy must be implemented, however, up until the date of approval, the Leaseholder must continue to implement the previously approved plan, programme or strategy.</i></p>	Compliant	<p>Approval letters for various plans and programs have been sighted for compliance to relevant Project Approval conditions. Annual Reviews and attached reports indicate implementation of approved plans. All plans and reports are available on peabody website.</p>	<p>Management Plan approval letters Longwalls 301-303 Extraction plan, Subsidence Monitoring Program rev A, Rehabilitation Management Plan rev E Annual Reviews</p>



10	<p><b>Implementation of Approval</b> Any modifications to plans, programmes or strategies already approved for the purposes of the conditions of this Approval must have regard to the matters set out in condition 8. Amended plans, programmes or strategies submitted for approval must be accompanied by all relevant supporting documentation to assist in the assessment of the amendment or modification.</p> <p><i>Note: This condition relates to plans, programmes and strategies required by the conditions of this Approval - it does not apply to variations to the SMP or the SMP Approved Plan which must be done in accordance with the requirements of the Mining Act, the conditions of title and the variation procedures identified in the SMP guidelines.</i></p>	<b>Compliant</b>	Approval letters for various plans and programs have been sighted for compliance to relevant Project Approval conditions. Annual Reviews and attached reports indicate implementation of approved plans. All plans and reports are available on peabody website.	Management Plan approval letters Longwalls 301-303 Extraction plan, Subsidence Monitoring Program rev A, Rehabilitation Management Plan rev E Annual Reviews	
<b>Directions</b>					
11	<p><b>Directions</b> The Leaseholder must comply with any written direction given by the Secretary Director Environmental Sustainability, Director Mine Safety Operations or Principal Subsidence Engineer relating to: a) the implementation of any aspect of the SMP or an approved plan, programme or strategy; b) assessing or reviewing the adequacy, effectiveness, or coverage of any approved plan, programme or strategy or any aspect of the SMP; c) the type, timing and/or location of monitoring of baseline conditions, subsidence or subsidence impacts; d) any reporting requirement under this Approval; e) the carrying out of works to address subsidence impacts; and/or f) the carrying out of any studies or investigations related to subsidence or subsidence impacts and the reporting of any findings or conclusions. The obligations under this condition prevail over any other obligation under this Approval. <i>Note: Compliance with a written direction will not operate as a defence to a breach of any obligation under this Approval that occurred prior to the Direction being given.</i></p>	<b>Noted</b>			
<b>Subsidence Monitoring Programme</b>					
12	<p><b>Subsidence Monitoring Programme</b> The Leaseholder must submit to the Principal Subsidence Engineer for approval a subsidence monitoring programme for the longwall panel which are the subject of this Approval. This Programme must include: a) inspection regimes; b) layout of monitoring points; c) parameters to be measured; d) monitoring methods and accuracy; e) timing and frequencies of surveys and inspections; f) recording and reporting of monitoring results.  The Leaseholder must not commence longwall mining prior to the subsidence monitoring programme being approved.  <i>Note: The programme should be submitted to the Principal Subsidence Engineer at least 30 days prior to the expected commencement of operations to enable sufficient time for the assessment of the programme. The Principal Subsidence Engineer may require the provision of further information to assist in the assessment of the programme or a resubmission of the programme if it is considered inadequate. Complex issues or the need for</i></p>	<b>Compliant</b>	Approved subsidence monitoring program was inspected and it includes the required details.	Longwalls 23-27 Subsidence Monitoring Program approval letter from DPE dated 25 August 2015; Longwalls 301-303 Subsidence Monitoring Program; Subsidence Report Longwalls 301-303; Annual Reviews 2015, 2016, 2017 reporting Subsidence Monitoring results	

Environmental Management Plan					
13	<p><b>Environmental Management Plan</b> The Leaseholder must submit to the Director Environmental Sustainability for approval an Environmental Management Plan (EMP) for the panels which are the subject of this Approval. This plan must address subsidence impacts on: a) surface and groundwater (quality and quantity); b) flora and fauna; c) cliffs and overhangs, rock ledges and steep slopes; d) archaeological sites; and e) any other significant environmental features that may be effected by subsidence resulting from the proposed longwall extraction.</p> <p>The leaseholder must not operate other than in accordance with an Environmental Management Plan (EMP) approved by the Director Environmental Sustainability. This plan must address subsidence impacts above and must include: i) a detailed monitoring programme; ii) trigger levels for subsidence impacts that require actions and responses; iii) the procedures that would be followed in the event that the monitoring indicates an exceedance of trigger levels; iv) measures to mitigate, remediate and/or compensate any identified impacts; v) a protocol for the notification of identified exceedances of the trigger levels; and vi) a contingency plan.</p> <p>This plan must be prepared in consultation with relevant landholders and government agencies.</p> <p>The Leaseholder must not cause subsidence impacts prior to the Environmental Management Plan being</p>	Compliant	The required details are included in the Extraction Plan for currently approved longwalls.	Longwalls 301-303 Extraction Plan and attached plans and programs; Metropolitan Coal Environmental Management Strategy; Annual Reviews 2015, 2016, 2017	
Note:	<p><b>Environmental Management Plan</b> <i>Note: The plan should be submitted to the Director Environmental Sustainability at least 30 days prior to the expected commencement of operations to enable sufficient time for the assessment of the plan. The Director Environmental Sustainability may require the provision of further information to assist in the assessment of the plan or a resubmission of the plan if it is considered inadequate. Complex issues or the need for additional information or a resubmission of the plan may require a longer assessment period.</i></p>	Noted			
Note:	<p><b>Environmental Management Plan</b> <i>Note: Plans or programees submitted in the SMP application or submitted under the Environmental Planning and Assessment Act 1979 may satisfy the requirements of conditions 12 or 13 insofar as they meet requirements of those conditions.</i></p>	Noted			
14	<p><b>Environmental Management Plan</b> Left blank intentionally</p>	n/a	n/a	n/a	n/a
15	<p><b>Environmental Management Plan</b> Left blank intentionally</p>	n/a	n/a	n/a	n/a

Incident and Ongoing Management Reporting

16	<p><b>Incident and Ongoing Management Reporting</b> The Leaseholder must, within 24 hours of becoming aware of the occurrence, notify:</p> <p>a) the Principal Subsidence Engineer; b) Director, Environmental Sustainability; c) The Mine Subsidence Board; d) NSW Office of Water; and e) other relevant stakeholders and any Government Agency with a regulatory role if they request such notification, of the following:</p> <p>i. Any significant unpredicted and/or higher-than-predicted subsidence and/or abnormalities in the development of subsidence; ii. Any exceedance of predicted impacts on groundwater resources and/or the natural environment that may have been cause (whether partly or wholly) by subsidence; iii. Any observed subsidence impacts adverse to the serviceability and/or safety of infrastructure and other built structures that may be affected by longwall mining; iv. Any significant subsidence-induced cracking and/or ground deformations observed in any surface areas within the SMP application area;</p>	Noted	As per records and confirmation by Metropolitan Coal, there were no reportable incidents for Longwalls 23-27	Longwalls 301-303 Subsidence Monitoring Program; Subsidence Report Longwalls 301-303 prepared by msec mine subsidence engineering consultants rev A of 27 Oct 2016; Annual Reviews 2015, 2016, 2017 reporting Subsidence Monitoring results. Audit discussion with Stephen Love	
Note:	<p><b>Incident and Ongoing Management Reporting</b> <i>Note: Under Condition 11, the Leaseholder can be directed to, among other things, prepare a report on an incident reported under this condition. A report on the details of the incident, including likely or known causes, response action and proposed response measures will generally be required for incidents that involve material property or environmental damage or have the potential to cause such damage.</i></p>	Noted			
Status Report					
17 (a)	<p><b>Status Report</b> The Leaseholder must prepare and maintain a Subsidence Management Status Report which must include but not be limited to:</p> <p>a) the current face position of the panel being extracted;</p>	Compliant	Subsidence Report as appendix I to longwalls 301-303 Extraction Plan and Subsidence monitoring details within the approved/submitted Annual Reviews are deemed to satisfy this requirement.	Longwalls 301-303 Subsidence Monitoring Program; Subsidence Report Longwalls 301-303 prepared by msec mine subsidence engineering consultants rev A of 27 Oct 2016; Annual Reviews 2015, 2016, 2017 reporting Subsidence Monitoring results	
17 (b)	<p><b>Status Report</b> The status report must include but not be limited to:</p> <p>b) a summary of any subsidence management actions undertaken by the Leaseholder;</p>	Compliant	Subsidence Report as appendix I to longwalls 301-303 Extraction Plan and Subsidence monitoring details within the approved/submitted Annual Reviews are deemed to satisfy this requirement.	Longwalls 301-303 Subsidence Monitoring Program; Subsidence Report Longwalls 301-303 prepared by msec mine subsidence engineering consultants rev A of 27 Oct 2016; Annual Reviews 2015, 2016, 2017 reporting Subsidence Monitoring results	
17 (c)	<p><b>Status Report</b> The status report must include but not be limited to:</p> <p>c) a summary of any comments, advice and feedback from consultation with stakeholders in relation to the implementation of the Approval (including the preparation, implementation and review of plans, programmes, reports or strategies required by the approval) undertaken or received and a summary of the Leaseholder's response to the comments, advice and feedback given by the stakeholders;</p>	Compliant	Subsidence Report as appendix I to longwalls 301-303 Extraction Plan and Subsidence monitoring details within the approved/submitted Annual Reviews are deemed to satisfy this requirement.	Longwalls 301-303 Subsidence Monitoring Program; Subsidence Report Longwalls 301-303 prepared by msec mine subsidence engineering consultants rev A of 27 Oct 2016; Annual Reviews 2015, 2016, 2017 reporting Subsidence Monitoring results	
17 (d)	<p><b>Status Report</b> The status report must include but not be limited to:</p> <p>d) a summary of the observed and/or reported subsidence impacts, incidents, service difficulties, community complaints, and any other relevant information reported to the Leaseholder and a summary of the Leaseholder's response to these impacts, incidents, service difficulties and complaints;</p>	Compliant	Subsidence Report as appendix I to longwalls 301-303 Extraction Plan and Subsidence monitoring details within the approved/submitted Annual Reviews are deemed to satisfy this requirement.	Longwalls 301-303 Subsidence Monitoring Program; Subsidence Report Longwalls 301-303 prepared by msec mine subsidence engineering consultants rev A of 27 Oct 2016; Annual Reviews 2015, 2016, 2017 reporting Subsidence Monitoring results	

17 (e)	<p><b>Status Report</b> The status report must include but not be limited to: e) a summary of subsidence development based on monitoring information compared with any defined triggers and/or predicted subsidence to facilitate early detection of potential subsidence impacts;</p>	<b>Compliant</b>	Subsidence Report as appendix I to longwalls 301-303 Extraction Plan and Subsidence monitoring details within the approved/submitted Annual Reviews are deemed to satisfy this requirement.	Longwalls 301-303 Subsidence Monitoring Program; Subsidence Report Longwalls 301-303 prepared by msec mine subsidence engineering consultants rev A of 27 Oct 2016; Annual Reviews 2015, 2016, 2017 reporting Subsidence Monitoring results	
17 (f)	<p><b>Status Report</b> The status report must include but not be limited to: f) a summary of the adequacy, quality and effectiveness of the implemented management processes based on the monitoring and consultation information summarised above; and</p>	<b>Compliant</b>	Subsidence Report as appendix I to longwalls 301-303 Extraction Plan and Subsidence monitoring details within the approved/submitted Annual Reviews are deemed to satisfy this requirement.	Longwalls 301-303 Subsidence Monitoring Program; Subsidence Report Longwalls 301-303 prepared by msec mine subsidence engineering consultants rev A of 27 Oct 2016; Annual Reviews 2015, 2016, 2017 reporting Subsidence Monitoring results	
17 (g)	<p><b>Status Report</b> The status report must include but not be limited to: g) a statement regarding any additional and/or outstanding management actions to be undertaken or the need for early responses or emergency procedures to ensure adequate management of any potential subsidence impacts due to longwall mining.</p>	<b>Compliant</b>	Subsidence Report as appendix I to longwalls 301-303 Extraction Plan and Subsidence monitoring details within the approved/submitted Annual Reviews are deemed to satisfy this requirement.	Longwalls 301-303 Subsidence Monitoring Program; Subsidence Report Longwalls 301-303 prepared by msec mine subsidence engineering consultants rev A of 27 Oct 2016; Annual Reviews 2015, 2016, 2017 reporting Subsidence Monitoring results	
17	<p><b>Status Report</b> The Subsidence Management Status Report must be updated at least every 14 days to reflect any changes in the information required to be included in the Report. The Status Report (as updated from time to time) must be provided, upon request, to the Mine Subsidence Board, the Director of Environmental Sustainability, the Principal Subsidence Engineer, owner/operators of any infrastructure within the application area and any other relevant government agencies.</p>	<b>Compliant</b>	Subsidence Report as appendix I to longwalls 301-303 Extraction Plan and Subsidence monitoring details within the approved/submitted Annual Reviews are deemed to satisfy this requirement.	Longwalls 301-303 Subsidence Monitoring Program; Subsidence Report Longwalls 301-303 prepared by msec mine subsidence engineering consultants rev A of 27 Oct 2016; Annual Reviews 2015, 2016, 2017 reporting Subsidence Monitoring results	
<b>Annual Report</b>					
18	<p><b>Annual Report</b> The Leaseholder shall prepare an annual report. This report shall be submitted to the Secretary within twelve months of the date of this approval and annually thereafter. The annual report must: a) include a summary of the subsidence and environmental monitoring results for the year; b) include an analysis of these monitoring results against the relevant; • impact assessment criteria; • monitoring results from previous panels; and • predictions in the SMP; c) identify any trends in the monitoring results over the life of the activity; and d) describe what actions were to ensure adequate management of any potential or actual subsidence impacts due to mining.  <i>Note: The requirement of this condition may be satisfied via an Annual Review prepared under conditions of development consent or project approval.</i></p>	<b>Compliant</b>	Annual Reviews are prepared and submitted for review/approval.	Annual Reviews 2015, 2016 and 2017. DPE letter dated 5 Oct 2016 indicating acceptance of re-submitted (addressing review comments) Annual Review 2015 dated 17 Jun 2016 DPE letter dated 27 Jul 2017 indicating acceptance of updated Annual Review 2016 dated 16 Jun 2017	
<b>Access to Information</b>					
19	<p><b>Access to Information</b> Within 3 months of the submission of an Annual Report (as required by Condition 18) or the approval of a plan, programme or strategy required under this Approval or the DMP (or any subsequent revision of these documents), the Leaseholder must, to the satisfaction of the Secretary: a) provide a copy of these documents/s to all relevant agencies; b) ensure that a copy of the relevant documents is made publicly available at the Leaseholder's regional office; and c) put a copy of the relevant document/s on the Leaseholder's website.  <i>Note: Relevant agencies currently include MSC, OEH, NOW and DP&amp;I.</i></p>	<b>Noted</b>			

Survey Marks					
20	<p><b>Survey Marks</b>                      At the completion of subsidence, or otherwise as required by the Land and Property Management Authority, the functionality of any survey marks affected by subsidence must be fully restored to the satisfaction of the Land and Property Management Authority.</p>	<p><b>Compliant</b></p>	<p>Evidence to processes involved in assessing survey lines regarding subsidence monitoring was sighted.</p>	<p>Subsidence Monitoring Program (Longwalls 301-303)                      Surface Works Assessment Form dated Sept 2013 Subsidence Survey Lines</p>	
Water Supply					
21	<p><b>Water Supply</b>                      In the event of interruptions to potable water supplied (water quality and/or quantity) due to subsidence impacts on water supply systems and/or sourced caused by longwall mining, the Leaseholder must provide, without delay, water supplies of equivalent quality and quantity to locations convenient to those affected within the SMP Application Area until such time that the affected water supply systems and/or sources are restored.</p>	<p><b>Noted</b></p>			

Resources Metropolitan Coal  
Independent Environmental Audit  
Detailed Findings and Recommendations  
Longwalls 23-27 Extraction Plan Approval

Clause	Requirement	Compliance	Audit Finding	Objective Evidence	Recommendation
<b>Schedule 3</b>					
<b>Terms of Approval</b>					
3	<b>Terms of Approval</b> The proponent shall carry out the development generally in accordance with the: a) conditions of approval MP 08_0149; b) conditions of this approval; and c) Extraction Plan.	<b>Compliant</b>	The management of the mine site is as per documentations prepared to satisfy the requirements	Various management plans, Environmental strategy, construction management documentation and rehabilitation management plan	
4	<b>Terms of Approval</b> If there is any inconsistency with the Extraction Plan, then the conditions of this approval shall prevail to the extent of the inconsistency.	<b>Noted</b>			
<b>Remediation</b>					
5	<b>Remediation</b> The Proponent shall develop a Grouting Protocol and Grouting Procedure for proposed remedial grouting works within Waratah Rivulet and/or other watercourses in consultation with OEH, SCA, and DRE and submit those documents to the Director-General for approval by 31 July 2014.	<b>Compliant</b>	Grouting Protocol and Grouting Procedure, along with Longwalls 23-27 Extraction plan and Rehabilitation Management Plan, has been accepted.	DPE letter of approval dated 19 Aug 2014	
6	<b>Remediation</b> Prior to undertaking any remedial grouting works in accordance with the Grouting Protocol and Grouting Procedure the Proponent shall consult with OEH, SCA, DRE and P&I, and shall then implement the works to the satisfactions of the Director-General.	<b>Noted</b>			
7	<b>Remediation</b> If the Proponent does not meet the performance measures in condition 1 of Schedule 3 of approval MP 08_0149, then the Director General may issue the Proponent with a directions in writing to undertake actions or measures to mitigate or remediate subsidence impacts and/or associated environmental consequences. The Proponent must implement the direction in accordance with its terms and requirements, in consultation with the Director-General and affected agencies.	<b>Observation</b>	Annual Review 2016 and 2017 report exceedance of the Eastern Tributary watercourse subsidence impact performance measure in relation to iron staining and pool flow / drainage behaviour downstream of the Longwall 26 maingate - this indicates non-compliance with condition 1 of schedule 3 of Development Consent 08_0149. Annual Review 2017 section 6.2 and 13.1 detail the monitoring observations and actions. No written direction from the D-G were sighted at the audit.	Annual Reviews 2015, 2016, 2017.	An observation has been made that the reasons for non-compliance and actions (undertaken and proposed) as per the directions issued by DG. The results of the proposed actions need further review and reporting
<b>Waratah Rivulet Flow Gauging Station</b>					
8	<b>Waratah Rivulet Flow Gauging Station</b> The Proponent shall ensure that the existing Waratah Rivulet flow gauging station is not subject to subsidence impacts which render it unsuitable for its primary purpose without first constructing, in consultation with SCA, an appropriate alternative flow gauging station further downstream (as close as practicable to the full supply level of Woronora Reservoir) and establishing a flow rating curve over a period of 2 years, to the satisfaction of the Director-General.	<b>Compliant</b>	Metropolitan Coal has monitored and assessed subsidence in the vicinity of the gauging station in accordance with the Metropolitan Coal Longwalls 23-27 and Longwalls 301-303 Subsidence Monitoring Programs. The Waratah Rivulet Gauging Station Contingency Plan indicates that in the event the differential survey data indicates that vertical and horizontal movements exceed ±15 millimetres (mm) Metropolitan Coal will assess the extent of the movement and whether the movement has the potential to alter the stream flow rating curve. Differential vertical movements at the Q, QA and QB subsidence monitoring lines were less than 15 mm.	Annual Review 2017 section 6.1.2	

Monitoring and Reporting Requirements				
9	<p><b>Monitoring and Reporting Requirements</b></p> <p>The Proponent shall implement a monitoring and reporting procedure that contains the following elements:</p> <p>a) incident reporting, following any occasion of incident, in accordance with the conditions of consent and/or environment protection licence and/or any requirements in the TARP(S);</p> <p>b) bi-monthly subsidence impact reporting, following regular monthly inspections, but only if any new impact is identified. Impact reporting must include a full description, location identification using aerial photos with longwall layout superimposed, good photos of the impacts and preliminary characterisation of the impact in accordance with the relevant TARP(S);</p> <p>c) six-monthly reporting of all impacts and environmental monitoring results, including:</p> <ul style="list-style-type: none"> <li>• a comprehensive summary of all impacts, including a revised characterisation according to the relevant TARP(S);</li> <li>• any proposed actions resulting from Triggers being met in the TARP, or other actions;</li> <li>• assessment of compliance with all relevant performance measure and indicators;</li> <li>• a comprehensive summary of all quantitative and qualitative environmental monitoring results, including landscape monitoring, water quality data, water flow and pool level data, piezometer reading, etc; and</li> </ul> <p>d) Annual Review reporting, to be based on each two successive six-monthly reports of impacts and environmental monitoring results. A summary of subsidence effects monitoring results should also be included.</p>	Compliant	<p>Mine subsidence monitoring and reporting is done by msec mine subsidence engineering consultants. The monitoring program is detailed in the Extraction Plan and monitoring results are appended to Annual Reviews.</p>	<p>Longwalls 301-303 Extraction Plan Appendix G - Subsidence Monitoring Program and Appendix I - Subsidence Report; Annual Reports 2015, 2016, 2017 Appendix A - Subsidence Monitoring Results</p>
Notes:	<p><b>Monitoring and Reporting Requirements</b></p> <p>Notes:</p> <ul style="list-style-type: none"> <li>• The Director-General may agree to a lesser frequency for the bi-monthly and six-monthly reporting set out above, if subsidence impacts and environmental consequences at the mine are relatively rare and benign in character.</li> <li>• There is no need to include results of the monitoring of subsidence effects within bi-monthly and six-monthly report P&amp;I. However, a summary of subsidence effects monitoring results should be included in the Annual Review.</li> <li>• Other regular reports assessing impacts of mining close to sensitive built features. P&amp;I expects to receive copies if reports of these types.</li> </ul>	Noted		
Independent Environmental Audit				
10	<p><b>Independent Environmental Audit</b></p> <p>The Applicant shall ensure that the audit team for the Independent Environmental Audit, required under condition 8 or Schedule 7 of approval MP 08_0149, includes suitable experts in the fields of mine subsidence impacts and remediation, upland swamps, stream hydrology and water quality; and carries out a detailed audit of the impacts of mining in Longwalls 20-27.</p>	Noted		

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