

# INDEPENDENT ENVIRONMENTAL AUDIT 2019

**Chain Valley Colliery**

**Prepared for:**

Delta Coal  
Off Construction Road  
Vales Point NSW 2259

SLR Ref: 630.12751-R01  
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## PREPARED BY

SLR Consulting Australia Pty Ltd  
ABN 29 001 584 612  
10 Kings Road  
New Lambton NSW 2305 Australia  
(PO Box 447 New Lambton NSW 2305 Australia)  
T: +61 2 4037 3200  
E: newcastleau@slrconsulting.com www.slrconsulting.com

## BASIS OF REPORT

This report has been prepared by SLR Consulting Australia Pty Ltd (SLR) with all reasonable skill, care and diligence, and taking account of the timescale and resources allocated to it by agreement with Delta Coal (the Client). Information reported herein is based on the interpretation of data collected, which has been accepted in good faith as being accurate and valid.

This report is for the exclusive use of the Client. No warranties or guarantees are expressed or should be inferred by any third parties. This report may not be relied upon by other parties without written consent from SLR.

SLR disclaims any responsibility to the Client and others in respect of any matters outside the agreed scope of the work.

## DOCUMENT CONTROL

Reference	Date	Prepared	Checked	Authorised
630.12751-R01-v0.1	24 June 2019	Chris Jones	Tracey Ball	Chris Jones

## CONTENTS

<b>1</b>	<b>INTRODUCTION .....</b>	<b>5</b>
1.1	Background .....	5
1.2	Audit Scope .....	8
1.3	Key Site Contacts .....	8
1.4	Audit Methodology.....	9
1.4.1	Introductory and Close out Meetings.....	9
1.5	Consultation Requirements .....	11
1.6	Statement of Independence .....	13
<b>2</b>	<b>DOCUMENTS REVIEWED AND REFERENCED.....</b>	<b>14</b>
<b>3</b>	<b>ASSESSMENT OF COMPLIANCE.....</b>	<b>15</b>
<b>4</b>	<b>APPROVALS AND DOCUMENTATION ASSESSED .....</b>	<b>16</b>
4.1	Previous Audit Recommendations .....	16
4.2	Development Consent SSD 5465 .....	16
4.2.1	Development Consent SSD 5465 Statement of Commitments .....	16
4.3	Environment Protection Licence 1770.....	16
4.4	Management Plans and Programs.....	17
4.5	Mining Leases .....	18
4.6	Water Licences.....	18
4.7	Complaints .....	18
4.8	Incidents and Non - compliances.....	18
<b>5</b>	<b>ENVIRONMENTAL MANAGEMENT – SPECIALIST ASSESSMENTS.....</b>	<b>25</b>
5.1	Noise .....	25
5.1.1	SLR Findings – Noise .....	25
5.1.2	Noise Recommendations.....	25
5.2	Subsidence .....	26
5.2.1	Mining Areas during Audit Period .....	26
5.2.2	Summary of Subsidence Performance .....	26
5.2.3	Subsidence Recommendations .....	27
<b>6</b>	<b>AUDIT FINDINGS – SUMMARY OF NON - COMPLIANCES .....</b>	<b>29</b>
<b>7</b>	<b>ADDITIONAL RECOMMENDED ACTIONS .....</b>	<b>69</b>
<b>8</b>	<b>CONCLUSION.....</b>	<b>70</b>

## CONTENTS

### DOCUMENT REFERENCES

#### TABLES

Table 1	Meeting Attendees.....	10
Table 2	Stakeholder Consultation for the Audit .....	11
Table 3	Compliance Assessment Criteria.....	15
Table 4	Risk Levels for Non - compliances.....	15
Table 5	Management Plans.....	17
Table 6	Summary of Incidents and Non - compliances.....	19
Table 7	Summary of Mining Areas and Extraction Plans .....	26
Table 8	Summary of Non - compliances .....	29
Table 9	Additional Recommendations.....	69

#### FIGURES

Figure 1	Locality – CVC (Prepared by EMM) .....	6
Figure 2	CVClery Mining Areas – 2011 to 2019 (Prepared by Delta Coal 2019) .....	7

#### APPENDICES

Appendix A	Photographs
Appendix B	Compliance Spreadsheet
Appendix C	Audit Certification
Appendix D	Endorsement of SLR
Appendix E	Review of Subsidence (SCT 2019)

# 1 Introduction

## 1.1 Background

The Chain Valley Colliery (CVC) is an underground coal mine located at the southern end of Lake Macquarie, approximately 60 km south of Newcastle (see **Figure 1**) which is now operated by Delta Coal. For the majority of the Independent Environmental Audit period LakeCoal Pty Ltd (LakeCoal) operated the site on behalf of Wallarah Coal Joint Venture (WCJV).

Underground mining has occurred at the Colliery since 1962 extracting coal from three seams – the Wallarah Seam, the Great Northern Seam and the Fassifern Seam, with current mining activities limited to the Fassifern Seam. The Colliery is located in the Swansea North Entrance Mine Subsidence District. Historically, underground mining was undertaken using the bord and pillar method; however in September 2011 miniwall mining was introduced.

In August 1960, J&A Brown and Abermain Seaham Collieries Ltd commenced clearing the present site with drift and shaft sinking starting a few months later. Production of coal from the Wallarah seam, commenced with the first delivery to the adjacent Delta Electricity's Vales Point power station in April 1963.

The prior owners LakeCoal were a producer of thermal coal. The company was formed in 2001 to acquire BHP Billiton's 80% share in the Wallarah Coal Joint Venture (WCJV), the remaining 20% share was owned by Sojitz. In October 2006, Peabody Energy, a US listed company acquired LakeCoal.

In November 2009 LDO Coal Pty Limited purchased LakeCoal and in March 2011 the 20% share in the WCJV which Sojitz held was acquired by LDO Coal shareholders through the entity Fassi Coal Pty Ltd. In November 2016, LakeCoal finalised commercial arrangements with investor into the business (RWE).

The WCJV had operated the Wallarah, Moonee and CVC underground coal mines and the Catherine Hill Bay Coal Preparation Plant, all located at the southern end of Lake Macquarie. At the time of LakeCoal's acquisition by LDO Coal, both the Wallarah and Moonee mines were closed.

LakeCoal is currently undertaking the mine closure/rehabilitation process for the Moonee Colliery and the Catherine Hill Bay Coal Preparation Plant. The rehabilitation process for Wallarah Colliery has been completed and the lease in that area relinquished.

CVC peaked with a workforce of approximately 380 personnel in the mid 1980's. At the end of 2018, CVC had a workforce of 209 personnel.

LakeCoal went into receivership on 3 October 2018, however has maintained coal conveyance and processing operations. Delta Coal are now the current owners and operators of the site. The transfer occurred on the 31 March 2019 with Great Southern Energy (trading as Delta Coal) being the owner and operator of Mannering Colliery and CVC. **Figure 2** has been prepared by Delta Coal outlining the mining areas and relevant Extraction Plans within the audit period.

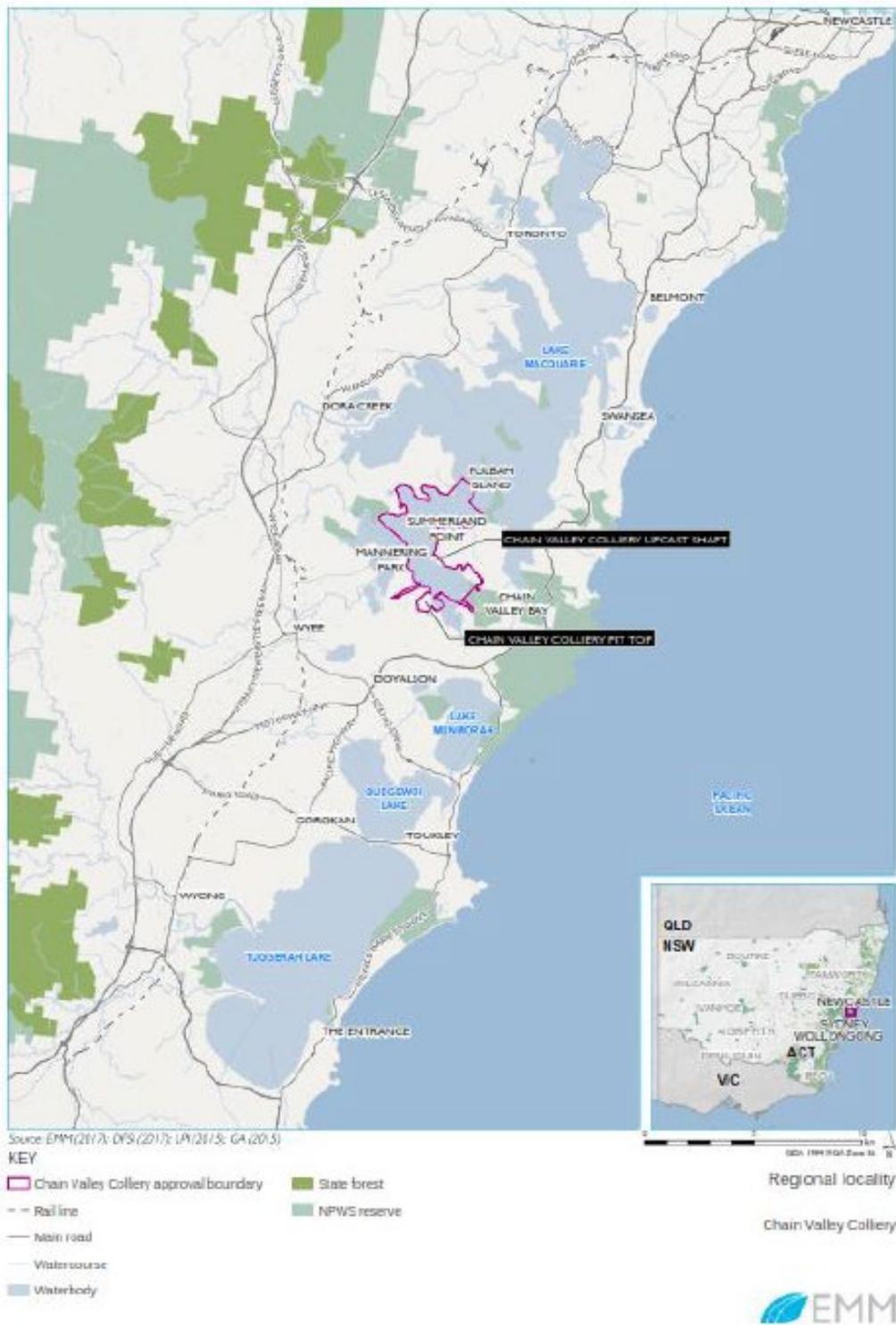


Figure 1 Locality – CVC (Prepared by EMM)



## 1.2 Audit Scope

This Independent Environmental Audit (Audit) covers the period from 1 January 2016 (day after previous 2015 Independent Environmental Audit) to the end of the auditing onsite (10 April 2019).

The scope of the Audit is outlined in Schedule 6, Condition 9 and 10 of Development Consent SSD 5465 (as modified), and includes:

*By the end of February 2016 (or other such timing as agreed by the Secretary), and every 3 years thereafter, unless the Secretary directs otherwise, the Applicant shall commission and pay the full cost of an Independent Environmental Audit of the development. This audit must:*

- a) be conducted by a suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Secretary;*
- b) include consultation with the relevant agencies;*
- c) assess the environmental performance of the development and assess whether it is complying with the requirements in this consent and any relevant EPL or Mining Lease (including any assessment, plan or program required under these approvals);*
- d) review the adequacy of strategies, plans or programs required under the abovementioned approvals; and*
- e) recommend appropriate measures or actions to improve the environmental performance of the development, and/or any assessment, plan or program required under the abovementioned approvals.*

*Note: This audit team must be led by a suitably qualified auditor and include experts in any field specified by the Secretary.*

*10. Within 6 weeks of the completion of this audit, or as otherwise agreed by the Secretary, the Applicant shall submit a copy of the audit report to the Secretary, together with its response to any recommendations contained in the audit report.*

The Audit has assessed the key approvals and documentation outlined in **Section 4**, including:

- SSD 5465 and Statement of Commitments;
- Environment Protection Licence (EPL) 1770; and
- Consolidated Coal Leases (CCL) 707 and 721.

## 1.3 Key Site Contacts

Contact details for key Delta Coal contact for this audit is outlined below:

**Chris Armit**

**Environmental and Community Coordinator**

Phone: 02 4358 0800

Mobile: 0409 070 233

Email: CArmit@deltacoal.com.au

## 1.4 Audit Methodology

The Audit was undertaken onsite by Chris Jones (Lead Auditor), Tracey Ball (Assistant Auditor) and Martin Davenport (Mine Site Noise Specialist) of SLR.

SLR was assisted by subsidence specialist Ken Mills of SCT during the Audit.

The SLR Audit team are independent of CVC as defined under Section 3.3 of the Department of Planning and Environment's (DPE) *Independent Environmental Audit Guidelines* (October 2015).

Information was provided by CVC during and following the Audit. SLR also sourced a large amount of information from the CVC/Delta Coal website.

The methodology for the Audit consisted of the following key steps:

- Introductory and close out meetings;
- Reviewing key documents provided by CVC prior to the Audit;
- Consultation with relevant government agencies as per the Independent Environmental Audit Guideline requirements prior to the site component;
- Preparation of draft Audit Tables provided to CVC prior to the site Audit;
- Site component of the Audit, including inspections and discussions with key CVC operational personnel;
- Review of additional relevant documentation obtained while onsite during the inspection or provided by CVC operations after the site inspection; and
- Client review and comment on the draft Audit report.

The site component was completed on the following days:

- 2 and 3 April 2019 – including opening meeting, inspection, determination of compliance;
- 10 April 2019 – On site determining compliance;
- 7 June 2019 – Meeting at SLR offices to obtain further evidence to determine compliance.

Photographs taken during the site inspection is included in **Appendix A**. A large amount of evidence was viewed and collected as part of the Audit, including monitoring records, reports, and correspondence. While this key evidence has been referenced in **Section 2**, it has not been attached to this Audit report.

The Audit has been completed as per the *Independent Environmental Audit Guidelines* (DPE October 2015).

The Audit team assessed the approvals and documentation outlined in **Section 4**.

### 1.4.1 Introductory and Close out Meetings

Introductory and close out meetings were held for the Audit. At the opening meeting introductions were made by each of the meeting attendees and CVC personnel provided background details regarding the site to SLR. During the close out meeting a general discussion about compliance and areas for improvement was undertaken. **Table 1** lists those present at these meetings.

**Table 1 Meeting Attendees**

Name	Role	Comment
Chris Armit	Delta Coal Environment and Community Co-ordinator	Present at opening meeting. Main contact for the audit.
Chris Jones	SLR Lead Auditor	Present at opening and closing meeting
Tracey Ball	SLR Assistant Auditor	Present at opening and closing meeting
Martin Davenport	SLR Noise Specialist	Present at opening meeting
Ken Mills	SCT Subsidence Specialist	Present at opening meeting

## 1.5 Consultation Requirements

**Table 2** outlines the stakeholder consultation completed for CVC, undertaken in accordance with the Audit Guidelines.

**Table 2 Stakeholder Consultation for the Audit**

Regulatory Authority	Contact Details	Comment
DPE	<p>Joel Curran Compliance Officer Northern Region NSW Department of Planning and Environment PO Box 1226   NEWCASTLE NSW 2300 P 02 4904 2702 E joel.curran@planning.nsw.gov.au</p>	<p>Email sent to DPE contact from SLR on 20 March 2019. A response was provided by the DPE on 25 March 2019</p> <p><i>The Department sees noise and general monitoring and reporting obligations as key issues for CVC and Mannerling Collieries at this time.</i></p>
Environment Protection Authority (EPA)	<p>Matthew Corradin A/Unit Head Hunter North  NSW Environment Protection Authority – North Branch  Landline (02) 4908 6830</p>	<p>Email sent to EPA contact from SLR on 20 March 2019. No response provided to SLR.</p>
Department of Planning and Environment – Resources Regulator (DPE-RR)	<p>Catherine Lewis Senior Inspector Environment Resources Regulator 516 High Street Maitland NSW 2320 T 02 4063 6619 E <a href="mailto:Catherine.lewis@planning.nsw.gov.au">Catherine.lewis@planning.nsw.gov.au</a></p> <p>Lands Ministerial Unit NSW Department of Industry - Crown Lands Level 4, 437 Hunter Street, NEWCASTLE NSW 2300 E: <a href="mailto:lands.ministerials@industry.nsw.gov.au">lands.ministerials@industry.nsw.gov.au</a></p>	<p>Email sent to DPE-RR contact from SLR on 20 March 2019. No response provided to SLR from the RR, however a response was provided from Crown Lands. <i>The only feedback from Crown Lands, is that SLR should consider to what extent Crown Land is involved in either project, and if so whether Access Agreements (where required) are in place in accordance with the Mining Act 1992.</i> Crown Land is within the previous and current underground mining areas. There are recommendations to improve subsidence reporting in the future and impacts to crown lands should be highlighted when applicable.</p>
Department of Industry – Water (DOI Water)	<p>Mitchell Isaacs   Manager Strategic Stakeholder Liaison Department of Primary Industries   NSW Office of Water Level 11, 10 Valentine Ave Parramatta NSW 2124   PO Box 3720 Parramatta NSW 2124 T: 02 8838 7529 E: <a href="mailto:mitchell.isaacs@dpi.nsw.gov.au">mitchell.isaacs@dpi.nsw.gov.au</a></p>	<p>Email sent to DOI Water contact from SLR on 20 March 2019. No response provided to SLR.</p>

Regulatory Authority	Contact Details	Comment
Lake Macquarie City Council (LMCC)	Emma Graham (LMCC) <a href="mailto:egraham@lakemac.nsw.gov.au">egraham@lakemac.nsw.gov.au</a>	Email sent to LMCC contact from SLR on 20 March 2019. No response provided to SLR.
Community Consultative Committee (CCC) Chairperson	Margaret MacDonald-Hill <a href="mailto:mmacdonald-hill@bigpond.com">mmacdonald-hill@bigpond.com</a>	Email sent to contact from SLR on 20 March 2019. The CCC Chairperson sent an email to the CCC requesting any comments. A response was provided by the CCC chairperson based on 25 March. <i>I have reviewed the file for the audit period and other than the long delay with the implementation of the Voluntary Planning Agreement and Community Advisory Panel (condition for CVC) with the former Wyong Council (now Central Coast Council) caused by the Council itself and now satisfactorily resolved, there are no specific issues. The committee met quarterly for the entire audit period.</i>  One of the members of the CCC stated in an email to the CCC Chairperson on 25 March 2019: <i>There have been a series of noise complaints from a fellow resident of mine. But only one person – no one else seems to hear what he hears. The colliery have taken a great deal of remedial actions.</i>
Central Coast Council	Julie Vaughan Central Coast Council - <a href="mailto:Julie.Vaughan@centralcoast.nsw.gov.au">Julie.Vaughan@centralcoast.nsw.gov.au</a>	Email sent to contact from SLR on 20 March 2019. No response provided to SLR.

## 1.6 Statement of Independence

We can confirm independence based on the following:

- No one from SLR or the proposed audit team is related to any proponent, owner, operator or other entity involved in the delivery of the project. Such a relationship includes that of employer/employee, a business partnership, sharing a common employer, a contractual arrangement outside an Independent Audit, or that of a spouse, partner, sibling, parent, or child.
- No one from SLR or the proposed audit team has any pecuniary interest in the project, proponent or related entities. Such an interest includes where there is a reasonable likelihood or expectation of financial gain (other than being reimbursed for performing the audit) or loss to the auditor, or their spouse, partner, sibling, parent, or child.
- No one from SLR or the proposed audit team have provided services (not including independent reviews or auditing) to the current project with the result that the audit work performed by themselves or their company, except as otherwise declared to the Department prior to the audit.
- No one from SLR or the proposed audit team is an Environmental Representative for the Project.
- No one from the proposed audit team can or will accept any inducement, commission, gift or any other benefit from auditee organisations, their employees or any interested party, or knowingly allow colleagues to do so.

## 2 Documents Reviewed and Referenced

Key documentation reviewed as part of the Audit includes:

- SSD 5465;
- EPL 1770;
- CCL 707 and 721;
- Bore Licence 20BL173107;
- Annual Reviews – 2016, 2017 and 2018;
- Monitoring results for meteorological, noise, air, water and blasting;
- Rehabilitation Monitoring Reports;
- Biodiversity Monitoring Spreadsheets;
- Transport Summary Spreadsheet;
- Environmental Management Plans – as per approval conditions;
- Mining Operations Plans (MOPs);
- Extraction Plans;
- Annual Returns – across the Audit period;
- Complaints log;
- Voluntary Planning Agreements (VPA) - Payments
- Evidence of maintenance and calibration;
- CCC Meeting Minutes – across the Audit period; and
- Key consultation with government – including consultation and approval letters.

### 3 Assessment of Compliance

The terms used in the Audit to describe the level of compliance of the site with the relevant approval documentation are outlined in **Table 3** and **Table 4**. These are requirements of the DPE’s *Independent Environmental Audit Guidelines* (October 2015).

**Table 3 Compliance Assessment Criteria**

Assessment	Criteria
<b>Compliant</b>	Where the Auditor has collected 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.
<b>Not Verified</b>	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.
<b>Non-Compliant</b>	Where the Auditor has collected sufficient verifiable evidence to demonstrate that the intent of one or more specific elements of the regulatory approval have not been complied with within the scope of the Audit.
<b>Administrative Non - compliance</b>	A technical non - compliance with a regulatory approval that would not impact on performance and that is considered minor in nature (e.g. report submitted but not on the due date, failed monitor or late monitoring session). This would not apply to performance-related aspects (e.g. exceedance of a noise limit) or where a requirement had not been met at all (e.g. noise management plan not prepared and submitted for approval).
<b>Not triggered</b>	A regulatory approval requirement has an activation or timing trigger that had not been met at the time of the Audit inspection; therefore, a determination of compliance could not be made.
<b>Observation</b>	Observations are recorded where the Audit identified issues of concern which do not strictly relate to the scope of the Audit or assessment of compliance. Further observations are considered to be indicators of potential non - compliances or areas where performance may be improved.
<b>Note</b>	A statement or fact, where no assessment of compliance is required.

**Table 4 Risk Levels for Non - compliances**

Risk Level	Colour Code	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).

## 4 Approvals and Documentation Assessed

Audit findings and recommendations relating to key approvals are outlined in **Section 6** and **7** of this report.

### 4.1 Previous Audit Recommendations

The previous Audit was completed by Hansen Bailey, with the site Audit completed in May 2016 and the final Audit Report dated 22 July 2016.

The previous Audit covered the period of 1 November 2012 to 31 December 2015. Appendix 4 of the 2016 Annual Review provides an update on the 2016 Independent Environmental Audit, with several recommendations committing to a 30 June 2017 completion date. There is no update on Independent Environmental Audit actions within the 2017 AEMR, therefore it is not possible to fully determine compliance against the previous actions. Independent Environmental Audit Actions Plans should be included in every Annual Review going forward.

The requirement to review Environmental Management Plans has not been completed with this referenced numerous times in the Independent Environmental Audit Action Plan (Appendix 4 of 2016 Annual Review). There was also a commitment to improve reporting of incidents/non – compliances during the future, with some non – compliances identified as part of this 2019 Independent Environmental Audit.

### 4.2 Development Consent SSD 5465

The conditions relating to SSD 5465 were assessed as part of this Audit. The Development Consent was first granted on 23 December 2013. SSD 5465 has been modified two times including:

- Mod 1 – approved 27 November 2014;
- Mod 2 – approved 16 December 2015; and
- Mod 3 – pending approval.

The site had a moderate level of compliance against Development Consent conditions.

#### 4.2.1 Development Consent SSD 5465 Statement of Commitments

There is a Statement of Commitments relating to SSD 5465 which contains numerous commitments relating to environmental management, monitoring and reporting. The site had a moderate level of compliance against the Statement of Commitments during this audit period.

### 4.3 Environment Protection Licence 1770

SLR assessed compliance against the EPL 1770 which has an anniversary date of 1 April. Conditions relate to limit conditions, operating conditions, monitoring and reporting. The site had a moderate level of compliance against the EPL during this audit period.

## 4.4 Management Plans and Programs

The following management plans were assessed as part of the Audit. All the management plans reviewed are required according to SSD 5465 consent conditions with these documents placed on the CVC website. Some management plans with more recent dates were provided to SLR by Delta Coal, however there was no evidence of submission of these plans to the DPE and no evidence of approval of these plans by DPE. SLR only audited management plans on the CVC website with these outlined in the table below.

**Table 5 Management Plans**

Management Plan	Requirement	Comment
Road Transport Protocol	SSD 5465 Schedule 3, Condition 3	Road Transport Protocol, which includes; MSP-D-14559 – Coal Haulage Traffic Management Plan and POL-D-14926 Coal Haulage Driver Code of Conduct. Coal Haulage Traffic Management System Plan on the CVC website is dated 18/03/14. Coal Haulage Driver Code of Conduct on the CVC website is dated 04/10/2012.
Noise Management Plan	SSD 5465 Schedule 3, Condition 9	The management plan on the CVC website is dated 12/03/2014.
Air Quality Management Plan	SSD 5465 Schedule 3, Condition 13	The management plan on the CVC website is dated 18/07/2014.
Water Management Plan including a Surface Water Management Plan and Ground Water Monitoring Program	SSD 5465 Schedule 3, Condition 18	The management plan on the CVC website is dated 21/07/2015.
Biodiversity Management Plan	SSD 5465 Schedule 3, Condition 20	The management plan on the CVC website is dated 09/03/16.
Heritage Management Plan	SSD 5465 Schedule 3, Condition 21	The management plan on the CVC website is dated 23/06/14.
Rehabilitation Management Plan	SSD 5465 Schedule 3, Condition 27	The management plan is dated 1 March 2019. A copy of this management plan is not on the CVC website. No evidence of approval of 2019 management plan.
Extraction Plan	SSD 5465 Schedule 4, Condition 7	The management plan on the CVC website is dated 28/03/2013.
Seagrass Management Plan	SSD 5465 Schedule 4, Condition 7(i)	The management plan on the CVC website is dated 09/04/2014.
Environmental Management Strategy	SSD 5465 Schedule 6, Condition 1	The management plan on the CVC website is dated 12/10/2012.
Pollution Incident Response Management Plan	EPL 1770	The management plan on the CVC website is dated 21/09/2018.

## 4.5 Mining Leases

As part of this Audit, SLR assessed the two consolidated coal leases which is applicable to the Project Approval Area including CCL 721 and 707. This lease includes conditions relating to mining, rehabilitation, MOPs and group security deposits.

## 4.6 Water Licences

CVC has one current Groundwater Extraction Licence – Bore Licence 20BL173107. This licence is a production bore and has an annual limit of 4,443 ML. There was also a licence for Bore Licence 20BL111869 which operated during the 2015 and 2016 Annual Review periods and had an entitlement limit of 402ML.

The Water Licence for Bore Licence 20BL171958 has a condition stating:

*The volume of groundwater extracted from the works authorized by this licence shall not exceed 985 megalitres in any 12 month period commencing 1st July.*

Based on the information in the 2016, 2017 and 2018 Annual Reviews the site was well below the extraction licence limits during the Audit period.

## 4.7 Complaints

Complaints were recorded within the 2016, 2017 and 2018 Annual Reviews, with 2019 complaints provided by Site. Complaints have remaining low during the Audit period:

- Two complaints received in 2016 relating to dust;
- One complaint received in 2017 relating to noise;
- One complaint received in 2018 relating to dust, noise and vibration; and
- No complaints received in 2019 reporting period relating to start of April, as provided by Delta Coal.

## 4.8 Incidents and Non - compliances

There were 13 incidents and non - compliances provided to SLR during the Audit period. These are summarised in **Table 6**.

This information was provided in the Annual Reviews for 2016 - 2018.

**Table 6 Summary of Incidents and Non - compliances**

Date	Description of Incident / Non - compliance	Approval Condition	Actions Taken to Address Incident / Non - compliance
<b>2016</b>			
6 January 2016	Daily discharge volume exceedances from EPA Point 1 (LDP1) as a result of significant rainfall.	EPL 1770 - L3.1 – Volume and mass limits	During the 2015 reporting period the then LakeCoal completed extensive upgrades to its water management system to improve its ability to handle rainfall events. LakeCoal also restricted its underground pumping to reduce the potential for the exceedance in accordance with its approved water management plan. LakeCoal will continue to implement its approved site water management plan in the next reporting period.
11-13 January 2016	Missed data capture as a result of a power outage/trip at the Wyong waste treatment plant associated with storm activity.	EPL 1770 - M2.2 Air Monitoring Requirements	Power was restored to the unit on the next available working day (13 January 2016).
18-22 January 2016	Missed data capture as a result of a power outage /trip at the Wyong waste treatment plant.	EPL 1770 - M2.2 Air Monitoring Requirements	An electrical inspection was undertaken by the sites electrical contractor on the 24 and 25 February. The inspection identified a significant ant infestation in the circuit breaker. New circuit breakers were installed on 25 February and the area pest sprayed to try and reduce any trips of the system.
27 February - 8 March 2016	Missed data capture for the period as a result of the failure of the TEOM air conditioner.	EPL 1770 - M2.2 Air Monitoring Requirements	A new air conditioner was installed at the site on 3 March 2016. Commissioning of the new unit was undertaken from 3-8 April 2016.
22-24 April 2016	Missed data capture for the period as a result of some temperature regulation issues and water condensate blocking the filter in the unit.	EPL 1770 - M2.2 Air Monitoring Requirements	The unit was inspected and repaired on the next available working day (24 April 2016).
1 June 2016	Missed data capture on 1 June 2016 as a result of a power outage at the Wyong Treatment Plant	EPL 1770 - M2.2 Air Monitoring Requirements	An inspection of the unit was undertaken on 2 June 2016 and power was subsequently restored.

Date	Description of Incident / Non - compliance	Approval Condition	Actions Taken to Address Incident / Non - compliance
5 June 2016	Daily discharge volume exceedances from EPA Point 1 (LDP1) as a result of significant rainfall.	EPL 1770 - L3.1 – Volume and mass limits	During the 2015 reporting period LakeCoal completed extensive upgrades to its water management system to improve its ability to handle rainfall events. LakeCoal also restricted its underground pumping to reduce the potential for the exceedance in accordance with its approved water management plan. LakeCoal will continue to implement its approved site water management plan.
28 June 2016	6dB and 7dB exceedances of LA1, 1 minute Noise Criteria at R13 and ATN004 receivers respectively during Q2 2016 monitoring.	SSD 5465 Schedule 3, Condition 7	<p>During the night time Q2 monitoring on 28 June 2016, LA1,1minute readings recorded at locations R13 and ATN004 with did not comply with the noise criteria in SSD 5465. Exceedances of 6 and 7dB respectively were recorded at each location. During the monitoring Global Acoustics (the sites principle noise monitoring consultant) identified that the elevated levels were attributed to dozer noise, specifically “track slap” which appeared to be coming from the CVClery’s product coal stockpiling activities.</p> <p>Following the identification of the exceedances LakeCoal notified the relevant authorities of the exceedances on 29 June 2016. The following actions were also undertaken by LakeCoal as a result of noise exceedances:</p> <ul style="list-style-type: none"> <li>• A review of the sites night time operational activities were undertaken on 29 June 2016 which confirmed that the CVC product coal dozer was operating on the site product coal stockpile at the time the exceedances were recorded.</li> <li>• Discussions with operational personnel, ME Transport (the contracting company who manage the product coal dozer) and the dozer operator were undertaken on 29 June 2016 and it was agreed that a revised operating protocol (which involved the dozer being restricted to second gear in reverse with a maximum speed of 5km/h) would be adopted for night time activities on 29 June 2016.</li> <li>• Follow up noise monitoring was undertaken at the R13 and ATN004 receiver locations during the night time period on 29 June 2016. During the monitoring the CVC product coal dozer was in use utilising the restricted operating protocol.</li> <li>• The results from the follow up night time monitoring undertaken at both receivers on 29 June indicated that the noise levels from the operation were within the noise criteria limits as specified within EPL 1770 and the sites Development Consent. A summary of the follow up noise monitoring results is provided below:</li> </ul>

Date	Description of Incident / Non - compliance	Approval Condition	Actions Taken to Address Incident / Non - compliance																								
			<p><i>Table 1.2 :L<sub>A1,1minute</sub> GENERATED BY CVC AGAINST IMPACT ASSESSMENT CRITERIA</i></p> <table border="1"> <thead> <tr> <th>Location</th> <th>Date and Time</th> <th>Wind Speed (m/s)</th> <th>VTG (deg/C per 100m)<sup>1</sup></th> <th>L<sub>A1,1min</sub> Criterion dB</th> <th>Criterion Applies?<sup>2,3</sup></th> <th>CVC L<sub>A1,1min</sub> dB<sup>4</sup></th> <th>Exceedance</th> </tr> </thead> <tbody> <tr> <td>ATN4</td> <td>29/06/16 2302</td> <td>0.3</td> <td>3</td> <td>45</td> <td>Yes</td> <td>45</td> <td>Nil</td> </tr> <tr> <td>R13</td> <td>29/06/16 2226</td> <td>0.2</td> <td>0.5</td> <td>49</td> <td>Yes</td> <td>40</td> <td>Nil</td> </tr> </tbody> </table> <p><i>Notes:</i></p> <ol style="list-style-type: none"> <li><i>Sigma theta data used to calculate Vertical Temperature Gradient (VTG) in accordance with procedures detailed in the INP;</i></li> <li><i>Noise emission limits do not apply for winds greater than 3 metres per second (at a height of 10 metres); or temperature inversion conditions greater than 4°C/100m;</i></li> <li><i>These are results for Chain Valley Colliery (CVC) in the absence of all other noise sources; and</i></li> <li><i>Bolded results in red are those greater than the relevant criterion (if applicable).</i></li> </ol> <p>It should also be noted that there were no community complaints received as a result of the noise exceedances recorded on 28 June 2016.</p>	Location	Date and Time	Wind Speed (m/s)	VTG (deg/C per 100m) <sup>1</sup>	L <sub>A1,1min</sub> Criterion dB	Criterion Applies? <sup>2,3</sup>	CVC L <sub>A1,1min</sub> dB <sup>4</sup>	Exceedance	ATN4	29/06/16 2302	0.3	3	45	Yes	45	Nil	R13	29/06/16 2226	0.2	0.5	49	Yes	40	Nil
Location	Date and Time	Wind Speed (m/s)	VTG (deg/C per 100m) <sup>1</sup>	L <sub>A1,1min</sub> Criterion dB	Criterion Applies? <sup>2,3</sup>	CVC L <sub>A1,1min</sub> dB <sup>4</sup>	Exceedance																				
ATN4	29/06/16 2302	0.3	3	45	Yes	45	Nil																				
R13	29/06/16 2226	0.2	0.5	49	Yes	40	Nil																				
<b>2017</b>																											
24 October 2017	1dB exceedance of night time LAeq15 min criteria at ATN007.	SSD 5465 Schedule 3, Condition 7	<p>Follow up noise monitoring undertaken by site confirmed that noise levels were back within compliance.</p> <p>LakeCoal has committed to replacing the inlet and outlet silencers at the fan site location in the 2018 reporting period in an attempt to reduce the low frequency noise impacts at this location.</p> <p>LakeCoal has engaged an external noise specialist to assist with identifying further noise mitigation options for this location and will report these findings in the next reporting period.</p>																								

Date	Description of Incident / Non - compliance	Approval Condition	Actions Taken to Address Incident / Non - compliance
9 November 2017	Exceedance of the site's approved subsidence values over the miniwall 7-12 mining area.	SSD 5465 Schedule 2, Condition 2 Statement of Commitments	LakeCoal engaged experts to undertake a detailed review of the exceedance during the reporting period. This report is expected to be finalised in Q1 2018. A preliminary review of both Bethic and Seagrass monitoring locations indicated no discernible impacts as a result of the exceedance.  LakeCoal has committed to implementing any findings from this report into its proposed mine design for its northern mining area.  Further detail is provided in <b>Section 5.2</b> .
<b>2018</b>			
3 April 2018	PM <sub>10</sub> 24 Hour Average Exceedance (RTD 001) - Kingfisher Shores	SSD 5465 Schedule 3, Condition 11	<p>As outlined in the initial notification, the TEOM recorded a 24 hour PM<sub>10</sub> value of 50.2ug/m<sup>3</sup> against the 24 hour average criterion of 50ug/m<sup>3</sup> on the 19 March. A copy of the TEOM Data recorded for the month of March is provided in Attachment 2.</p> <p>Following a preliminary investigation of the exceedance, a follow-up phone call was made to DPE in which LakeCoal advised that it was of the opinion that the exceedance was not a direct result of its mining activities and was more likely a result of a regional dust event which was occurring at the time, noting that on 19 March, it had received automatic notifications from OEH (via oeh.airquality@environment.nsw.gov.au) that both the Central Coast and Lower Hunter Central Coast PM<sub>10</sub> levels exceeded national air quality standards (copies attached). Notwithstanding, it was agreed that LakeCoal would submit an incident report on the event.</p> <p>As previously advised, based on the results of the preliminary and subsequent investigations, LakeCoal remains of the opinion that the minor exceedance of the 24 hour PM<sub>10</sub> value of 50.2µg/m<sup>3</sup> recorded on 19 March 2018 was not as a consequence of its activities and, in the absence of any other known local sources and the warnings received from OEH, was firmly of the opinion that the exclusion nominated in the footnote to Table 4 in SSD 5465 applies and consequently the exceedance did not represent a non-compliance with the consent.</p> <p>Accordingly LakeCoal did not intend to undertake any further actions as a result of the minor exceedance and request the Secretary's agreement that it did not constitute a non - compliance for the purpose of SSD 5465 for its internal compliance records.</p>
18 July 2018	PM <sub>10</sub> 24 Hour Average Exceedance (RTD 001)- Kingfisher Shores	SSD 5465 Schedule 3,	<p>As outlined in the initial notification, the TEOM recorded a 24 hour PM<sub>10</sub> value of 57.82ug/m<sup>3</sup> against the 24 hour average criterion of 50ug/m<sup>3</sup> on 18 July 2018.</p> <p>Following a preliminary investigation of the exceedance, a follow-up phone call was made to</p>

Date	Description of Incident / Non - compliance	Approval Condition	Actions Taken to Address Incident / Non - compliance
		Condition 11	<p>DPE in which LakeCoal advised that it was of the opinion that the exceedance was not a direct result of its mining activities and was more likely a result of a regional dust event which was occurring at the time, noting that on 18 July 2018, it had received automatic notifications from OEH (via oeh.airquality@environment.nsw.gov.au) that both the Central Coast and Lower Hunter Central Coast PM<sub>10</sub> levels exceeded national air quality standards (copies attached). Notwithstanding, it was agreed that LakeCoal would submit an incident report on the event.</p> <p>As outlined in SSD 5465, LakeCoal is required to ensure that all reasonable and feasible avoidance and mitigation measures are employed so that particulate matter emissions generated by the development do not cause an exceedance of the criteria listed in Tables 3, 4 and 5 at any residence on privately-owned land. Table 4, "Short-term criterion for (PM<sub>10</sub>) nominates a 24 hour PM<sub>10</sub> criterion of 50µg/m<sup>3</sup> as:</p> <ul style="list-style-type: none"> <li>• Applying to total impact (i.e. incremental increase in concentrations due to the development plus background concentrations due to other sources); and</li> <li>• Excluding extraordinary events such as bushfires, prescribed burning, dust storms, sea fog, fire incidents, illegal activities or any other activity agreed to by the Secretary.</li> </ul> <p>Based on the results of the preliminary and subsequent investigations, LakeCoal remains of the opinion that the minor exceedance of the 24 hour PM<sub>10</sub> value of 57.82µg/m<sup>3</sup> recorded on 18 July 2018 was not as a consequence of its activities and, in the absence of any other known local sources and the warnings received from OEH, was firmly of the opinion that the exclusion nominated in the footnote to Table 4 in SSD 5465 applies and consequently the exceedance did not represent a non - compliance with the consent.</p> <p>Accordingly LakeCoal did not intend to undertake any further actions as a result of the minor exceedance and would like to request the Secretary's agreement that it does not constitute a non - compliance for the purpose of SSD 5465 for its internal compliance records.</p>
4 December 2018	PM <sub>10</sub> 24 Hour Average Exceedance (RTD 001)- Kingfisher Shores	SSD 5465 Schedule 3, Condition 11	<p>The TEOM recorded a 24 hour PM<sub>10</sub> value of 112.98 µg/m<sup>3</sup> and 91.59 µg/m<sup>3</sup> against the 24 hour average criterion of 50µg/m<sup>3</sup> on the 22 and 23 November respectively.</p> <p>Following a preliminary investigation of the exceedance, a follow-up phone call was made to DPE in which LakeCoal advised that it was of the opinion that the exceedance was not a direct result of its mining activities and was more likely a result of a regional dust event which was occurring at the time, noting that on 22 and 23 November 2018, it had received automatic</p>

Date	Description of Incident / Non - compliance	Approval Condition	Actions Taken to Address Incident / Non - compliance
			<p>notifications from OEH (oeh.airquality@environment.nsw.gov.au) that both the Central Coast and Lower Hunter Central Coast PM<sub>10</sub> levels exceeded national air quality standards (copies attached). Notwithstanding, it was agreed that LakeCoal would submit an incident report on the event.</p> <p>As outlined in SSD 5465, LakeCoal is required to ensure that all reasonable and feasible avoidance and mitigation measures are employed so that particulate matter emissions generated by the development do not cause an exceedance of the criteria listed in Tables 3, 4 and 5 at any residence on privately-owned land. Table 4, "Short-term criterion for (PM<sub>10</sub>) nominates a 24 hour PM<sub>10</sub> criterion of 50µg/m<sup>3</sup> as:</p> <ul style="list-style-type: none"> <li>• Applying to total impact (i.e. incremental increase in concentrations due to the development plus background concentrations due to other sources); and</li> <li>• Excluding extraordinary events such as bushfires, prescribed burning, dust storms, sea fog, fire incidents, illegal activities or any other activity agreed to by the Secretary.</li> </ul> <p>As previously advised, based on the results of the preliminary and subsequent investigations, LakeCoal was of the opinion that the exceedance of the 24 hour PM<sub>10</sub> value of 112.98µg/m<sup>3</sup> and 91.59 µg/m<sup>3</sup> recorded on the 22 and 23 November 2018 respectively was not as a consequence of its activities and, in the absence of any other known local sources and the warnings received from OEH, was of the opinion that the exclusion nominated in the footnote to Table 4 in SSD 5465 applies and consequently the exceedance does not represent a non-compliance with the consent.</p> <p>Accordingly LakeCoal did not intend to undertake any further actions as a result of the exceedance and requested the Secretary's agreement that it did not constitute a non - compliance for the purpose of SSD 5465 for its internal compliance records.</p>

## 5 Environmental Management – Specialist Assessments

### 5.1 Noise

The audit required the input of a noise specialist as per the request from DPE to CVC.

#### 5.1.1 SLR Findings – Noise

The noise conditions associated with the CVC were assessed as part of the Independent Environmental Audit. Recommendations relating to noise conditions are outlined in **Section 6** of this document. The Independent Environmental Audit identified the following:

- Noise monitoring has been completed by independent noise consultants;
- The *Noise Management Plan* and all other management plans are out of date and not reflective of current operations;
- There were some noise exceedances during the Independent Environmental Audit period, with evidence provided of noise investigation;
- The CVC real - time noise monitoring was removed in January 2019. This should have been operational during the entire Independent Environmental Audit period; and
- There were few noise complaints associated with CVC operations.

#### 5.1.2 Noise Recommendations

Recommendations relating to noise conditions are outlined in **Section 6** of this document and are repeated below:

- Continue investigations of any noise issues and, where practicable, implement reasonable and feasible mitigation measures;
- Ensure accurate/consistent monitoring results are presented in Annual Reviews;
- The real - time noise monitor should be re-established for the site. Liaise with the DPE regarding the best location as the majority of noise complaints have resulted from Mannering Colliery operations, not CVC. Mannering Colliery is also owned by Delta Coal;
- Update the Noise Management Plan; and
- There are also some recommendations relating to all management plans outlined in **Section 6**.

## 5.2 Subsidence

### 5.2.1 Mining Areas during Audit Period

Following discussions with Delta Coal the following mining areas were determined from the audit.

**Table 7 Summary of Mining Areas and Extraction Plans**

Year	Longwalls	Extraction Plan Reference
2016	MW10-11-12	MW 7-12 Extraction Plan
2017	MW12	MW 7-12 Extraction Plan
	MW5A	MW 7-12 Extraction Plan – MW5A Mod
	MW CVB1	MW CVB 1-3 Extraction Plan
2018	N1/S1	Miniwalls S1/N1
2019	N1/S1	Miniwalls S1/N1

### 5.2.2 Summary of Subsidence Performance

SLR and Ken Mills (Subsidence Specialist) from SCT have assessed the subsidence impacts relating to the CVC Mine. Details of subsidence performance is outlined in **Appendix E**. In summary:

- The site visit was successful and informative. It was difficult to gain access to much of the foreshore areas, but the site inspection provided context for the audit.
- The issues identified in the consent conditions and repeated in the Environmental Assessment, various Extraction Plans and Subsidence Management Plans (SMPs) as requiring management of potential subsidence impacts include:
  - Trinity Point Marina Development;
  - Benthic communities on the floor of Lake Macquarie;
  - Seagrass communities along the shore of Lake Macquarie;
  - A requirement for long-term stable, non-subsiding first workings below any features requiring negligible environmental consequences;
  - Second workings to be carried out in accordance with an approved Extraction Plans;
  - Other unspecified built features;
  - Other unspecified threatened species or endangered populations; and
  - Negligible additional risk to public safety.
- The Independent Environmental Audit review indicates that all the second workings undertaken during the review period were carried out under approved Extraction Plans. The review further indicates that the subsidence related components have been carried out in general accordance with the processes described in the Environmental Assessments and Extraction Plans

- The 2015 MOD2 subsidence assessment notes that the May 2015 bathymetric survey showed maximum subsidence of 570mm above Miniwalls 3-6. The MOD2 subsidence assessment updates the maximum subsidence predictions from 0.62m to 0.78m. The earlier 2013 predictions for Miniwalls 7-12 were 0.44m. These were updated to 0.72m. The associated assessments that rely on maximum predicted subsidence are considered in the MOD2 assessment.
- Miniwall 12 was completed early in 2017. The 2017 Annual Review reports maximum subsidence of 800-1100mm indicated by the bathymetric survey conducted in October 2017. The reference to subsidence exceeding predictions by approximately 430mm is not clear given that maximum subsidence of 1100mm exceeding predictions by 430mm would imply a prediction of 670mm. Nevertheless, maximum subsidence is significantly (250%) greater than the 440mm maximum subsidence predicted in the 2013 EA and 50% higher than the 720mm maximum subsidence predicted in the 2015 MOD2 assessment for the area above Miniwalls 7-12 (as per Figure 3a in DgS (2017)).
- There are several recommendations relating to monitoring, developing Extraction Plans and reporting within **Section 5.2.3**.

### 5.2.3 Subsidence Recommendations

Recommendations relating to subsidence are outlined within **Appendix E** Subsidence Review (SCT 2019) as well as some additional recommendations from the Lead Environmental Auditor. Recommendations regarding subsidence are outlined below:

#### Subsidence Predictions

- A more conservative approach to assessing future impacts from further mining is recommended to build confidence that the subsidence processes in play are understood and impacts that rely on the subsidence impacts can be suitably assessed prior to mining.

#### Subsidence Monitoring

- A significant upgrade of subsidence monitoring systems and reporting protocols at CVC is recommended.
- The use of three dimensional surveying with total station survey and high quality global positioning system (GPS) control is recommended. This technology is readily available and widely used for subsidence monitoring in NSW.
- For sensitive high value features such as the marina or similar features, real-time continuous GNSS monitoring is available at relatively low cost and can be used to provide high confidence subsidence monitoring in three dimensions.
- A thorough review of the survey data and monitoring approach for Line 23 along the northern lakeshore of CVC Bay is recommended.
- A review of benthic and seagrass community monitoring systems is recommended to confirm that the monitoring is capable of discriminating minor and negligible impacts as required by the development consent conditions.

### **Subsidence Reporting**

- A separate subsidence impact assessment report should be prepared annually and appended to the Annual Review. Presentation of all future survey data in Annual Reviews would benefit from a thorough and comprehensive analysis of the subsidence monitoring being undertaken by an external consultant so that the data can be meaningfully interpreted and is comprehensible by anyone with an interest in the outcomes; and
- The report should assess performance against subsidence impact performance measures from the Development Consent as well as any other commitments, triggers and management measures from Extraction Plans. This report should assess how the Extraction Plans tracked against Trigger Action Response Plan (TARP's).

### **Biodiversity and Annual Reporting**

- Include how the site is tracking against subsidence performance criteria (Schedule 4 Condition 4) in the Biodiversity Monitoring Reports, Annual Seagrass Monitoring Report and the Annual Review. This should include a table outlining if performance criteria have been met and where further information can be found.

### **Benthic Community Management Plan**

- Develop a TARP when updating the Benthic Communities Management Plan. This should address the wording of Schedule 4 Condition 2 SSD 5465. A series of triggers should be developed based on quantitative data and this should be reported in the bi - annual monitoring reports and the Annual Review. An example of a trigger would be '% change in organisms between monitoring events'.
- Assess the triggers from the Extraction Plans eg. ANOVA/ANOSIM level is approaching 5% in the bi-annual monitoring reports.

## 6 Audit Findings – Summary of Non - compliances

**Table 8** outlines the summary of non - compliances relating to the statutory conditions of CVC and the proposed recommendation.

**Table 8 Summary of Non - compliances**

Schedule and Condition Number	Condition	Compliance Status	Evidence	Recommendations
<b>SSD 5465 (as modified)</b>				
Schedule 2 Condition 7	The Applicant shall ensure that no laden coal trucks are dispatched from the site to public roads outside of the hours of 5:30 am to 5:30 pm, Monday to Friday, and not at all on Saturdays, Sundays or public holidays	Non-Compliant (Low Risk)	Detailed coal records only provided for 2017. This included loads and tonnages for Delta (Vales Point), Weathertex and Port Waratah Coal Service. There are no times provided in the spreadsheet. SLR requested additional spreadsheets but no detailed information was provided for 2016, 2018 and 2019 year to date. As no information was provided SLR in unable to determine if the site is compliant with this condition.	<b>REC 1</b> <ul style="list-style-type: none"> <li>Ensure detailed records of coal transportation are recorded and able to be provided to auditors upon request. The spreadsheets should cover the requirements of the key conditions of the Development Consent.</li> </ul>
Schedule 2 Condition 8	The Applicant shall not dispatch from the site more than: <ul style="list-style-type: none"> <li>(a) 660,000 tonnes of product coal in any calendar year to Port Waratah Coal Services for export;</li> <li>(b) 180,000 tonnes of product coal in any calendar year to domestic customers other than Vales Point Power Station;</li> <li>(c) a total of 270 laden coal trucks per day by public roads;</li> <li>(d) a total of 32 laden coal trucks per hour; and</li> <li>(e) an average of 16 laden coal trucks per hour by public roads during peak hour periods, calculated monthly, until the intersection of M1 Motorway and Sparks Road Interchange (East Side - unsignalised with stop sign) is upgraded to a signalised intersection.</li> </ul>	Non-Compliant (Low Risk)	2018 Annual Review - 394,213 tonnes transported, but 0 t from public roads. 2017 Annual Review- 1,378,996 tonnes transported to power station. 254 tonnes on public roads. 2016 Annual Review - 1,175,523 tonnes to domestic market. 2,414 tonnes on public roads.  a) Within this limit; b) Within this limit; c) There is no evidence provided of breakdown on public roads for 2016, 2018 and 2019 year to date; d) There is no evidence provided of breakdown on public roads for 2016, 2018 and 2019 year to date; e) Based on the Annual Review data this has been met.	As per <b>REC 1</b> <ul style="list-style-type: none"> <li>Ensure detailed records of coal transportation are recorded and able to be provided to auditors upon request. The spreadsheets should cover the requirements of the key conditions of the Development Consent.</li> </ul>

Schedule and Condition Number	Condition	Compliance Status	Evidence	Recommendations
			Detailed coal records only provided for 2017. This included loads and tonnages for Delta (Vales Point), Weathertex and Port Waratah Coal Service. There are no times provided in the spreadsheet. SLR requested additional spreadsheets but no detailed information was provided for 2016, 2018 and 2019 year to date. As no information was provided SLR in unable to determine if the site is compliant with this condition.	
Schedule 2 Condition 10	The Applicant shall restrict the transport of coal by truck to the Vales Point Power Station between 10 pm and 5:30 am to: (a) 16 laden trucks per hour for the Spring and Autumn months; and (b) zero during Winter months.	Non-Compliant (Low Risk)	Detailed coal records only provided for 2017. This included loads and tonnages for Delta (Vales Point), Weathertex and Port Waratah Coal Service. There are no times provided in the spreadsheet. SLR requested additional spreadsheets but no detailed information was provided for 2016, 2018 and 2019 year to date. As no information was provided SLR in unable to determine if the site is compliant with this condition.	As per <b>REC 1</b> <ul style="list-style-type: none"> <li>Ensure detailed records of coal transportation are recorded and able to be provided to auditors upon request. The spreadsheets should cover the requirements of the key conditions of the Development Consent.</li> </ul>
Schedule 2 Condition 11	<b>Planning Agreement</b> Within 12 months of the date of this consent, unless otherwise agreed by the Secretary, the Applicant shall enter into a planning agreement with the WSC in accordance with Division 6 of Part 4 of the EP&A Act that provides for payment to the WSC for community enhancement purposes.  The agreement must include provision for those matters set out in condition 12 below.  If there is any dispute between the Applicant and WSC relating to the preparation or implementation of the planning agreement, then either party may refer the matter to the Secretary for resolution.	Administrative Non - Compliance	<u>Administrative non - compliance</u> prior to this audit period. The VPA was not executed with the WSC within the required date - 23 December 2014. There were numerous attempts between 2013 to 2016 to execute this agreement (based on evidence from the prior audit).  The VPA was executed on 1 September 2016. Evidence of payment in the 2016, 2017 and 2018 Annual Reviews. Evidence of receipts from 19 March 2018 and 23 March 2017.  Historical <u>Admin - Non - Compliance</u> for not meeting 12 month date. No further action proposed	Nil Action
Schedule 2 Condition 18	The Applicant must regularly review the strategies, plans and programs required under this consent and ensure that these documents are updated to incorporate measures to improve the environmental performance of the development and reflect current best practice in the mining industry. To facilitate these updates, the Applicant may at any time submit revised strategies, plans or	Administrative Non - Compliance	The following Management Plans are applicable to CVC and outlined on the CVC website: Water Management Plan - July 2015; Air Quality Management Plan - July 2014; Noise Management Plan - March 2014:	<b>REC 2</b> <ul style="list-style-type: none"> <li>All management plans require updating due to the length of time since the previous reviews. All should in a Delta Coal template.</li> </ul>

Schedule and Condition Number	Condition	Compliance Status	Evidence	Recommendations
	<p>programs for the approval of the Secretary. With the agreement of the Secretary, the Applicant may also submit any strategy, plan or program required by this consent on a staged basis.</p> <p>With the agreement of the Secretary, the Applicant may prepare a revision or stage of any strategy, plan or program required under this consent without undertaking consultation with all parties nominated under the applicable condition in this consent.</p> <p>Notes:</p> <ul style="list-style-type: none"> <li>• While any strategy, plan or program may be submitted on a staged basis, the Applicant must ensure that the existing operations on site are covered by suitable strategies, plans or programs at all times.</li> <li>• If the submission of any strategy, plan or program is to be staged, then the relevant strategy, plan or program must clearly describe the specific stage to which the strategy, plan or program applies, the relationship of this stage to any future stages, and the trigger for updating the strategy, plan or program.</li> </ul>		<p>Heritage - June 2014; Biodiversity Management Plan - 16 March 2016; Seagrass Management Plan - April 2014; and Environmental Management System - 2012.</p> <p><u>Admin Non - Compliance</u>: This condition is non - compliant as plans have not been 'regularly' updated.</p> <p>Evidence of letter to DPE from LakeCoal dated 28 July 2016 stating that a series of management plans would be updated in late 2016/2017. This was not completed.</p>	<ul style="list-style-type: none"> <li>• Ensure there is a cross referencing table covering this condition in management plans.</li> <li>• Additional detail including Trigger, Action, Response Tables (contingency plan) should be developed in the next round of management plan updates.</li> </ul>
Schedule 3 Condition 1	<p><b>Monitoring of Coal Transport</b></p> <p>The Applicant shall:</p> <p>(a) keep accurate records of the amount of coal transported from the site (on a weekly basis); and</p> <p>(b) make these records publicly available on its website at the end of each calendar quarter.</p>	Non – Compliant (Low Risk)	<p>a) Detailed coal records only provided for 2017. This included loads and tonnages for Delta (Vales Point), Weathertex and Port Waratah Coal Service. There are no times provided on the spreadsheet provided. SLR requested additional spreadsheets but no detailed information was provided for 2016, 2018 and 2019 year to date. As no information was provided SLR is unable to determine if the site is compliant with this condition.</p> <p>b) Evidence of publically available information regarding transport. However this information showed most quarters in 2016 and 2017. However no coal records on the website in 2018 or 2019. <u>Admin Non - Compliance</u>.</p>	<p>As per <b>REC 1</b></p> <ul style="list-style-type: none"> <li>• Ensure detailed records of coal transportation are recorded and able to be provided to auditors upon request. The spreadsheets should cover the requirements of the key conditions of the Development Consent.</li> </ul> <p><b>REC 3</b></p> <ul style="list-style-type: none"> <li>• Ensure transport records from this Audit period (January 2016) onwards are recorded on the website. This could be appended to the Annual Review summarising the weekly transport.</li> </ul>

Schedule and Condition Number	Condition	Compliance Status	Evidence	Recommendations
Schedule 3 Condition 2	<p><b>Road Works</b></p> <p>The Applicant shall upgrade the Ruttleys Road and Construction Road intersection within 6 months of the date of this consent, unless the Secretary directs otherwise, by:</p> <p>(a) installing additional signage on and adjacent to Construction Road prior to the intersection;</p> <p>(b) repairing the surface of Construction Road as required and ensuring the edge seal of the left turn lane is of sufficient width to accommodate coal trucks;</p> <p>(c) installing or replacing “Stop” signs in accordance with Austroads guidelines;</p> <p>(d) repainting road line markings and raised pavements associated with this intersection; and</p> <p>(e) installing barriers to prevent trucks parking on the gravel area adjacent to the intersection and the electricity substation located in the vicinity of this intersection.</p> <p>The design and construction of these works must be undertaken in consultation with, and to the relevant satisfaction of, WSC, RMS and Delta Electricity and to the satisfaction of the Secretary.</p>	Administrative Non - Compliance	<p>'Based on site communications with Environment and Community Co-ordinator. No upgrades completed during this audit period. However there is a historical <u>Admin Non - Compliance</u> from the previous audit period, with these details noted by Hansen Bailey (2016).</p> <p>- WSC Civil Design Approval SCC11-2013 dated 1/04/14 and WSC invoice for construction assessment and certificate dated 17/07/13;</p> <p>- Email from Lyle Marshall &amp; Associated (LC construction contractor) to WSC dated 21/03/14; and</p> <p>- Email from LC to Delta Electricity dated 29/01/14 and response from Delta Electricity dated 11/02/14 confirming approval of the proposed works.</p> <p>No evidence that the required Ruttleys Road and Construction Road intersection upgrade was to the satisfaction of RMS and DPE.</p> <p>Construction works for the intersection upgrade were completed on 14/08/2014, which is outside of 6 months of the date of approval of SSD-5465 (i.e. 23/06/2014). Historical admin non - compliance with no further action.</p>	Nil recommendation

Schedule and Condition Number	Condition	Compliance Status	Evidence	Recommendations
Schedule 3 Condition 3	<p><b>Road Transport Protocol</b></p> <p>The Applicant shall prepare a Road Transport Protocol to the satisfaction of the Secretary. This protocol shall:</p> <p>(a) be prepared in consultation with RMS, NCC, WSC, DRE and CCC and submitted to the Secretary for approval within 6 months of the date of this consent;</p> <p>(b) describe the designated haulage routes to be used (as shown in Appendix 5); the maximum number of road movements proposed and the haulage hours permitted under this consent;</p> <p>(c) include a Traffic Management Plan, which includes:</p> <ul style="list-style-type: none"> <li>procedures to ensure that drivers adhere to the designated haulage routes;</li> <li>measures to maximise the use of a low frequency (regular) trucking schedule rather than an intermittently-high frequency (campaign) trucking schedule, especially during the morning peak hour;</li> <li>contingency plans to apply when (for example) the designated haulage route is disrupted, including procedures for notifying relevant agencies and affected communities of the need to implement such contingency plans;</li> <li>procedures to ensure that all haulage vehicles associated with the development are clearly distinguishable as CVC Colliery coal haulage trucks;</li> <li>details of procedures for receiving and addressing complaints from the community concerning traffic issues associated with truck movements to and from the site;</li> <li>measures to ensure that the provisions of the Traffic Management Plan are implemented, eg driver training in the heavy vehicle driver's Code of Conduct and contractual agreements with heavy vehicle operators; and</li> <li>procedures for ensuring compliance with and enforcement of the heavy vehicle driver's Code of Conduct;</li> </ul> <p>(d) include a Code of Conduct for heavy vehicle drivers that addresses:</p> <ul style="list-style-type: none"> <li>travelling speeds;</li> <li>instructions to avoid grouping or conveying of trucks;</li> <li>instructions to drivers not to overtake each other on the haulage route, as far as practicable, and to maintain appropriate distances between vehicles;</li> <li>instruction to drivers to adhere to the designated haulage routes;</li> <li>instruction to drivers to be properly safety conscious and to strictly obey all traffic regulations; and</li> <li>appropriate penalties for infringements of the Code.</li> </ul> <p>The Applicant shall implement the approved Road Transport Protocol</p>	Administrative Non - Compliance	<p>Evidence of Road Transport Protocol. Road Transport Protocol, which includes; MSP-D-14559 – Coal Haulage Traffic Management Plan and POL-D-14926 Coal Haulage Driver Code of Conduct.</p> <p>Coal Haulage Traffic Management System Plan on the CVC website is dated 18/03/14. This plan has not been updated since the previous audit.</p> <p>Coal Haulage Driver Code of Conduct on the CVC website is dated 04/10/2012.</p> <p><u>Preparation:</u></p> <p>a) Evidence of consultation from 2014;</p> <p>b) Section 8.3;</p> <p>c) Overall document. Covered in Section 8;</p> <p>d) Code of conduct discussed in Section 8.11. Not attached to the document.</p> <p><u>Implementation:</u></p> <p>Records and training.</p> <p>Section 12 of this plan states - "The Manager of Mining Engineering or his representative shall formerly review this document every three years". No evidence of any review in 2017, therefore <u>Admin Non - Compliant</u>.</p>	<p><b>REC 4</b></p> <ul style="list-style-type: none"> <li>Ensure Coal Haulage Traffic Management Plan is reviewed as per the requirements of the consent and commitments in the management plan.</li> <li>Attach Driver Code of Conduct to the management plan.</li> </ul>
	<ul style="list-style-type: none"> <li>instruction to drivers to adhere to the designated haulage routes;</li> <li>instruction to drivers to be properly safety conscious and to strictly obey all traffic regulations; and</li> <li>appropriate penalties for infringements of the Code.</li> </ul> <p>The Applicant shall implement the approved Road Transport Protocol</p>		<p>Page 33</p>	

Schedule and Condition Number	Condition	Compliance Status	Evidence	Recommendations
Schedule 3 Condition 4	<p><b>Independent Traffic Audit</b></p> <p>Prior to 31 March 2014, and every 12 months thereafter, unless the Secretary directs otherwise, the Applicant shall commission a suitably qualified person, whose appointment has been approved by the Secretary, to conduct an Independent Traffic Audit of the development. This audit must:</p> <p>(a) be undertaken without prior notice to the Applicant, and in consultation with RMS, NCC, WSC and the CCC;</p> <p>(b) assess the impact of the development on the performance and safety of the road network, including a review of:</p> <ul style="list-style-type: none"> <li>• haulage records;</li> <li>• accident records on the haulage route, infringements relating to the code of conduct and any incidents involving haulage vehicles;</li> <li>• community complaints register; and</li> </ul> <p>(c) assess the effectiveness of the Road Transport Protocol; and, if necessary, recommend measures to reduce or mitigate any adverse (or potentially adverse) impacts.</p>	Administrative Non - Compliance	<u>Admin Non - Compliance</u> : No evidence provided by site indicating Traffic Audits were completed annually.	<p><b>REC 5</b></p> <ul style="list-style-type: none"> <li>• Ensure Traffic Audits are completed annually in accordance with this condition. Ensure the report is submitted to the DPE.</li> </ul>
Schedule 3 Condition 5	<p>Within 1 month of receiving the audit report, or as otherwise agreed by the Secretary, the Applicant shall submit a copy of the report to the Secretary, with a detailed response to any of the recommendations contained in the audit report, including a timetable for the implementation of any measures proposed to address the recommendations in the audit report.</p> <p>A summary of the audit report must be included in the Annual Review.</p>	Administrative Non - Compliance	<u>Admin Non - Compliance</u> : No evidence provided by site indicating Traffic Audits were completed annually.	<p>As per <b>REC 5</b></p> <ul style="list-style-type: none"> <li>• Ensure Traffic Audits are completed annually in accordance with this condition. Ensure the report is submitted to the DPE.</li> </ul>
Schedule 3 Condition 6	<p><b>Alternative Coal Transport Options</b></p> <p>Prior to 31 December 2014, and every three years thereafter, the Applicant shall prepare and submit to the Secretary for approval, a study of the reasonable and feasible options to reduce or eliminate the use of public roads to transport coal from the development. The assessment must include:</p> <p>(a) an analysis of the capital, construction and operating costs of the alternative transport options; and</p> <p>(b) quantified social and environmental impacts associated with road</p>	Administrative Non - Compliance	Evidence provided of 2014 study with the letter dated 10 December 2014. The condition requires an audit every three years which would be in late 2017. No evidence of 2017 report provided to SLR, therefore <u>Admin Non - Compliance</u> .	<p><b>REC 6</b></p> <ul style="list-style-type: none"> <li>• Ensure the Alternative Transport Options Report is completed as per the frequency in this condition.</li> </ul>

Schedule and Condition Number	Condition	Compliance Status	Evidence	Recommendations																																																	
	and rail transport.																																																				
Schedule 3 Condition 7	<p>Noise Impact Assessment Criteria</p> <p>The Applicant shall ensure that the noise generated by the development at any residence on privately- owned land does not exceed the criteria for the location in Table 1 nearest to that residence.</p> <p><i>Table 1: Noise Criteria dB(A)</i></p> <table border="1"> <thead> <tr> <th rowspan="2">Location</th> <th colspan="2">Day</th> <th colspan="2">Night</th> </tr> <tr> <th>L<sub>Aeq</sub>(15 min)</th> <th>L<sub>Aeq</sub>(15 min)</th> <th>L<sub>Aeq</sub>(15 min)</th> <th>L<sub>A1</sub>(1 min)</th> </tr> </thead> <tbody> <tr> <td>R8</td> <td>38</td> <td>38</td> <td>38</td> <td>45</td> </tr> <tr> <td>R11</td> <td>49</td> <td>49</td> <td>49</td> <td>54</td> </tr> <tr> <td>R12</td> <td>49</td> <td>49</td> <td>49</td> <td>53</td> </tr> <tr> <td>R13</td> <td>43</td> <td>43</td> <td>43</td> <td>49</td> </tr> <tr> <td>R15</td> <td>36</td> <td>36</td> <td>36</td> <td>45</td> </tr> <tr> <td>R19</td> <td>37</td> <td>37</td> <td>37</td> <td>45</td> </tr> <tr> <td>R22</td> <td>46</td> <td>46</td> <td>46</td> <td>46</td> </tr> <tr> <td>all other privately-owned land</td> <td>35</td> <td>35</td> <td>35</td> <td>45</td> </tr> </tbody> </table>	Location	Day		Night		L <sub>Aeq</sub> (15 min)	L <sub>Aeq</sub> (15 min)	L <sub>Aeq</sub> (15 min)	L <sub>A1</sub> (1 min)	R8	38	38	38	45	R11	49	49	49	54	R12	49	49	49	53	R13	43	43	43	49	R15	36	36	36	45	R19	37	37	37	45	R22	46	46	46	46	all other privately-owned land	35	35	35	45	Non – Compliant (Low Risk)	<p>- Exceedance of LA1(1minute) criteria of 6dB and 7dB at ATN4 and R13 in June 2016. Documented in 2016 Annual Review and Quarterly Monitoring report (Global Acoustics report 16217_R01). Corrective actions undertaken and documented in incident report dated 05/07/2016.</p> <p>- 1dB exceedance of LAeq(15minute) criteria at ATN007 during the daytime period in October 2017 (Q4). Documented in 2017 Annual Review. However it is noted that a discrepancy between+E52 monitoring results presented in the 2017 Annual Review and Q4 Monitoring report (Global Acoustics Report 17424_R01) where no exceedance is recorded.</p> <p>- No exceedances recorded during 2018 period.</p> <p>- No exceedances recorded during the 2019 audit period (January - April 2019).</p>	<p><b>REC 7</b></p> <ul style="list-style-type: none"> <li>Continue investigations of any noise issues and, where practicable, implement reasonable and feasible mitigation measures.</li> <li>Ensure accurate/consistent monitoring results are presented in Annual Reviews.</li> </ul>
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Schedule 3 Condition 8	<p>Operating Conditions</p> <p>The Applicant shall:</p> <p>(a) implement best management practice, including all reasonable and feasible noise mitigation measures, to minimise the construction, operational and transport noise generated by the development;</p> <p>(b) regularly assess the noise monitoring and meteorological data and relocate, modify, and/or stop operations on site to ensure compliance with the relevant conditions of this consent;</p> <p>(c) minimise the noise impacts of the development during meteorological conditions under which the noise limits in this consent do not apply (see Appendix 8);</p> <p>(d) use its best endeavours to achieve the long-term noise goals in Table 2, where reasonable and feasible, and report on progress towards achieving these goals in each Annual Review;</p> <p>(e) carry out a comprehensive noise audit of the development in conjunction with each independent environmental audit; and</p> <p>(f) prepare an action plan to implement any additional reasonable and feasible onsite noise mitigation measures identified by each audit; to</p>	Administrative Non - Compliance	<p>a) The 2016 Annual Review documented an investigation into repairs/maintenance of ventilation fan silencers. No further evidence during audit period. Therefore no continued implementation. <u>Admin Non - Compliance.</u></p> <p>b) Evidence of real time noise monitoring conducted throughout 2016, 2017 and 2018 where no triggers were reported. During audit site inspection the real-time noise monitor was not in operation and has been removed from site. The Environment and Community Co-ordinator stated the real - time noise monitoring was removed in January 2019. <u>Admin - Non Compliance</u> as the monitor should have been active the entire IEA period.</p> <p>c) No evidence of reduced operations during adverse meteorological conditions.</p> <p>d) Evidence of inspection of silencers during 2016. No evidence of progress towards long term goal in the 2017-2019 audit period.</p> <p>e) Conducted as part of this Independent Audit. Note that no noise monitoring of site plant/equipment and operations was</p>	<p><b>REC 8</b></p> <ul style="list-style-type: none"> <li>The real - time noise monitor should be re-established for the site. Liaise with the DPE regarding the best location as the majority of noise complaints have resulted from Mannering Colliery operations, not CVC. Mannering Colliery is also owned by Delta Coal. Update the Noise Management Plan.</li> </ul>																																																	

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	<p>the satisfaction of the Secretary.</p> <p><i>Table 2: Long-term Noise Goals dB(A)</i></p> <table border="1"> <thead> <tr> <th rowspan="2">Location</th> <th>Day</th> <th>Evening</th> <th>Night</th> </tr> <tr> <th>L<sub>Aeq</sub>(15 min)</th> <th>L<sub>Aeq</sub>(15 min)</th> <th>L<sub>Aeq</sub>(15 min)</th> </tr> </thead> <tbody> <tr> <td>R11 – R13</td> <td>41</td> <td>41</td> <td>41</td> </tr> <tr> <td>R22</td> <td>40</td> <td>40</td> <td>40</td> </tr> </tbody> </table>	Location	Day	Evening	Night	L <sub>Aeq</sub> (15 min)	L <sub>Aeq</sub> (15 min)	L <sub>Aeq</sub> (15 min)	R11 – R13	41	41	41	R22	40	40	40		<p>conducted as part of the audit.</p> <p>f) No evidence of action plan. <u>Admin Non - Compliance</u>.</p> <p>Exceedances of long term noise goals occurred during the monitoring period. However these are longterm noise goals, not criteria.</p>	
Location	Day		Evening	Night															
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R11 – R13	41	41	41																
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Schedule 3 Condition 9	<p><b>Noise Management Plan</b></p> <p>The Applicant shall prepare a Noise Management Plan for the development to the satisfaction of the Secretary. This plan must:</p> <p>(a) be prepared in consultation with the EPA and submitted to the Secretary for approval within 4 months of the date of this consent, unless otherwise agreed by the Secretary;</p> <p>(b) describe the measures that would be implemented to ensure compliance with the noise criteria and operating conditions in this consent;</p> <p>(c) describe the proposed noise management system in detail including the mitigation measures that would be implemented to minimise noise during construction and operations, including on and off site road noise generated by vehicles associated with the development; and</p> <p>(d) include a monitoring program that:</p> <ul style="list-style-type: none"> <li>• uses attended monitoring to evaluate the compliance of the development against the noise criteria in this consent;</li> <li>• evaluates and reports on: <ul style="list-style-type: none"> <li>• the effectiveness of the on-site noise management system; and</li> <li>• compliance against the noise operating conditions; and</li> <li>• defines what constitutes a noise incident, and includes a protocol for identifying and notifying the Department and relevant stakeholders of any noise incidents.</li> </ul> </li> </ul> <p>The Applicant shall implement the approved management plan as approved from time to time by the Secretary.</p>	<b>Administrative Non - Compliance</b>	<p>Current plan dated 12 March 2014.</p> <p>Evidence of letter to DPE from LakeCoal dated 28 July 2016 stating that a series of management plans would be updated in late 2016/2017. This was not completed. <u>Admin Non - Compliance</u>.</p> <p><u>Preparation:</u></p> <p>a) Compliant. Evidence from 2014;</p> <p>b) Compliant - Section 4;</p> <p>c) Compliant - Section 4;</p> <p>d) Compliant - Section 5 and 6</p> <p><u>Implementation:</u></p> <p>No evidence of audit, review and update of noise management plan during audit period as prescribed in Section 9. Admin Non - Compliance.</p> <p>No notification to residents following recorded exceedances in accordance with Section 6.2. <u>Admin Non - Compliance</u>.</p> <p>Real time noise monitor removed from site. <u>Admin Non - Compliance</u>.</p>	<p>Nil.</p> <p>Previous recommendations relate to updating all management plans.</p>															
Schedule 3	The Applicant shall ensure that all reasonable and feasible avoidance	<b>Non –</b>	2019 - no longterm data for annual averages.	<b>REC 9</b>															

Schedule and Condition Number	Condition	Compliance Status	Evidence	Recommendations																							
Condition 11	<p>and mitigation measures are employed so that particulate matter emissions generated by the development do not cause exceedance of the criteria listed in Tables 3, 4 and 5 at any residence on privately-owned land.</p> <p><i>Table 3: Long-term criteria for particulate matter</i></p> <table border="1"> <thead> <tr> <th>Pollutant</th> <th>Averaging period</th> <th><sup>d</sup> Criterion</th> </tr> </thead> <tbody> <tr> <td>Total suspended particulate (TSP) matter</td> <td>Annual</td> <td><sup>a</sup> 90 µg/m<sup>3</sup></td> </tr> <tr> <td>Particulate matter &lt; 10 µm (PM<sub>10</sub>)</td> <td>Annual</td> <td><sup>a</sup> 30 µg/m<sup>3</sup></td> </tr> </tbody> </table> <p><i>Table 4: Short-term criterion for particulate matter</i></p> <table border="1"> <thead> <tr> <th>Pollutant</th> <th>Averaging period</th> <th><sup>d</sup> Criterion</th> </tr> </thead> <tbody> <tr> <td>Particulate matter &lt; 10 µm (PM<sub>10</sub>)</td> <td>24 hour</td> <td><sup>a</sup> 50 µg/m<sup>3</sup></td> </tr> </tbody> </table> <p><i>Table 5: Long-term 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><sup>c</sup> Deposited dust</td> <td>Annual</td> <td><sup>b</sup> 2 g/m<sup>2</sup>/month</td> <td><sup>a</sup> 4 g/m<sup>2</sup>/month</td> </tr> </tbody> </table>	Pollutant	Averaging period	<sup>d</sup> Criterion	Total suspended particulate (TSP) matter	Annual	<sup>a</sup> 90 µg/m <sup>3</sup>	Particulate matter < 10 µm (PM <sub>10</sub> )	Annual	<sup>a</sup> 30 µg/m <sup>3</sup>	Pollutant	Averaging period	<sup>d</sup> Criterion	Particulate matter < 10 µm (PM <sub>10</sub> )	24 hour	<sup>a</sup> 50 µg/m <sup>3</sup>	Pollutant	Averaging period	Maximum increase in deposited dust level	Maximum total deposited dust level	<sup>c</sup> Deposited dust	Annual	<sup>b</sup> 2 g/m <sup>2</sup> /month	<sup>a</sup> 4 g/m <sup>2</sup> /month	Compliant (Low Risk)	<p>Annual Review 2018 - Depositional dust gauges were below criteria.</p> <p>Short term PM<sub>10</sub> non-compliances on 3 April 2018, 18 July 2018 and 4 December 2018. The 2018 annual average of 24hr PM<sub>10</sub> results was 16.1 µg/m<sup>3</sup>. Daily (24-hour) results ranged from a minimum of 6.13 µg/m<sup>3</sup> to a maximum of 112.98 µg/m<sup>3</sup> during 2018. There were some data capture issues in 2018 relating to the TEOM. These were not reported as non-compliances in Section 1 or 7 of the Annual Review. <u>Non-Compliance (Low Risk)</u> for exceeding criteria.</p> <p>Annual Review 2017 - Excluding DDG005, deposited dust levels for the reporting period were below the EPA long term criteria annual maximum level of 4 g/m<sup>2</sup>/month at all sites. Additionally, no gauges showed annual increases in deposited dust levels above the EPA maximum of 2 g/m<sup>2</sup>/month during the reporting period. Note, the depositional dust gauge exceedance was not recorded as an exceedance in Section 1 or 7 of the Annual Review. <u>Non-compliance</u> relating to exceedance of DDG5 and also not reporting in Section 1 or 7 of the Annual Review.</p> <p>The EPA long-term annual average criteria (30 µg/m<sup>3</sup>) for PM<sub>10</sub> was not exceeded during the 2017 period. Daily (24-hour) results ranged from a minimum of 5.39 µg/m<sup>3</sup> to a maximum of 47.78 µg/m<sup>3</sup> during 2017. The 2017 annual average of 24hr PM<sub>10</sub> results was 15.1 µg/m<sup>3</sup>. Within short term criteria. It was noted there was some data capture issues The 2017 Annual Review states that 'When comparing the 2017 annual results to the previous year, the data capture rate was slightly higher in 2017. This was primarily due to power outages associated with electrical storms in 2016 and a failed air conditioner during the 2016 reporting period'. Data capture issues were not reported as <u>non-compliances</u> in Section 1 or 7 of the Annual Review.</p> <p>Annual Review 2016 - Deposited dust levels for the reporting period were below the EPA long term criteria annual</p>	<ul style="list-style-type: none"> <li>Update the Air Quality Management Plan following this audit.</li> <li>Improve data capture for PM10. Review possibilities of backup power supply.</li> <li>Ensure issues with data capture are reported in Section 1 and 7 of the Annual Review.</li> <li>Ensure TEOM is setup with alarms/notifications for when results are approaching or have exceeded the short term criterion for particulate matter. This will ensure exceedances are immediately detected and reported as soon as possible to the EPA and DPE.</li> </ul>
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			<p>maximum level of 4 g/m<sup>2</sup>/month at all sites. Additionally, no gauges showed annual increases in deposited dust levels above the EPA maximum of 2 g/m<sup>2</sup>/month.</p> <p>Daily (24-hour) results ranged from a minimum of 2.1 µg/m<sup>3</sup> to a maximum of 39.8 µg/m<sup>3</sup> during 2016.</p> <p>For PM<sub>10</sub> data capture - When comparing the 2016 annual results to the previous year, the data capture rate was slightly lower in 2016. This was primarily due to power outages associated with electrical storms, a failed air conditioner unit in February 2016 and a pest infestation in the units electrical circuit. <u>Non - compliance</u> relating to data capture.</p> <p><u>Field Evidence</u> The field assessment did not identify a high number of dust sources. There are disturbed surfaces, but these are small compared to most mines. Water truck sighted. Outside sources contribute to dust. It is highly likely that other sources contribute to dust levels.</p> <p><u>Correspondence</u> Incidents reports are prepared and provided to DPE and EPA. Sighted by the audit team. However there is often a delay in identifying short term criterion exceedances.</p>	
Schedule 3 Condition 12	<p><b>Operating Conditions</b></p> <p>The Applicant shall:</p> <p>(a) implement best practice air quality management at the site, including all reasonable and feasible measures to minimise the off-site odour, fume and dust emissions generated by the development;</p> <p>(b) implement best practice management to minimise the risk of spontaneous combustion and related emissions;</p> <p>(c) implement all reasonable and feasible measures to minimise the</p>	<b>Administrative Non - Compliance</b>	<p><u>Field Evidence</u> The field assessment did not identify a high number of dust sources. There are disturbed surfaces, but these are small compared to most mines. Water truck sighted. Outside sources contribute to dust.</p> <p><u>Correspondence</u> Incidents reports are prepared and provided to DPE and EPA.</p>	<p>As per <b>REC 9</b></p> <ul style="list-style-type: none"> <li>• Update the Air Quality Management Plan following this audit.</li> <li>• Improve data capture for PM<sub>10</sub>. Review possibilities of backup power supply.</li> <li>• Ensure issues with data capture are</li> </ul>

Schedule and Condition Number	Condition	Compliance Status	Evidence	Recommendations
	<p>release of greenhouse gas emissions from the site;</p> <p>(d) operate an air quality management system on site to ensure compliance with the relevant conditions of this consent;</p> <p>(e) minimise the air quality impacts of the development during adverse meteorological conditions and extraordinary events (see note d to Tables 3-5 above);</p> <p>(f) regularly assess the air quality monitoring data, and modify operations on site to ensure compliance with the relevant conditions of this consent, to the satisfaction of the Secretary.</p>		<p>Sighted by the audit team.</p> <p>a) Evidence of dust monitoring and watercart use;</p> <p>b) Based on discussions with Environment and Community Co-ordinator there have been no issues on the surface regarding spontaneous combustion;</p> <p>c) Monitoring of fuel and energy usage;</p> <p>d) Air quality management system - for monitoring continues to be undertaken;</p> <p>e) Based on discussions with Environment and Community Co-ordinator water carts are used on exposed surfaces. Product is generally a wet product, therefore no water sprays required;</p> <p>f) The real time air quality monitor is not being used as a management tool. During the audit period there was no system to notify persons of when the TEOM identified short term impact assessment <u>non - compliances</u>. <u>Non - compliances</u> are only identified during the monthly download. <u>Admin non - compliance</u> relating to not determining TEOM exceedances as soon as they occur.</p>	<p>reported in Section 1 and 7 of the Annual Review.</p> <ul style="list-style-type: none"> <li>Ensure TEOM is setup with alarms/notifications for when results are approaching or have exceeded the short term criterion for particulate matter. This will ensure exceedances are immediately detected and reported as soon as possible to the EPA and DPE.</li> </ul>
Schedule 3 Condition 13	<p><b>Air Quality Management Plan</b></p> <p>The Applicant shall prepare an Air Quality Management Plan for the development to the satisfaction of the Secretary. This plan must:</p> <p>(a) be prepared in consultation with the EPA, and submitted to the Secretary for approval within 6 months of the date of this consent;</p> <p>(b) describe the measures that would be implemented to ensure compliance with the relevant air quality criteria and operating conditions of this consent;</p> <p>(c) describe the measures that would be implemented to minimise the release of greenhouse gas emissions from the site;</p> <p>(d) describe the proposed on-site air quality management system; and</p> <p>(e) include an air quality monitoring program that:</p> <ul style="list-style-type: none"> <li>is capable of evaluating the operating conditions of this consent;</li> <li>evaluates and reports on:</li> </ul>	<b>Administrative Non - Compliance</b>	<p><u>Preparation:</u></p> <p>Evidence of Air Quality Management Plan dated 15 January 2016. The Air Quality Management Plan on the website 18 July 2014, with this approved on 24 July 2014. No evidence of approval provided by Delta Coal for 2016 Management Plan, therefore 2014 plan reviewed for adequacy.</p> <p>a) Section 1.4;</p> <p>b) Section 3;</p> <p>c) Section 4;</p> <p>d) and e) - Section 5</p> <p>Evidence of letter to DPE from LakeCoal dated 28 July 2016 stating that a series of management plans would be updated in late 2016/2017. This was not completed.</p>	<p>As per <b>REC 9</b></p> <ul style="list-style-type: none"> <li>Update the Air Quality Management Plan following this audit.</li> <li>Improve data capture for PM<sub>10</sub>. Review possibilities of backup power supply.</li> <li>Ensure issues with data capture are reported in Section 1 and 7 of the Annual Review.</li> <li>Ensure TEOM is setup with alarms/notifications for when results are approaching or have exceeded the short term criterion for</li> </ul>

Schedule and Condition Number	Condition	Compliance Status	Evidence	Recommendations
	<ul style="list-style-type: none"> <li>the effectiveness of the air quality management system; and</li> <li>compliance against the air quality operating conditions;</li> <li>defines what constitutes an air quality incident, and includes a protocol for identifying and notifying the Department and relevant stakeholders of any air quality incidents.</li> </ul> <p>The Applicant shall implement the approved management plan as approved from time to time by the Secretary.</p>		<p><u>Implementation:</u> Evidence of monitoring; Minimal issues observed with dust management; and The real time air quality monitor is not being used as a management tool.</p> <p>Section 5.3 of 2014 Air Quality Management Plan states: <i>Every 30 minutes the real time data from the monitor is sent via wireless (Next-G) connection to a web based data management system (Vista Data Vision) which is also used for the Company's real time noise monitoring system. A web based interface then allows the data to be viewed or downloaded, reports to be created and automated alarm generation when the predefined triggers are reached.</i></p> <p><u>Admin Non - Compliance</u> as no alarm was set up. The only way exceedances could be determine during the audit period was by manual download or viewing of results. This generally occurred every month.</p>	<p>particulate matter. This will ensure exceedances are immediately detected and reported as soon as possible to the EPA and DPE.</p>
Schedule 3 Condition 17	<p><b>Sewage Management</b> The Applicant shall manage on-site sewage in accordance with NSW Environmental Guidelines: Use of Effluent by Irrigation (DEC 2004) and the National Guidelines for Sewerage Systems - Effluent Management (ANZECC 1997) or its latest version, to the satisfaction of EPA.</p>	<b>Administrative Non - Compliance</b>	<p>Sewage system - 2 systems. Envirocycle for offices and second system is a septic system that handles the bathhouse and toilet facilities. This water is treated onsite.</p> <p>There is limited detail in the Water Management Plan regarding the sewage water management system. Garden Wastemaster Australia complete servicing. Evidence of one email from 6 March 2019 organising servicing. However no evidence of servicing provided. <u>Admin Non - Compliant</u>. Evidence of testing of wastewater through lab results.</p>	<p><b>REC 10</b></p> <ul style="list-style-type: none"> <li>Include additional detail in the Water Management Plan regarding sewage management.</li> <li>Include an update of sewage system during the audit period in the Annual Review.</li> <li>Ensure servicing is completed and records kept onsite.</li> </ul>
Schedule 3 Condition 18	<p><b>Water Management Plan</b> The Applicant shall prepare a Water Management Plan for the surface facilities sites to the satisfaction of the Secretary. This plan must be prepared in consultation with DPI Water and EPA, by suitably qualified</p>	<b>Administrative Non - Compliance</b>	<p>The current Water Management Plan is dated July 2015. This plan was approved by the DPE on 21 July 2015. This plan is out of date due to the age of the plan and also does not cover MOD 2. Evidence of letter to DPE from LakeCoal dated</p>	<p><b>REC 11</b></p> <ul style="list-style-type: none"> <li>Update the water balance or justify why the current water balance is still</li> </ul>

Schedule and Condition Number	Condition	Compliance Status	Evidence	Recommendations
	<p>and experienced persons whose appointment has been endorsed by the Secretary, and submitted to the Secretary for approval within 6 months of the date of this consent. This plan must include:</p> <p>(a) a comprehensive water balance for the development that includes details of:</p> <ul style="list-style-type: none"> <li>• sources and security of water supply;</li> <li>• water make in the underground workings;</li> <li>• water transfers from the underground operations to the surface;</li> <li>• water use; and</li> <li>• any water discharges;</li> </ul> <p>(b) management plans for the surface facilities sites, that include:</p> <ul style="list-style-type: none"> <li>• a detailed description of water management systems for each site, including: <ul style="list-style-type: none"> <li>• clean water diversion systems;</li> <li>• erosion and sediment controls; and</li> <li>• any water storages;</li> </ul> </li> <li>• measures to minimise potable water use and to reuse and recycle water;</li> <li>• measures to manage acid sulphate soils, if encountered;</li> <li>• activities that would involve ground disturbance at the site; and</li> <li>• monitoring and reporting procedures.</li> </ul> <p>(c) a Surface Water Management Plan which:</p> <ul style="list-style-type: none"> <li>• includes baseline data on surface water flows and quality of Swindles Creek;</li> <li>• details surface water impact assessment criteria, including trigger levels for investigating any potentially adverse impacts on surface water resources or surface water quality;</li> <li>• provides a program to monitor: <ul style="list-style-type: none"> <li>• surface water discharges;</li> <li>• surface water flows and quality; and</li> <li>• channel stability;</li> </ul> </li> </ul> <p>(d) a Ground Water Monitoring Program which includes a program to:</p>		<p>28 July 2016 stating that a series of management plans would be updated in late 2016/2017. This was not completed. <u>Admin Non - Compliance.</u></p> <p>The Plan outlines several activities which are planned to be undertaken in 2015. Evidence of consultation in 2015 update with this outlined in Section 1.2.</p> <p><u>Preparation:</u></p> <p>a) Section 3 of the report. Most of the information of the Water Balance is from 2013 and should be reviewed;</p> <p>b) Section 4. Includes details of mitigation measures. Figure 4 is a detailed figure, but may require some updating based on minor changes at the pit top. Monitoring information outlined in Section 5;</p> <p>c) Covered in Section 4;</p> <p>d) Covered in Appendix B; and</p> <p>e) Covered in several sections.</p> <p><u>Implementation:</u></p> <ul style="list-style-type: none"> <li>- The plan is a little out of date - from 2015, with some information dating back to 2013;</li> <li>- Evidence of surface water and groundwater monitoring in Annual Review;</li> <li>- Water management sighted in the field. Separation of water streams. Dams are stable; and</li> <li>- Some desilting of a drainage line is required.</li> </ul>	<p>applicable to the current operations.</p> <ul style="list-style-type: none"> <li>• Ensure dams and drainage lines are free on silt. Establish a maintenance schedule.</li> </ul>

Schedule and Condition Number	Condition	Compliance Status	Evidence	Recommendations
	<ul style="list-style-type: none"> <li>• monitor and report groundwater inflows to underground workings;</li> <li>• predict, manage and monitor impacts to nearby groundwater bores on privately-owned land that may be impacted by the development; and</li> </ul> <p>(e) a detailed review of surface water management at the site, with particular reference to the water storages within the dirty water management system, to:</p> <ul style="list-style-type: none"> <li>• determine whether the capacity, integrity, retention time and management of the dirty water storages (particularly the final Pollution Control Dam) are sufficient to ensure that water discharged from the site meets the EPL limits and surface water impact assessment criteria within the Surface Water Management Plan; and</li> <li>• propose any appropriate changes to the surface water management system.</li> </ul> <p>The Applicant shall implement the approved management plan as approved from time to time by the Secretary.</p> <p>Note: The Secretary may require the Applicant to implement upgrades and other changes identified under paragraph (e), in accordance with condition 4 of schedule 2.</p>			
Schedule Condition 20	<p><b>Biodiversity Management Plan</b></p> <p>The Applicant shall prepare a Biodiversity Management Plan for the surface facilities sites, for all areas that are not, or will not, be subject to condition 7 of schedule 4, to the satisfaction of the Secretary. This plan must:</p> <p>(a) be prepared by a suitably qualified person approved by the Secretary; in consultation with OEH, and submitted to the Secretary within 6 months of the date of this consent;</p> <p>(b) establish baseline data for the existing habitat in the Biodiversity Enhancement Area and elsewhere on the site;</p> <p>(c) describe the short, medium, and long term measures that would be implemented to:</p> <ul style="list-style-type: none"> <li>• manage the impacts of clearing vegetation;</li> </ul>	<b>Administrative Non - Compliance</b>	<p>The Biodiversity Management Plan is dated 16 March 2016. This was approved by the DPE on 20 April 2016. Covers pit top and fan sites. Seagrass management covered under a separate plan. Evidence of letter to DPE from LakeCoal dated 28 July 2016 stating that a series of management plans would be updated in late 2016/2017. This was not completed. <u>Admin Non - Compliance</u>.</p> <p><u>Preparation:</u></p> <p>a) Original document prepared by EMM. Updated document prepared by LakeCoal. The original document met this timeframe;</p> <p>b) Baseline data in Section 3.2;</p> <p>c) Mostly covered in Section 4 and 5, but not split into short,</p>	<p><b>REC 12</b></p> <ul style="list-style-type: none"> <li>• Include the biodiversity monitoring reports as appendices to the Annual Review.</li> <li>• The current monitoring is provided in a spreadsheet with an email summary. Prepare a small report outlining results, a comparison against trigger levels and potential reasons for changes.</li> <li>• Prepare a separate section with short, medium and longterm measures in the Biodiversity Management Plan.</li> </ul>

Schedule and Condition Number	Condition	Compliance Status	Evidence	Recommendations
	<ul style="list-style-type: none"> <li>manage the remnant vegetation and habitat in the Biodiversity Enhancement Area and elsewhere on the site; and</li> <li>implement the Biodiversity Enhancement Strategy, including detailed performance and completion criteria;</li> </ul> <p>(d) include a program to monitor and report on the effectiveness of these measures, and progress against the detailed performance and completion criteria;</p> <p>(e) identify the potential risks to the successful implementation of the Biodiversity Enhancement Strategy, and the contingency measures that would be implemented to mitigate these risks; and</p> <p>(f) include details of who would be responsible for monitoring, reviewing, and implementing the plan.</p> <p>The Applicant shall implement the approved management plan as approved from time to time by the Secretary.</p>		<p>medium and longterm measures;</p> <p>d) Section 11;</p> <p>e) See Table 11;</p> <p>f) Section 13.</p> <p><u>Implementation:</u> Section 14 refers to the resubmission of this management plan within three months of submitting the Independent Environmental Audit. The previous audit is dated July 2016. Evidence of biodiversity monitoring reports.</p>	
Schedule 3 Condition 21	<p><b>Heritage Management Plan</b></p> <p>The Applicant shall prepare a Heritage Management Plan for the development to the satisfaction of the Secretary. This Plan must:</p> <p>(a) be prepared in consultation with any relevant Aboriginal stakeholders;</p> <p>(b) be submitted to the Secretary for approval within 6 months of the date of this consent;</p> <p>(c) include consideration of the Aboriginal and non-Aboriginal cultural context and significance of the site;</p> <p>(d) detail the responsibilities of all stakeholders; and</p> <p>(e) include programs/procedures and management measures for:</p> <ul style="list-style-type: none"> <li>the ongoing monitoring of site 45-7-0189 at Summerland Point;</li> <li>managing the discovery of any human remains or previously unidentified Aboriginal objects on site, including (in the case of human remains) stop work provisions and notification protocols;</li> <li>ongoing consultation and involvement of the Aboriginal community in the conservation and management of Aboriginal heritage within the site; (including procedures for keeping records of this);</li> </ul>	<b>Administrative Non - Compliance</b>	<p><u>Preparation:</u> Plan dated 23/6/2014. Evidence of letter to DPE from LakeCoal dated 28 July 2016 stating that a series of management plans would be updated in late 2016/2017. This was not completed. <u>Admin Non - Compliance.</u></p> <p>a) Section 4.4 and 4.5;</p> <p>b) Condition outside of audit period;</p> <p>c) Section 4;</p> <p>d) Section 11;</p> <p>e) In various sections.</p> <p><u>Implementation:</u> Evidence of some monitoring of shell midden site #45-7-0189 in Annual Reviews. Monitoring every 2 years until Year 5 (Year 1, 3 and 5). 2017 was the fifth year, hence no further monitoring required.</p> <p>Section 12 of the Heritage Management Plan refers to the resubmission of this management plan within three months</p>	<p><b>REC 13</b></p> <ul style="list-style-type: none"> <li>Update the Heritage Management Plan, including the removal of Site #45-7-0154.</li> </ul>

Schedule and Condition Number	Condition	Compliance Status	Evidence	Recommendations
	<ul style="list-style-type: none"> <li>appropriate identification, management, conservation and protection of both Aboriginal and non-Aboriginal heritage items identified on the site; and</li> <li>ensuring relevant workers on site receive suitable heritage inductions prior to carrying out any activities which may disturb Aboriginal sites, and that suitable records are kept of these inductions.</li> </ul> <p>The Applicant shall implement the approved management plan as approved from time to time by the Secretary.</p>		of submitting the Independent Environmental Audit. This was not completed.	
Schedule 3 Condition 22	<p><b>Visual Amenity and Lighting</b></p> <p>The Applicant shall:</p> <p>(a) minimise visual impacts, and particularly the off-site lighting impacts, of the Surface facilities sites;</p> <p>(b) take all reasonable and feasible measures to further mitigate off-site lighting impacts from the development; and</p> <p>(c) ensure that all external lighting associated on site complies with Australian Standard AS4282 (INT) 1995 – Control of Obtrusive Effects of Outdoor Lighting, to the satisfaction of the Secretary.</p>	<b>Administrative Non - Compliance</b>	<p>The most recent lighting audit for CVC is from 2013. Prepared by Wadco May 2013.</p> <p>a) and b) The pit top area and ventilation shaft site are not dominant features of the landscape the pit top area is somewhat overshadowed by the adjacent power station. The ventilation fans were designed to maintain a relatively low profile, below the surrounding vegetation to ensure amenity and lighting impacts were minimised. Some lights have been removed, including those at the stockpile. There were no complaints to visual or lighting during the audit period.</p> <p>c) Compliance with this requirement could not be determined due to the date of the previous Visual and Lighting audit. Therefore <u>Admin - Non - Compliance</u>.</p>	<p><b>REC 14</b></p> <ul style="list-style-type: none"> <li>Complete a visual and lighting assessment against the Australian Standard AS4282 (INT) 1995 – Control of Obtrusive Effects of Outdoor Lighting.</li> </ul>
Schedule 3 Condition 27	<p><b>Rehabilitation</b></p> <p>The Applicant shall prepare a Rehabilitation Management Plan for the development, in consultation with OEH, DPI Water, WSC, LMCC, and the CCC, and to the satisfaction of the DRE. This plan must:</p> <p>(a) be submitted to the Secretary and the DRE for approval within 12 months of the date of approval of this development consent;</p> <p>(b) be prepared in accordance with any relevant DRE guideline and be consistent with the rehabilitation objectives in the EIS and in Table 7;</p> <p>(c) describe how the performance of the rehabilitation would be monitored and assessed against the objectives in Table 7;</p> <p>(d) describe the process whereby additional measures would be identified and implemented to ensure the rehabilitation objectives are achieved;</p> <p>(e) provide for detailed mine closure planning, including measures to</p>	<b>Administrative Non - Compliance</b>	<p>Evidence of Rehabilitation Management Plan. Update dated 1 March 2019. This plan appears unapproved and no evidence of this plan being sent to the DPE. Current approved Rehabilitation Management Plan is from December 2014. Evidence of letter to DPE from LakeCoal dated 28 July 2016 stating that a series of management plans would be updated in late 2016/2017. This was not completed. <u>Admin Non - Compliance</u>.</p> <p><u>Preparation:</u></p> <p>a) Outside of audit period;</p> <p>b) Covers this requirement. Note, a separate MOP has also been prepared for the site;</p> <p>c) Section 8;</p>	<p><b>REC 15</b></p> <ul style="list-style-type: none"> <li>Ensure a copy of the approved Rehabilitation Management Plan is put on the website.</li> </ul>

Schedule and Condition Number	Condition	Compliance Status	Evidence	Recommendations
	<p>minimise socio-economic effects due to mine closure, to be conducted prior to the site being placed on care and maintenance; and (f) be integrated with the other management plans required under this consent.</p> <p>The Applicant shall implement the approved management plan as approved from time to time by the Secretary.</p> <p>Note: The Rehabilitation Management Plan should address all land impacted by the development whether prior to, or following, the date of this consent.</p>		<p>d) Generally covered in Section 7; e) Section 6; f)) Linked to MOP.</p> <p><u>Implementation:</u> There is no rehabilitation onsite. Minimal surface footprint. Extraction Plans cover subsidence management. The Rehabilitation Management Plan is not on the CVC website, which makes this <u>Admin Non - Compliant</u>.</p>	
Schedule 4 Condition 1	<p><b>Subsidence</b></p> <p>The Applicant shall ensure that vertical subsidence within the High Water Mark Subsidence Barrier and within seagrass beds is limited to a maximum of 20 millimetres (mm). If at any stage predicted subsidence levels are exceeded within these areas, an ecological monitoring program shall be initiated to assess the impacts to ecological communities and threatened species and if appropriate, offsets are to be provided for any impacts detected.</p>	<b>Administrative Non - Compliance</b>	<p>This condition is outlined in the Annual Review (see Section 3.16.4 in 2018 Annual Review), however no update has been provided on whether the condition has been met. Based on this the auditor cannot determine compliance.</p>	<p><b>REC 16</b></p> <ul style="list-style-type: none"> <li>See <b>Section 5.2</b> of the Main Audit Report for Subsidence Recommendations.</li> </ul>
Schedule 4 Condition 2	<p><b>Performance Measures – Natural Environment</b></p> <p>The Applicant shall ensure that the development does not cause any exceedance of the performance measures in Table 8 to the satisfaction of the Secretary.</p>	<b>Administrative Non - Compliance</b>	<p>The subsidence performance is outlined in the Annual Reviews. There is no specific table or section addressing if the site has met these performance measures.</p> <p>Reports from 2016 to 2018 titled Seagrass Survey of Chain Valley Bay, Summerland Point, Bardens Bay and Crangan Bay, Lake Macquarie, NSW. These reports do not assess against these performance measures as the word 'negligible' is not in the report. There is no definition of negligible.</p> <p>Biodiversity Monitoring Reports do not cover these performance measures.</p> <p>Benthic monitoring reports do not specifically address these performance measures.</p> <p>Despite this there is no evidence that these performance measures have been exceeded, however the auditor is not able to determine compliance based on the information</p>	<p><b>REC 16</b></p> <ul style="list-style-type: none"> <li>See <b>Section 5.2</b> of the Main Audit Report for Subsidence Recommendations.</li> </ul>

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	<p><i>Table 8: Subsidence Impact Performance Measures – Natural and Heritage Features</i></p> <table border="1"> <tr> <td colspan="2"><b>Biodiversity</b></td> </tr> <tr> <td>Threatened species or endangered populations</td> <td>Negligible environmental consequences</td> </tr> <tr> <td>Seagrass beds</td> <td>Negligible environmental consequences including: <ul style="list-style-type: none"> <li>• negligible change in the size and distribution of seagrass beds;</li> <li>• negligible change in the functioning of seagrass beds; and</li> <li>• negligible change to the composition or distribution of seagrass species within seagrass beds.</li> </ul> </td> </tr> <tr> <td>Benthic communities</td> <td>Minor environmental consequences, including minor changes to species composition and/or distribution.</td> </tr> <tr> <td colspan="2"><b>Mine workings</b></td> </tr> <tr> <td>First workings under an approved Extraction Plan beneath any feature where performance measures in this table require negligible environmental consequences</td> <td>To remain long-term stable and non-subsiding.</td> </tr> <tr> <td>Second workings</td> <td>To be carried out only in accordance with an approved Extraction Plan.</td> </tr> </table>	<b>Biodiversity</b>		Threatened species or endangered populations	Negligible environmental consequences	Seagrass beds	Negligible environmental consequences including: <ul style="list-style-type: none"> <li>• negligible change in the size and distribution of seagrass beds;</li> <li>• negligible change in the functioning of seagrass beds; and</li> <li>• negligible change to the composition or distribution of seagrass species within seagrass beds.</li> </ul>	Benthic communities	Minor environmental consequences, including minor changes to species composition and/or distribution.	<b>Mine workings</b>		First workings under an approved Extraction Plan beneath any feature where performance measures in this table require negligible environmental consequences	To remain long-term stable and non-subsiding.	Second workings	To be carried out only in accordance with an approved Extraction Plan.		provided.	
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Schedule 4 Condition 3	<p><b>Offsets</b></p> <p>If the Applicant exceeds the performance measures in Table 8 and the Secretary determines that:</p> <p>(a) it is not reasonable or feasible to remediate the impact or environmental consequence; or</p> <p>(b) the remediation measures implemented by the Applicant have failed to satisfactorily remediate the impact or environmental consequence;</p> <p>then the Applicant shall provide a suitable offset to compensate for the impact or environmental consequence to the satisfaction of the Secretary.</p> <p>Note: Any offset required under this condition must be proportionate with the significance of the impact or environmental consequence.</p>	<b>Administrative Non - Compliance</b>	<p>There is no specific assessment against subsidence criteria in the Annual Review, therefore we cannot determine compliance.</p> <p>The 2017 Annual Review stated there was an exceedance of predicted subsidence values over the MW7-12 mining area, but not an exceedance of the performance measures in this table.</p>	<p><b>REC 16</b></p> <ul style="list-style-type: none"> <li>• See <b>Section 5.2</b> of the Main Audit Report for Subsidence Recommendations.</li> </ul>														
Schedule 4 Condition 7	<p><b>Extraction Plan</b></p> <p>The Applicant shall prepare an Extraction Plan for all second workings on site, to the satisfaction of the Secretary. Each Extraction Plan must:</p> <p>(h) include a Benthic Communities Management Plan, which has been prepared in consultation with OEH, LMCC, and DPI Fisheries, which provides for the management of the potential impacts and/or</p>	<b>Administrative Non - Compliance</b>	<p><u>Preparation:</u></p> <p>Evidence of Benthic Communities Management Plans in EP 1, 3 and 4. Overall Extraction Plan and management plans have been approved by the DPE. No Benthic Communities Management Plan for EP 2 (Modification to EP 1). Plan updated for each EP. The Plans cover the requirements of the</p>	<p><b>REC 16</b></p> <ul style="list-style-type: none"> <li>• See Section 5.2 of the Main Audit Report for Subsidence Recommendations.</li> </ul>														

Schedule and Condition Number	Condition	Compliance Status	Evidence	Recommendations
	<p>environmental consequences of the proposed second workings on benthic communities, and which includes:</p> <ul style="list-style-type: none"> <li>surveys of the lake bed to enable contours to be produced and changes in depth following subsidence to be accurately measured;</li> <li>benthic species surveys within the area subject to second workings, as well as control sites outside the area subject to second workings (at similar depths) to establish baseline data on species number and composition within the communities;</li> <li>a program of ongoing seasonal monitoring of benthic species in both control and impact sites;</li> <li>development of a model to predict likely impact of increased depth and associated subsidence impacts and effects, including but not limited to light reduction and sediment disturbance, on benthic species number and benthic communities composition, incorporating the monitoring and survey data collected; and</li> <li>updating the model every 2 years using the most recent monitoring and survey data;</li> </ul>		<p>sub conditions. Evidence of consultation included in management plans.</p> <p><u>Implementation:</u> Evidence of bi-annual benthic communities monitoring during the Audit period. Reports are prepared every six months except no evidence of September 2018 report provided to SLR. Reports prepared by John and Emma Laxton. Results are also summarised in the Annual Review.</p> <p>There is no definition of what a 'minor' impact is in the Benthic Communities Management Plan or the bi-annual monitoring reports, with this being a subsidence performance criteria in Schedule 4 Condition 2.</p> <p>- Minor environmental consequences including minor changes to species composition of distribution.</p> <p>There is no definitive guide as to what constitutes reporting of an incident or non - compliance ie. 'What is greater than minor?' See Section 6 of May 2018 Benthic Communities Management Plan. As there is little interpretation of results against subsidence performance measures this is a <u>Admin Non - Compliance</u>.</p> <p>The Extraction Plan - EP3 (Appendix 1) outlines a Trigger Action Response Plan (TARP). It has triggers relating to statistical change in benthic communities. eg. Trigger Level 1 = ANOVA/ANOSIM level is approaching 5%. There is no discussion in the bi-annual reports about how the site is tracking against those triggers.</p>	
Schedule 5 Condition 1	<p><b>Notification of Landowners</b></p> <p>As soon as practicable after obtaining monitoring results showing:</p> <p>(a) an exceedance of any relevant criteria in Schedule 3, the Applicant shall notify affected landowners in writing of the exceedance, and provide regular monitoring results to each affected landowner until</p>	<b>Administrative Non - Compliance</b>	<p>a) 2018 - Short term PM<sub>10</sub> <u>non - compliances</u> on 3 April 2018, 18 July 2018 and 4 December 2018. For 2018 there was evidence provided to SLR through correspondence with EPA that these dust events were regional. There was however no evidence provided of contact with 'affected landowners'</p>	<p><b>REC 17</b></p> <ul style="list-style-type: none"> <li>Define who are potentially 'affected landowners' in the Air Quality Management Plan</li> </ul>

Schedule and Condition Number	Condition	Compliance Status	Evidence	Recommendations
	the development is again complying with the relevant criteria; and (b) an exceedance of any relevant air quality criteria in Schedule 3, the Applicant shall send a copy of the NSW Health fact sheet entitled "Mine Dust and You" (as may be updated from time to time) to the affected landowners and/or existing tenants of the land (including the tenants of any mine-owned land).		<p>(Admin Non - Compliance).</p> <p>2017 - Noise <u>non - compliance</u> in 2017 (24 October 2017 at ATN007 (Summerland Point). Evidence of report to the DPE on 8 November 2017. No evidence of notifying 'affected landowner/s'.</p> <p>2016 - Exceedance of daily discharge limit at LDP1 on January 2016 as a result of heavy rainfall (SLR believes no affected landowners, therefore no notification required).</p> <p>Exceedance of night time LA1 Minute criteria at two residential receivers during Q2 2016 monitoring.</p> <p>b) No evidence that the 'Mine Dust and You' fact sheet was provided for 2018 dust exceedances for 'affected landowners'. However as these events were proven to be regional, the auditors do not believe this is required for the 2018 exceedances.</p>	<ul style="list-style-type: none"> <li>Affected landowners should be contacted when there is a <u>non - compliance</u> relating to dust or noise. This should be completed even if it is a regional dust event as Delta Coal are still recording it as a <u>non - compliance</u> in the Annual Review.</li> </ul>
Schedule 6 Condition 1	<p><b>Environmental Management Strategy</b></p> <p>The Applicant shall prepare an Environmental Management Strategy for the development to the satisfaction of the Secretary. This strategy must:</p> <p>(a) be submitted to the Secretary for approval within 7 months of the date of this consent;</p> <p>(b) provide the strategic framework for environmental management of the development;</p> <p>(c) identify the statutory approvals that apply to the development;</p> <p>(d) describe the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the development;</p> <p>(e) describe the procedures that would be implemented to:</p> <ul style="list-style-type: none"> <li>keep the local community and relevant agencies informed about the operation and environmental performance of the development;</li> <li>receive, handle, respond to, and record complaints;</li> <li>resolve any disputes that may arise during the course of the development;</li> </ul>	Administrative Non - Compliance	<p>EMS Document is dated 12 October 2012. The EMS was approved by DP&amp;E with a letter dated 6/11/12. Evidence of letter to DPE from LakeCoal dated 28 July 2016 stating that a series of management plans would be updated in late 2016/2017. This was not completed. <u>Admin Non - Compliance</u>.</p> <p>No evidence that the EMS was updated following the last audit or other modifications.</p> <p><u>Preparation:</u></p> <p>a) - NA as outside audit period;</p> <p>b) Framework provided as part of document;</p> <p>c) Approvals are listed but are out of date;</p> <p>d) Section 9.5;</p> <p>e) Covered in Several Sections 8-11; and</p> <p>f) Plans listed in Section 9.</p>	<p><b>REC 18</b></p> <ul style="list-style-type: none"> <li>Prepare a cross referencing table outlining where sub conditions have been covered.</li> <li>Ensure plans are reviewed as per Schedule 6 Condition 5.</li> <li>Include Schedule 5 Condition 2 requirement in the EMS to notify landowners of exceedances 'as soon as practical'. Define a time period for as soon as practical.</li> </ul>

Schedule and Condition Number	Condition	Compliance Status	Evidence	Recommendations
	<ul style="list-style-type: none"> <li>respond to any non - compliance;</li> <li>respond to emergencies; and</li> </ul> (f) include: <ul style="list-style-type: none"> <li>copies of any strategies, plans and programs approved under the conditions of this consent; and</li> <li>a clear plan depicting all the monitoring required to be carried out under the conditions of this consent.</li> </ul> <p>The Applicant shall implement the approved management strategy as approved from time to time by the Secretary.</p>		<p><u>Implementation:</u></p> <p>There is evidence of complaints and incident management. No evidence of landowners being contacted for dust or noise exceedances. Non complaint for implementation (<u>Admin Non - Compliance</u>).</p> <p>The EMS is supposed to be reviewed every three years. Last review was 2012, therefore <u>Admin Non - Compliance</u>.</p>	
Schedule 6 Condition 2	<p><b>Adaptive Management</b></p> <p>The Applicant must assess and manage development-related risks to ensure that there are no exceedances of the criteria and/or performance measures in Schedules 3 and 4. Any exceedance of these criteria and/or performance measures constitutes a breach of this consent and may be subject to penalty or offence provisions under the EP&amp;A Act or EP&amp;A Regulation.</p> <p>Where any exceedance of these criteria and/or performance measures has occurred, the Applicant must, at the earliest opportunity:</p> <p>(a) take all reasonable and feasible steps to ensure that the exceedance ceases and does not recur;</p> <p>(b) consider all reasonable and feasible options for remediation (where relevant) and submit a report to the Department describing those options and any preferred remediation measures or other course of action; and</p> <p>(c) implement remediation measures as directed by the Secretary, to the satisfaction of the Secretary.</p>	Non-Compliant (Low Risk)	<p>There have been some exceedances of criteria during the audit period.</p> <p>a) Exceedances noted for air (regional dust), noise and a discharge volume issue during the audit period. Also <u>Non - Compliance</u> relating to subsidence which is outlined in the 2017 Annual Review. Evidence of exceedance/incident reports provided;</p> <p>b) Incident reports submitted to the DPE, however some reports have been well after the incident or non - compliance occurred;</p> <p>c) Remedial measures - additional subsidence modelling completed following MW7-12 subsidence exceedance.</p> <p>Exceedances have generally been investigated with no further recommendations.</p>	Nil recommendation.
Schedule 6 Condition 4	<p><b>Annual Review</b></p> <p>By the end of March each year, or other timing as may be agreed by the Secretary, the Applicant shall review the environmental performance of the development to the satisfaction of the Secretary. This review must:</p> <p>(a) describe the development (including any rehabilitation) that was</p>	Administrative Non - Compliance	<p>The 2016, 2017 and 2018 Annual Reviews were reviewed as part of the IEA.</p> <p>a) Section 1 and 2;</p> <p>b) Section 3. Some sections do not report against all Development Consent criteria eg. subsidence;</p> <p>c) Section 7 - however this is different to the Annual Review</p>	<p><b>REC 19</b></p> <ul style="list-style-type: none"> <li>The Annual Reviews are set out differently to the DPE Annual Review Guidelines (2015). Ensure table of contents matches the guidelines.</li> </ul>

Schedule and Condition Number	Condition	Compliance Status	Evidence	Recommendations
	<p>carried out in the past calendar year, and the development that is proposed to be carried out over the current calendar year;</p> <p>(b) include a comprehensive review of the monitoring results and complaints records of the development over the past calendar year, which includes a comparison of these results against the:</p> <ul style="list-style-type: none"> <li>• relevant statutory requirements, limits or performance measures/criteria;</li> <li>• requirements of any plan or program required under this consent;</li> <li>• monitoring results of previous years; and</li> <li>• relevant predictions in the documents listed in condition 2 of Schedule 2; <p>(c) identify any non - compliance over the past calendar year, and describe what actions were (or are being) taken to ensure compliance;</p> <p>(d) identify any trends in the monitoring data over the life of the development;</p> <p>(e) identify any discrepancies between the predicted and actual impacts of the development, and analyse the potential cause of any significant discrepancies; and</p> <p>(f) describe what measures will be implemented over the current financial year to improve the environmental performance of the development.</p> </li></ul>		<p>guidelines;</p> <p>d) Trends covered for water management and air quality;</p> <p>e) Limited information on this condition in the Annual Reviews;</p> <p>f) Section 8;</p> <p>The Annual Reviews have not been prepared to cover the current Annual Review Guidelines. See link:</p> <p><a href="https://www.planning.nsw.gov.au/Policy-and-Legislation/Mining-and-Resources/~/_/media/3AA21D35168042FE813DD0FB92E00E58.ashx">https://www.planning.nsw.gov.au/Policy-and-Legislation/Mining-and-Resources/~/_/media/3AA21D35168042FE813DD0FB92E00E58.ashx</a></p> <p>Therefore <u>Admin Non - Compliance</u>.</p>	<ul style="list-style-type: none"> <li>• Ensure transport records from this Audit period (January 2016) onwards are recorded on the website. This could be appended to the Annual Review summarising the weekly transport.</li> <li>• Include the biodiversity monitoring reports as appendices to the Annual Review.</li> <li>• See Section 5.2 of the Main Audit Report for Subsidence Recommendations.</li> <li>• Include an update on Audit Action Plan.</li> </ul>
Schedule 6 Condition 5	<p><b>Revision of Strategies, Plans and Programs</b></p> <p>Within 3 months of:</p> <p>(a) the submission of an annual review under Condition 4 above;</p> <p>(b) the submission of an incident report under Condition 7 below;</p> <p>(c) the submission of an audit report under Condition 9 below; or</p> <p>(d) any modification to the conditions of this consent, (unless the conditions require otherwise),</p> <p>the Applicant shall review, and if necessary revise, the strategies, plans, and programs required under this consent, to the satisfaction of the Secretary. Where this review leads to revisions in any such document, then within 4 weeks of the review the revised document must be submitted for the approval of the Secretary.</p>	Administrative Non - compliance	This timing has not been met. Several of the management plans were not updated since the previous audit.	<p><b>REC 20</b></p> <ul style="list-style-type: none"> <li>• Include statement in future Annual Reviews stating that Management Plans have been reviewed and state which management plans will or will not be updated within 3 months.</li> <li>• Develop and implement a plan to update CVC's Strategies, Plans and Programs.</li> </ul>

Schedule and Condition Number	Condition	Compliance Status	Evidence	Recommendations
	Note: This is to ensure the strategies, plans and programs are updated on a regular basis, and incorporate any recommended measures to improve the environmental performance of the development.			
Schedule 6 Condition 7	The Applicant shall immediately notify the Secretary and any other relevant agencies of any incident that has caused, or threatens to cause, material harm to the environment. For any other incident associated with the development, the Applicant shall notify the Secretary and any other relevant agencies as soon as practicable after the Applicant becomes aware of the incident. Within 7 days of the date of the incident, the Applicant shall provide the Secretary and any relevant agencies with a detailed report on the incident, and such further reports as may be requested.	Administrative Non - compliance	<p>Evidence of incident notification in 'Incident Management' folder provided to SLR. Evidence provided in Annual Reviews.</p> <p>No evidence of any incident causing material harm requiring immediate notification.</p> <p>Evidence of notification to Secretary and EPA for dust incidents in 2018. One incident occurred on 18 July 2018, with the site finding this non compliance on 1 August 2018. The exceedance was then reported on 10 August 2018 (greater than 7 days - <u>Admin Non - Compliance</u>). It appears that short term dust exceedances are only determined during the monthly data download, with reporting sometimes occurring two to three weeks after an incident occurs. The two other dust exceedances in 2018 appear to have been reported as per this condition.</p> <p>2017 - Noise non - compliance in 2017 (24 October 2017 at ATN007 (Summerland Point). Evidence of report to the DPE on 8 November 2017. Greater than 7 days - <u>Admin Non - Compliance</u>.</p> <p>There was a non - compliance relating to an exceedance of predicted subsidence. The non - compliance was determined based on bathymetric surveys (October 2017) but was not reported (as per Exceedance Report) until 13 December 2017.</p>	<p>As per <b>REC 9</b></p> <ul style="list-style-type: none"> <li>Update the Air Quality Management Plan following this audit.</li> <li>Improve data capture for PM<sub>10</sub>. Review possibilities of backup power supply.</li> <li>Ensure issues with data capture are reported in Section 1 and 7 of the Annual Review.</li> <li>Ensure TEOM is setup with alarms/notifications for when results are approaching or have exceeded the short term criterion for particulate matter. This will ensure exceedances are immediately detected and reported as soon as possible to the EPA and DPE.</li> </ul> <p><b>REC 21</b></p> <ul style="list-style-type: none"> <li>Ensure exceedances and other incidents are reported as per this condition (Detailed Incident Report within 7 days).</li> </ul>
Schedule 6 Condition 8	<b>Regular Reporting</b> The Applicant shall provide regular reporting on the environmental performance of the development on its website, in accordance with the reporting arrangements in any plans or programs approved under the conditions of this consent.	Administrative Non - compliance	<p>Evidence of reporting on the Lake Coal and Delta Coal website.</p> <p>Note Schedule 3 Condition 1 outlines requirements to report transport.</p>	<p><b>REC 22</b></p> <ul style="list-style-type: none"> <li>Ensure website reporting meets the conditions of the Development Consent.</li> </ul>

Schedule and Condition Number	Condition	Compliance Status	Evidence	Recommendations
			<p>The Applicant shall:</p> <p>(a) keep accurate records of the amount of coal transported from the site (on a weekly basis); and</p> <p>(b) make these records publicly available on its website at the end of each calendar quarter.</p> <p>Admin Non - Compliance: This has not been completed. No EIS's shown on the LakeCoal or Delta Coal website.</p> <p>Information now available on the Delta Coal website. However no management plans and EIS's are on the website. No Rehabilitation Management Plan was on the website. No noise monitoring reports on website.</p>	
Schedule 6 Condition 10	<b>Independent Environmental Audit</b> Within 6 weeks of the completion of this audit, or as otherwise agreed by the Secretary, the Applicant shall submit a copy of the audit report to the Secretary, together with its response to any recommendations contained in the audit report.	Administrative Non - compliance	<p>No evidence has been provided of the submission of the previous audit report.</p> <p>The submission timing for this audit has been extended by the DPE until 25 June 2019.</p>	Nil recommendation
Schedule 6 Condition 11	<p>The Applicant shall:</p> <p>(a) make copies of the following publicly available on its website:</p> <ul style="list-style-type: none"> <li>• the EIS;</li> <li>• all current statutory approvals for the development;</li> <li>• all approved strategies, plans and programs required under the conditions of this consent;</li> <li>• a comprehensive summary of the monitoring results of the development, which have been reported in accordance with the various plans and programs approved under the conditions of this consent;</li> <li>• a complaints register (updated monthly);</li> <li>• minutes of CCC meetings;</li> <li>• the Annual Reviews of the development;</li> </ul>	Administrative Non - compliance	<p>a) and b) Copies of this information is still available on the Lakecoal website. With the exception of EIS's. Admin Non - Compliant.</p> <p>Information now available on the Delta Coal website. However no management plans and EIS's are on the website. No Rehabilitation Management Plan on the website. No noise monitoring reports on website.</p>	<p><b>REC 23</b></p> <ul style="list-style-type: none"> <li>• Ensure all relevant information is brought across to the Delta Coal website.</li> </ul>

Schedule and Condition Number	Condition	Compliance Status	Evidence	Recommendations
	<ul style="list-style-type: none"> <li>any Independent Environmental Audit, and any other audit, and the Applicant's response to the recommendations in these audits;</li> <li>any other matter required by the Secretary; and</li> </ul> (b) keep this information up-to-date, to the satisfaction of the Secretary.			
<b>SSD 5465 Statement of Commitments</b>				
Surface water SOC's	<ul style="list-style-type: none"> <li>develop a program to monitor creek line channel stability and the health of riparian vegetation within Swindles Creek. Monitoring will be undertaken in accordance with Section 8.5.2 of the Surface Water Impact Assessment (EIS Appendix E) and incorporated into the Colliery's WMP or Biodiversity Management Plan;</li> </ul>	Administrative Non - compliance	Evidence of the Water Management Plan. Evidence of surface water monitoring, including results in Annual Reviews. Admin Non - Compliant: Evidence of photos provided of channel stability monitoring of Swindles Creek, however it does not appear to have been completed in accordance with Section 5.4 of the Water Management Plan. No evidence of: <ul style="list-style-type: none"> <li>Documenting general observations of water quantity and quality;</li> <li>Documenting locations and dimensions of significant erosive or depositional features;</li> <li>Documenting evidence of erosion and exposed soils;</li> <li>Documenting general indicators of stream health, including abundance of flora and fauna; and</li> <li>Review and comparison of results to previous rounds of monitoring.</li> </ul> There is also no timing proposed for inspections in the Water Management Plan.	<b>REC 24</b> <ul style="list-style-type: none"> <li>A separate report should be completed for Stream Health Channel Flow and Riparian Vegetation Monitoring. This should compare results from previous inspections. Information to be included in the Annual Review.</li> </ul>

Schedule and Condition Number	Condition	Compliance Status	Evidence	Recommendations
Noise SOC's	<p>Management and monitoring of noise will continue to be undertaken in accordance with the Colliery's NMP, which will be reviewed and updated as required to include the commitments made below. LakeCoal will:</p> <ul style="list-style-type: none"> <li>• continue attended compliance monitoring on site which will be used to identify potential hot spots and primary noise sources;</li> <li>• continue real-time noise monitoring alerts to site personnel to enable implementation of any required rapid noise management initiatives;</li> <li>• manage potential non - compliance through a noise complaint handling and response system, including the identification of responsible sources to enable targeted remedial action;</li> <li>• assess if further noise mitigation options for the ventilation fans are reasonable and feasible following the receipt of attenuation proposals; and</li> <li>• discuss potential management measures or agreement options with the landowner at 275 Cams Boulevard, following receipt of proposals from acoustics specialists.</li> </ul> <p>In addition to the above, LakeCoal is committed to the progressive implementation of feasible measures to target long term noise goals which are designed to reduce noise emissions from the Colliery. Long term options for investigation include:</p> <ul style="list-style-type: none"> <li>• modification to belt/movement alarms;</li> <li>• investigation of surface conveyer and coal preparation equipment, to determine if noise reductions are possible;</li> <li>• identifying sound attenuation options for the surface bulldozer and front end loader;</li> <li>• strategic placement of acoustic barriers;</li> <li>• attenuation for the surface screener/shaker;</li> <li>• installation of quiet rollers for surface conveyor belts;</li> <li>• acoustic treatments around compressors; and</li> <li>• the use of a conveyor stacker for product coal stockpiling.</li> </ul>	Administrative Non - compliance	<p>No evidence of review or update of Noise Management Plan during audit period. Admin Non - Compliance.</p> <p>Real time noise monitoring system removed during the audit period and has not been replaced.</p> <p>No evidence of progressive noise mitigation implementation</p>	<p>As per <b>REC 7</b></p> <ul style="list-style-type: none"> <li>• Continue investigations of any noise issues and, where practicable, implement reasonable and feasible mitigation measures.</li> <li>• Ensure accurate/consistent monitoring results are presented in Annual Reviews.</li> </ul> <p>As per <b>REC 8</b></p> <ul style="list-style-type: none"> <li>• The real - time noise monitor should be re-established for the site. Liaise with the DPE regarding the best location as the majority of noise complaints have resulted from Mannering Colliery operations, not CVC. Mannering Colliery is also owned by Delta Coal. Update the Noise Management Plan.</li> </ul>
Subsidence SOC's	<p>Management and monitoring of subsidence will continue to be undertaken in accordance with the Colliery's SMP, which will be</p>	Non-Compliant	<p>Subsidence is managed under Extraction Plans, not SMP's. SMP's cover past mining areas.</p>	<p>As per <b>REC 16</b></p>

Schedule and Condition Number	Condition	Compliance Status	Evidence	Recommendations
	<p>reviewed and updated as required to include the commitments made below. LakeCoal will:</p> <ul style="list-style-type: none"> <li>• provide raw subsidence survey data to OEH within 7 days of completion;</li> <li>• undertake annual bathymetric surveys of the lake bed to determine actual subsidence and undertake a comparison with predicted levels. Should measured subsidence significantly exceed predicted levels, LakeCoal will review future panel designs to limit future impacts to acceptable levels;</li> <li>• install a new foreshore survey line above the first and second workings panels where the underground linkage passes beneath them and possibly extending from the foreshore to the point of connection with the MC workings;</li> <li>• inspect existing conditions in the Fassifern Seam and undertake geotechnical and geological mapping in the roadways proximate to the proposed linkage in both CVC and MC workings;</li> <li>• complete representative borehole core drilling and sampling of the Fassifern Seam floor at the start and finishing ends of the underground linkage and where the headings pass beneath the SPB. Development below the foreshore will be limited to two headings only until floor conditions can be confirmed;</li> <li>• develop infrastructure monitoring and management plans in consultation with infrastructure owners and other relevant stakeholders;</li> <li>• re-establish and re-survey Survey Line 24;</li> <li>• install a suitable survey line at the starting end above Great Northern Seam first workings to provide early warning monitoring data for the tension towers and switchyard structures;</li> <li>• monitor tension and suspension towers and switchyard conductor suspension frames directly above the panels, foreshore and adjacent inlet canal wall;</li> <li>• ensure that a monitoring and management plan for the MP01 sewer rising main is in place prior to commencement of mining that may impact Council's infrastructure; and</li> <li>• complete an annual subsidence report and make this report publicly</li> </ul>	<p>(Low Risk)</p>	<p>Separate Extraction Plan requirements including monitoring and reporting.</p> <p>Some of the aspects in this condition have not been triggered, however due to a lack of a defined subsidence report it has been difficult for SLR to determine which conditions are not triggered and which are relevant.</p> <p>Subsidence impacts are reported in the Annual Review, however it would be preferable if a standalone subsidence report was prepared. There is not a separate Annual Subsidence Report, therefore Admin Non - Compliant.</p> <p>No evidence of raw survey result being provided to OEH within 7 days of completion. Admin Non - Compliant.</p> <p>No evidence provided regarding - "complete representative borehole core drilling and sampling of the Fassifern Seam floor at the start and finishing ends of the underground linkage and where the headings pass beneath the SPB"</p>	<ul style="list-style-type: none"> <li>• See Section 5.2 of the Main Audit Report for Subsidence Recommendations.</li> </ul>

Schedule and Condition Number	Condition	Compliance Status	Evidence	Recommendations
	available on the Colliery's website.			
Heritage SOC's	<p>Management and monitoring of heritage will continue to be undertaken in accordance with the Colliery's HMP, which will be reviewed and updated as required to include the commitments made below. LakeCoal will:</p> <ul style="list-style-type: none"> <li>• review and revise the HMP to remove site #45-7-0154 and incorporate any other changes as a result of the proposed modification;</li> <li>• update the HMP following approval of the Proposal to include the extended area to which it relates;</li> <li>• ensure that should unanticipated Aboriginal or historic heritage artefacts be found during dam embankment and diversion works, work will cease and the site assessed by an archaeologist; and</li> <li>• ensure that in the unlikely event that skeletal remains are found during dam embankment and diversion works, work will cease immediately in the area and the NSW Police Coroner called to determine if the material is of Aboriginal origin. OEH and relevant Aboriginal community stakeholders will be notified if the remains are positively identified as being of Aboriginal origin to determine their appropriate management prior to works recommencing.</li> </ul>	Administrative Non-compliance	<p>The most recent date of the Heritage Management Plan is 23 June 2014. The highlighted condition is from MOD 2 (December 2015). Site 45-7-0154 is still included the document.</p> <p>Other aspects of this statement of commitments have been met.</p>	<p>As per <b>REC 13</b></p> <ul style="list-style-type: none"> <li>• Update the Heritage Management Plan, including the removal of Site #45-7-0154.</li> </ul>
<b>EPL 1770</b>				
L3.1	<p><b>Volume and Mass Limits</b></p> <p>For each discharge point or utilisation area specified below (by a point number), the volume/mass of:</p> <p>a) liquids discharged to water; or;</p> <p>b) solids or liquids applied to the area;</p> <p>must not exceed the volume/mass limit specified for that discharge point or area.</p>	Non-Compliant (Low Risk)	<p>Discharge volumes have been recorded at site.</p> <p>No exceedances in 2017 or 2018 Annual Reviews. Based on information provided by Environment and Community Co-ordinator no exceedances for 2019.</p> <p>Non-compliant: There were two exceedances of the daily volumetric limit (12,161 kL) during the 2016 which were related to significant rainfall events. These exceedances occurred on the:</p> <ol style="list-style-type: none"> <li>1. 6 January 2016 – A total of 14,152 kL was discharged</li> <li>2. 5 June 2016 – A total of 16,391 kL was discharged.</li> </ol> <p>No further recommendations.</p>	Nil recommendations.

Schedule and Condition Number	Condition	Compliance Status	Evidence	Recommendations
L3.2	The volumetric daily discharge limit for the premises is the combined discharge measured at EPA discharge points 1 and 27 and must not exceed 12161 kilolitres per day.	Non – Compliant (Low Risk)	There were two exceedances of the daily volumetric limit (12,161 kL) during 2016 which were related to significant rainfall events. These exceedances occurred on the: 1. 6 January 2016 – A total of 14,152 kL was discharged. 2. 5 June 2016 – A total of 16,391 kL was discharged.  No further recommendations.	Nil recommendations.
L5.1	<b>Noise Limits</b> Noise generated at the premises that is measured at each noise monitoring point established under this licence must not exceed the noise levels specified in Column 4 of the table below for that point during the corresponding time periods specified in Column 1 when measured using the corresponding measurement parameters listed in Column 2.  <i>See Appendix 2 for full list of criteria</i>	Non – Compliant (Low Risk)	- Exceedance of LA1(1minute) criteria of 7dB at Point 14 in June 2016. Documented in 2016 Annual Review and Quarterly Monitoring report (Global Acoustics report 16217_R01). Corrective actions undertaken and documented in incident report dated 05/07/2016.  - 1dB exceedance of LAeq(15minute) criteria at Point 23 during the daytime period in October 2017 (Q4). Documented in 2017 Annual Review. However it is noted that a discrepancy between+E52 monitoring results presented in the 2017 Annual Review and Q4 Monitoring report (Global Acoustics Report 17424_R01) where no exceedance is recorded.  - No exceedances recorded during 2018 period.  - No evidence obtained on performance during the 2019 audit period.	Nil recommendations.
L5.7	To determine compliance: 1. With the LAeq(15 min) noise limits in condition L5.1 and condition L5.2, the licensee must locate noise monitoring equipment;  (a) within 30 metres of a dwelling facade (but not closer than 3 metres) where any dwelling on the property is situated more than 30 metres from the property boundary that is closest to the premises; (b) approximately on the boundary where any dwelling is situated 30 metres or less from the property boundary that is closest to the premises, or, where applicable, (c) within approximately 50 metres if the boundary of a national park	Administrative Non - compliance	It is noted that monitoring for LA1(1minute) noise levels is not completed at 1m from a façade - however such noise monitoring is generally not practical due to disturbance to residents during the sensitive night-time period.	Nil recommendations.

Schedule and Condition Number	Condition	Compliance Status	Evidence	Recommendations
	<p>or nature reserve.</p> <p>2. With the LA1(1 minute) noise limits in condition L5.1 and L5.2, the noise monitoring equipment must be located within 1 metre of a dwelling facade.</p> <p>3. With the noise limits in condition L5.1 and condition L5.2, the noise monitoring equipment must be located;</p> <p>(a) at the most affected point at a location where there is no dwelling at the location, or</p> <p>(b) at the most affected point within an area at a location prescribed by conditions L5.7 1(a) or L5.7 1(b).</p>			
O5.1	<p>The licensee must maintain, and implement as necessary, a current emergency response plan for the premises. The licensee must keep the emergency response plan on the premises at all times. The emergency response plan must document systems and procedures to deal with all types of incidents (e.g. spills, explosions or fire) that may occur at the premises or that may be associated with activities that occur at the premises and which are likely to cause harm to the environment. If a current emergency response plan does not exist at the date on which this condition is attached to the licence, the licensee must develop an emergency response plan within three months of that date.</p>	Administrative Non - compliance	<p>A PIRMP has been prepared for the site. Latest dated 21 September 2018.</p> <p>Evidence of testing PIRMP - including details of tests from 21 December 2018.</p> <p>Although there were some incidents, it does not appear any incident required the PIRMP to be enacted.</p> <p>* PIRMP is kept on-site.</p> <p>* Observation: The PIRMP is labelled LakeCoal, has persons listed in it who are no longer at site, does not have email details for government contacts, and figures do not clearly show the location of hazardous substances and where pollution response equipment is stored.</p>	<p><b>REC 25</b></p> <p>Update the PIRMP to include:</p> <ul style="list-style-type: none"> <li>• Current site contacts;</li> <li>• Email details for government contacts; and</li> <li>• Figures that clearly show the location of hazardous substances and where pollution response equipment is stored.</li> </ul>
O7.2	<p><b>Sewage Treatment</b></p> <p>The licensee is responsible for the correct operation of the sewage treatment system(s) on their premises.</p>	Administrative Non - compliance	<p>Sewage system - 2 systems. Envirocycle for offices and second system is a septic system that handles the bathroom and toilet facilities. This water is treated onsite.</p> <p>There is limited detail in the Water Management Plan regarding the sewage water management system. Garden Wastemaster Australia complete servicing. Evidence of one email from 6 March 2019 organising servicing. However no evidence of servicing provided. Evidence of testing of wastewater through lab results</p>	<p><b>As per REC 10</b></p> <ul style="list-style-type: none"> <li>• Include additional detail in the Water Management Plan regarding sewage management.</li> <li>• Include an update of sewage system during the audit period in the Annual Review.</li> <li>• Ensure servicing is completed and</li> </ul>

Schedule and Condition Number	Condition	Compliance Status	Evidence	Recommendations
				records kept onsite.
O7.3	<b>Sewage Treatment</b> Correct operation involves regular supervision and system maintenance. The licensee must be aware of the system requirements and must ensure that the necessary service contracts are in place.	Administrative Non-compliance	Same as L7.2	As per REC 10
O7.4	<b>Sewage Treatment</b> The sewage treatment system(s) must be serviced by a suitably qualified and experienced waste water technician at least once each quarterly period and a minimum of four times per year.	Administrative Non-compliance	Same as L7.2	As per REC 10
O7.5	<b>Sewage Treatment</b> The licensee must record each inspection and any actions required or recommended by the technician; including all results from tests performed on the sewage treatment system(s) by the technician as defined in Condition O7.4.	Administrative Non-compliance	Same as L7.2	As per REC 10
M2.1	<b>Monitoring and Recording</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:	Administrative Non-compliance	There has been data capture issues identified in Annual Reviews for PM <sub>10</sub> . <u>Admin Non - Compliance.</u>	As per REC 9 <ul style="list-style-type: none"> <li>Update the Air Quality Management Plan following this audit.</li> <li>Improve data capture for PM<sub>10</sub>. Review possibilities of backup power supply.</li> <li>Ensure issues with data capture are reported in Section 1 and 7 of the Annual Review.</li> <li>Ensure TEOM is setup with alarms/notifications for when results are approaching or have exceeded the short term criterion for particulate matter. This will ensure exceedances are immediately detected and reported as soon as possible to the EPA and DPE.</li> </ul>
M2.2	Air Monitoring Requirements	Administrative	There were some issues with data capture with this outlined	As per REC 9

Schedule and Condition Number	Condition	Compliance Status	Evidence	Recommendations								
	<p>POINT 25</p> <table border="1"> <thead> <tr> <th>Pollutant</th> <th>Units of measure</th> <th>Frequency</th> <th>Sampling Method</th> </tr> </thead> <tbody> <tr> <td>Particulate matter</td> <td>micrograms per cubic metre</td> <td>Continuous</td> <td>AM-22</td> </tr> </tbody> </table>	Pollutant	Units of measure	Frequency	Sampling Method	Particulate matter	micrograms per cubic metre	Continuous	AM-22	Non - compliance	in Annual Reviews. See Schedule 3 Condition 11 of the Development Consent.	
Pollutant	Units of measure	Frequency	Sampling Method									
Particulate matter	micrograms per cubic metre	Continuous	AM-22									
M4.1	<p>To determine compliance with condition L5.1, attended noise monitoring must be undertaken in accordance with conditions L5.7 and L5.8, and</p> <p>(a) at each one of the locations listed in condition L5.1;</p> <p>(b) occur quarterly within the reporting period of the Environment Protection Licence with at least 2 months between monitoring periods;</p> <p>(c) occur during each day, evening and night period as defined in the NSW Industrial Noise Policy (EPA 2000) for a minimum of 15 minutes for three of the quarters;</p> <p>(d) the night time 15 minute attended monitoring in accordance with c) must be undertaken between the hours of 1am and 4am;</p> <p>(e) the night time LA1 (1 min) attended monitoring in accordance with c) must be undertaken between the hours of 1am and 4am;</p> <p>(f) one quarterly monitoring must occur during each day, evening and night period as defined in the NSW Industrial Noise Policy (EPA 2000) for a minimum of 1.5 hours during the day; 30 minutes during the evening; and 1 hours during the night, and</p> <p>(g) each quarterly monitoring must be undertaken on a different day(s) of the week not including Saturdays, Sundays and public holidays; and</p> <p>(h) these monitoring conditions take effect in the 2015 Reporting period.</p> <p>Note: The intention of this condition is that quarterly monitoring be undertaken at each sensitive receiver. That at each sensitive receiver monitoring is undertaken over a range of different days excluding weekends and public holidays during the reporting period so as to be representative of operating hours. That night time 15 minute attended monitoring and the LA1 (1min) monitoring for three of the quarters be undertaken at worst case being the most stable atmospheric</p>	Administrative Non - compliance		<p>As per <b>REC 7</b></p> <ul style="list-style-type: none"> <li>Continue investigations of any noise issues and, where practicable, implement reasonable and feasible mitigation measures.</li> <li>Ensure accurate/consistent monitoring results are presented in Annual Reviews.</li> </ul> <p>As per <b>REC 8</b></p> <ul style="list-style-type: none"> <li>The real - time noise monitor should be re-established for the site. Liaise with the DPE regarding the best location as the majority of noise complaints have resulted from Mannering Colliery operations, not CVC. Mannering Colliery is also owned by Delta Coal. Update the Noise Management Plan.</li> </ul>								

Schedule and Condition Number	Condition	Compliance Status	Evidence	Recommendations
	conditions and when noise would be most intrusive to sleep. All of the sensitive receivers do not have to be monitored on the same day, evening and night for sub condition f.			
M4.2	For the Annual Reporting Period ending March 2015 the EPA will accept all monitoring required by the current Department of Planning and Environment consent (usually quarterly monitoring for noise as dB(A) Leq15minutes) for compliance with noise monitoring requirements in this licence, as a single report attached to the Annual Return for the premises.	Administrative Non - compliance	No evidence of a consolidated noise report prepared for the Annual Returns. Evidence from 2015/16, but none during the audit period.	<p><b>REC 26</b></p> <ul style="list-style-type: none"> <li>For future Annual Returns a single noise monitoring report should be prepared and attached to the Annual Return.</li> </ul>
M6.2	The record must include details of the following: a) the date and time of the complaint; b) the method by which the complaint was made; c) any personal details of the complainant which were provided by the complainant or, if no such details were provided, a note to that effect; d) the nature of the complaint; e) the action taken by the licensee in relation to the complaint, including any follow-up contact with the complainant; and f) if no action was taken by the licensee, the reasons why no action was taken.	Administrative Non - compliance	<p>*Admin Non-compliant: The Complaints Register does not include the personal details of the complainant.</p> <p>* Not all complaints registered in the register included the method by which the complaint was made.</p> <p>* There are additional complaints outlined in the Annual Review compared to the Complaints Registers provided to the auditor.</p>	<p><b>REC 27</b></p> <ul style="list-style-type: none"> <li>Ensure all complaints are recorded in the internal database on site and the relevant details required under this condition are outlined in the Annual Review.</li> </ul>
M7.2	The licensee must notify the public of the complaints line telephone number and the fact that it is a complaints line so that the impacted community knows how to make a complaint.	Administrative Non - compliance	<p>*Telephone line for complaints advertised on the LakeCoal and Delta Coal websites.</p> <p>* However no evidence of notifying to the community that the complaints line exists.</p>	<p><b>REC 28</b></p> <ul style="list-style-type: none"> <li>With the new ownership an advertisement should be placed in the paper/newsletter providing a link to the Delta Coal website and outlining the complaint management details.</li> </ul>
M7.4	The licensee must notify the EPA with contact details of personnel capable of a timely response to emergencies or any other exigent circumstances. (a) the nominated contact must be available at all times. (b) contact details must include a telephone number and must be current. (c) such notification must be made within 14 days of receiving this	Administrative Non - compliance	<p>* Designated representatives of the company included in the Pollution Incident Response Plan (PIRMP), dated September 2018.</p> <p>* Admin Non-compliant: The designated representatives of the company, included in the PIRMP, are not current.</p>	<p><b>REC 29</b></p> <ul style="list-style-type: none"> <li>Update the details of designated representatives of the company in the PIRMP.</li> </ul>

Schedule and Condition Number	Condition	Compliance Status	Evidence	Recommendations
	licence.			
R1.5	The Annual Return for the reporting period must be supplied to the EPA by registered post not later than 60 days after the end of each reporting period or in the case of a transferring licence not later than 60 days after the date the transfer was granted (the 'due date').	Administrative Non - compliance	The 2017-18 Annual Return is dated 4 June 2018 and was supposed to be submitted to the EPA by 30 May 2018. From the date of the Annual Return it appears it wasn't submitted to the EPA time  The 2016-17 Annual Return was dated within the 60 days.	<b>REC 30</b>  <ul style="list-style-type: none"> <li>Ensure Annual Returns are completed as per the EPA requirements and submitted within the due date.</li> </ul>
R4.1	The licensee must submit to the EPA a noise compliance assessment report at the end of each reporting period. The report must be submitted with the Environment Protection Licence Annual Return. The report must be prepared by a suitably qualified and experienced acoustical consultant which:  (a) details the noise monitoring undertaken in accordance with condition M4; (b) assesses compliance with noise limits presented in condition L5.1 and condition 5.2; and (c) outlines any management actions taken within the monitoring period to address any exceedances of limits contained in condition L5.1 and condition L5.2.  Note: The licensee must provide the EPA with one report, but this report may be a combination of the monitoring undertaken by the licensee as part of their quarterly monitoring program as required by the Project Approval SSD-5456 and must include LA1(1min).		No evidence of a consolidated noise report prepared for the Annual Returns. Evidence from 2015/16, but none during the audit period.	<b>REC 31</b>  <ul style="list-style-type: none"> <li>Send a combined noise report for the Annual Return period to the EPA.</li> </ul>
U1.1	By 07 July 2017 the licensee must construct a pump station, rising main and other infrastructure in order to connect the sewage from Chain Valley Colliery to Wyong Shire Council's sewerage system. The construction must be undertaken by an appropriately qualified an experienced person. The Licensee must:  a) obtain the appropriate approvals and permits required for the development; b) construct option A or option B in accordance with the document	Administrative Non - compliance	The upgrade has been designed but not yet constructed.  This was supposed to be completed by 7 July 2017.	<b>REC 32</b>  <ul style="list-style-type: none"> <li>Liaise with the EPA regarding the current status of the Sewage System Project. Implement any agreed actions in terms of timing.</li> </ul>

Schedule and Condition Number	Condition	Compliance Status	Evidence	Recommendations
	<p>titled "Concept Design Report for Sewage Treatment System Upgrade Chain Valley Colliery" dated 1 February 2016 and prepared by RGH Consulting Group;</p> <p>c) include connection of sewage from the administration building to the rising main;</p> <p>c) notify the EPA in writing at hunter.region@epa.nsw.gov.au within 2 weeks of the pump station and rising main being commissioned; and</p> <p>d) provide the EPA with a report on commissioning of the pump station and rising main which details the final option constructed within 2 weeks of the pump station and rising main being commissioned.</p>			
<b>CCL 721</b>				
Condition 3.	<p><b>Mining Operations Plan</b></p> <p>(a) Mining operations must not be carried out otherwise than in accordance with:</p> <p style="padding-left: 20px;">a Mining Operations Plan (MOP) which has been approved by the Director-General of the Department of Primary Industries.</p> <p>(b) The MOP must:</p> <p style="padding-left: 20px;">i) identify areas that will be disturbed by mining operations;</p> <p style="padding-left: 20px;">ii) detail the staging of specific mining operations;</p> <p style="padding-left: 20px;">iii) identify how the mine will be managed to allow mine closure;</p> <p style="padding-left: 20px;">iv) identify how mining operations will be carried out on site in order to prevent and or minimise harm to the environment;</p> <p style="padding-left: 20px;">v) reflect the conditions of approval under:</p> <p style="padding-left: 40px;">the Environmental Planning and Assessment Act 1979</p> <p style="padding-left: 40px;">the Protection of the Environment Operations Act 1997</p> <p style="padding-left: 40px;">and any other approvals relevant to the development including the conditions of this lease; and</p> <p style="padding-left: 20px;">vi) have regard to any relevant guidelines adopted by the Director-General.</p> <p>(c) The titleholder may apply to the Director-General to amend an approved MOP at any time.</p> <p>(d) It is not a breach of this condition if:</p>	Non-Compliant (Low Risk)	<p>Two MOPs provided for this audit.</p> <p>MOP 1 - 1 April 2015 - 31 March 2018.</p> <p>MOP 2 - 1 October 2018 - 31 December 2020.</p> <p>There appears to be a gap in the MOPs between March and October 2017. There has been no evidence of the reason why there was a gap and whether the site was approved to operate without a MOP in that period. As there is no information provided this condition is non-compliant. <u>There is now an approved MOP therefore there is no further recommendation relating to this period of time.</u></p> <p>Both MOPs cover the required aspects of this condition.</p> <p><u>Implementation:</u></p> <p>No areas available for rehabilitation at site.</p>	Nil recommendation

Schedule and Condition Number	Condition	Compliance Status	Evidence	Recommendations
	<p>i) the operations constituting the breach were necessary to comply with a lawful order or direction given under the Mining Act 1992, the Environmental Planning and Assessment Act 1979, Protection of the Environment Operations Act 1997 or the Occupational Health and Safety Act 2000; and</p> <p>ii) the Director-General had been notified in writing of the terms of the order or direction prior to the operations constituting the breach being carried out.</p> <p>{e) A MOP ceases to have affect 7 years after date of approval or other such period as identified by the Director-General. An approved amendment to the MOP under condition 5 does not constitute an approval for the purpose of this paragraph unless otherwise identified by the Director-General.</p>			
Condition 5	<p><b>The EMR must:</b></p> <p>a) report against compliance with the MOP;</p> <p>b) report on progress in respect of rehabilitation completion criteria;</p> <p>c) report on the extent of compliance with regulatory requirements; and</p> <p>d) have regard to any relevant guidelines adopted by the Director-General.</p>	Administrative Non-compliance	<p>a) Admin Non-compliant: The 2016, 2017 &amp; 2018 Annual Reviews do not report against compliance with the MOP.</p> <p>b) N/A - Rehabilitation has not commenced at the site;</p> <p>c) 2016, 2017 &amp; 2018 Annual Reviews - Executive Summary &amp; Section 3; and</p> <p>d) Admin Non-compliant: 2016, 2017 and 2018 Annual Reviews not prepared in accordance with the DPE Annual Review guidelines.</p>	<p>As per <b>REC 19</b></p> <ul style="list-style-type: none"> <li>The Annual Reviews are set out differently to the DPE Annual Review Guidelines (2015). Ensure table of contents matches the guidelines.</li> <li>Ensure transport records from this Audit period (January 2016) onwards are recorded on the website. This could be appended to the Annual Review summarising the weekly transport.</li> <li>Include the biodiversity monitoring reports as appendices to the Annual Review.</li> <li>See Section 5.2 of the Main Audit Report for Subsidence Recommendations.</li> <li>Include an update on Audit Action Plan.</li> </ul>

Schedule and Condition Number	Condition	Compliance Status	Evidence	Recommendations
				<p><b>REC 33</b></p> <ul style="list-style-type: none"> <li>Report against compliance with the MOP in future Annual Reviews</li> </ul>
Condition 11	<p><b>Reports</b></p> <p>The lease holder must provide an exploration report, within a period of twenty-eight days after each anniversary of the date this lease has effect or at such other date as the Director-General may stipulate, of each year. The report must be to the satisfaction of the Director-General and contain the following:</p> <p>(a) Full particulars, including results, interpretation and conclusions, of all exploration conducted during the twelve months period;</p> <p>(b) Details of expenditure incurred in conducting that exploration;</p> <p>(c) A summary of all geological findings acquired through mining or development evaluation activities;</p> <p>(d) Particulars of exploration proposed to be conducted in the next twelve months period;</p> <p>(e) All plans, maps, sections and other data necessary to satisfactorily interpret the report.</p>	Administrative Non - compliance	<p>Evidence of submission for 2016, 2017 and 2018 Group Exploration Reports.</p> <p>LakeCoal received a PIN from the Resources Regulator on 7 November 2017 for late lodgement.</p> <p>In the version supplied to SLR there are no figures.</p>	<p><b>REC 34</b></p> <ul style="list-style-type: none"> <li>Ensure Group Exploration Reports meet the required timeframe.</li> <li>Ensure figures are included in the reports.</li> </ul>
<b>CCL 707</b>				
Condition 2 1-4	<p><u>Sub Condition 1</u></p> <p>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:-</p> <p>(a) ongoing mining operations and environmental management; and</p> <p>(b) ongoing monitoring of the project.</p> <p><u>Sub Condition 2</u></p> <p>The Plan must be prepared in accordance with the Director-General's guidelines current at the time of lodgement.</p>	Non-Compliant (Low Risk)	<p>All sub conditions are <u>non - compliant</u>.</p> <p>Two MOPs provided for this audit.</p> <p>MOP 1 - 1 April 2015 - 31 March 2018.</p> <p>MOP 2 - 1 October 2018 - 31 December 2020.</p> <p>There appears to be a gap in the MOPs between March and October 2017. There has been no evidence of the reason why there was a gap and whether the site was approved to operate without a MOP in that period. As there is no information provided this condition is <u>non - compliant</u>. There is now an approved MOP therefore there is no further recommendation relating to this period of time.</p>	Nil recommendation

Schedule and Condition Number	Condition	Compliance Status	Evidence	Recommendations
	<p>A Plan must be lodged with the Director-General:-</p> <ul style="list-style-type: none"> <li>(a) prior to the commencement of mining operations (including mining purposes);</li> <li>(b) subsequently as appropriate prior to the expiry of any current Plan; and</li> <li>(c) in accordance with any direction issued by the Director-General.</li> </ul> <p><u>Sub Condition 3</u></p> <p>A Plan must be lodged with the Director-General:-</p> <ul style="list-style-type: none"> <li>(a) prior to the commencement of mining operations (including mining purposes);</li> <li>(b) subsequently as appropriate prior to the expiry of any current Plan; and</li> <li>(c) in accordance with any direction issued by the Director-General.</li> </ul> <p>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:-</p> <p><u>Sub Condition 4</u></p> <ul style="list-style-type: none"> <li>(a) area(s) proposed to be disturbed under the Plan;</li> <li>(b) mining and rehabilitation method(s) to be used and their sequence;</li> <li>(c) areas to be used for disposal of tailings/waste;</li> <li>(d) existing and proposed surface infrastructure;</li> <li>(e) existing flora and fauna on the site;</li> <li>(f) progressive rehabilitation schedules;</li> <li>(g) areas of particular environmental, ecological and cultural sensitivity and measures to protect these areas;</li> <li>(h) water management systems (including erosion and sediment controls);</li> <li>(i) proposed resource recovery; and</li> </ul>			

Schedule and Condition Number	Condition	Compliance Status	Evidence	Recommendations
	(j) 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.			
Condition 3-2	<p>AEMR</p> <p>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:</p> <p>(a) the accepted Mining Operations Plan;</p> <p>(b) development consent requirements and conditions;</p> <p>(c) Department of Environment and Conservation and Department of Planning licences and approvals;</p> <p>(d) any other statutory environmental requirements;</p> <p>(e) details of any variations to environmental approvals applicable to the lease area; and</p> <p>(f) where relevant, progress towards final rehabilitation objectives.</p>	Administrative Non-compliance	Annual Review covers conditions b-f. However there is minimal information regarding a review and forecast against the MOP.	<p>As per <b>REC 19</b></p> <ul style="list-style-type: none"> <li>The Annual Reviews are set out differently to the DPE Annual Review Guidelines (2015). Ensure table of contents matches the guidelines.</li> <li>Ensure transport records from this Audit period (January 2016) onwards are recorded on the website. This could be appended to the Annual Review summarising the weekly transport.</li> <li>Include the biodiversity monitoring reports as appendices to the Annual Review.</li> <li>See Section 5.2 of the Main Audit Report for Subsidence Recommendations.</li> <li>Include an update on Audit Action Plan.</li> </ul> <p>As per <b>REC 33</b></p> <ul style="list-style-type: none"> <li>Report against compliance with the MOP in future Annual Reviews.</li> </ul>
Condition 7	<p><b>Reports</b></p> <p>The lease holder must provide an exploration report, within a period of twenty-eight days after each anniversary of the date this lease has effect or at such other date as the Director-General may stipulate, of each year. The report must be to the satisfaction of the Director-General and contain the following:</p>	Administrative Non-compliance	<p>Evidence of submission for 2016, 2017 and 2018 Group Exploration Reports.</p> <p>LakeCoal received a PIN from the Resources Regulator on 7 November 2017 for late lodgement.</p> <p>In the version supplied to SLR there are no figures.</p>	<p>As per <b>REC 34</b></p> <ul style="list-style-type: none"> <li>Ensure Group Exploration Reports meet the required timeframe.</li> <li>Ensure figures are included in the reports.</li> </ul>

Schedule and Condition Number	Condition	Compliance Status	Evidence	Recommendations
	(a) Full particulars, including results, interpretation and conclusions, of all exploration conducted during the twelve months period; (b) Details of expenditure incurred in conducting that exploration; (c) A summary of all geological findings acquired through mining or development evaluation activities; (d) Particulars of exploration proposed to be conducted in the next twelve months period; (e) All plans, maps, sections and other data necessary to satisfactorily interpret the report.			

## 7 Additional Recommended Actions

Additional recommendations relating to compliant conditions are outlined within **Table 9**.

**Table 9 Additional Recommendations**

Aspect	Recommendation
Management Systems	It provided difficult for Delta Coal to provide requested information in a timely manner. SLR recommends a review of the management system to ensure information is correctly filed and readily available.
Audit Preparations	Little information was provided to SLR prior to the audit which resulted in numerous additional information requests. Additional time is required by Delta Coal to prepare for the next Independent Environmental Audit. An internal audit is recommended prior to the next Independent Environmental Audit to ensure information and evidence is available to the Independent Environmental Auditor.
Waste Management	Ensure the minor waste management issues identified during the audit are rectified, including: <ul style="list-style-type: none"> <li>• Improve bin labelling;</li> <li>• Ensure all hydrocarbon containers (empty or full) are stored within bunds.</li> </ul>
Groundwater	Attempt to contact property owners and ask for permission to monitor the private groundwater bores. Some additional consultation with Council may be required.
Surface Water Discharges	The Annual Reviews need to provide a clear statement regarding whether discharge criteria have been met.
Future Annual Returns	LakeCoal and Delta Coal to prepare Annual Returns based on the period of the Annual Return and dates of the sale of CVC.

## 8 Conclusion

Conditions were assessed across the SSD 5465, SSD 5465 Statement of Commitments), EPL 1770, CCL 707 and CCL 721. In summary:

- There were 29 Administrative Non – Compliances and 7 Low Risk Non – Compliances in SSD 5465;
- There were 3 Administrative Non – Compliances and 1 Low Risk Non Compliance in the Statement of Commitments;
- There were 16 Administrative Non – Compliances and 3 Low Risk Non – Compliances in the EPL;
- There were 2 Administrative Non – Compliances and 1 Low Risk Non – Compliance in CCL 707; and
- There were 2 Administrative Non – Compliances and 1 Low Risk Non – Compliance in CCL 721.

There are a series of grouped recommendations across **Section 6** and **7**.

The majority of non - compliances and recommendations related to administrative issues, including not fully implementing the Project Approval and management plans. The field inspection did not identify any major issues that required immediate attention. The situation at the time of Independent Environmental Audit made the task of auditing more difficult than expected for SLR. This included the change in management from LakeCoal to Delta Coal and the previous Environment and Community Co-ordinator leaving LakeCoal prior to the commencement of the audit. Little information was provided to SLR prior to the Independent Environmental Audit which resulted in numerous additional information requests following the site component. Additional time is required by Delta Coal to prepare for the next Independent Environmental Audit.

# APPENDIX A

Photographs



**Photo 1 Previous Underground Mining Area – Lake Macquarie Shoreline**



**Photo 2 Cardboard included in general waste bin. Improvement Required.**



**Photo 3** Hydraulic oil container stored on the side within bunded area. Improvement Required.



**Photo 4** Hydraulic oil container should not be stored in general waste



**Photo 5 Diesel Tank stored within Bund**



**Photo 6 Coal Material in drain should be removed**



**Photo 7** The Oily water separator worked effectively during the audit period



**Photo 8** Licenced discharge point in operation

# APPENDIX B

## Compliance Spreadsheet

# Development Consent SSD - 5465

Audit Period = 1 January 2016 – 5 April 2019

Condition Number	Condition	Compliance Status	Evidence	Recommended Action
<b>SCHEDULE 2 - ADMINISTRATIVE CONDITIONS</b>				
<b>OBLIGATION TO MINIMISE HARM TO THE ENVIRONMENT</b>				
1	In addition to meeting the specific performance criteria established under this consent, the Applicant 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 development.	Compliant	There have been no major incidents where there has been material harm.	
<b>Terms of Consent</b>				
2	2. The Applicant shall carry out the development generally in accordance with the: (a) EIS; (b) SEE Mod 1; (c) SEE Mod 2; and (d) Project Layout Plans.  Note: The Project Layout Plans of the development are shown in Appendices 2 to 4 and Appendix 7A	Compliant	Based on a review of the information provided activities have generally been carried out in accordance with approvals. Although some non-compliances have been noted.	
2A	The Applicant shall carry out the development in accordance with the: (a) Statement of Commitments; and (b) conditions of this consent.	Compliant	Based on a review of the information provided activities have generally been carried out in accordance with approvals. Although some non-compliances have been noted.	
3	If there is any inconsistency between the documents in condition 2, the more recent document shall prevail to the extent of the inconsistency. The conditions of this consent shall prevail over the documents in conditions 2 and 2A(a) to the extent of any inconsistency.	Note	No inconsistency found during the audit.	
4	The Applicant shall comply with any reasonable requirements of the Secretary arising from the Department's assessment of: (a) any strategies, plans, programs, reviews, audits, reports or correspondence that are submitted by the Applicant in accordance with this consent; and (b) the implementation of any actions or measures contained in these documents.	Compliant	Evidence of consultation with the DPE and other agencies. Consultation in the Annual Review. Evidence of letter to DPE from LakeCoal dated 28 July 2016 stating that a series of management plans would be updated in 2016. Evidence of consultation with the DPE regarding incident management.	
<b>Limits of Consent</b>				
<b>Mining Operations</b>				
5	The Applicant may carry out mining operations on the site until 31 December 2027.  Note: Under this consent, the Applicant is required to rehabilitate the site and perform additional undertakings to the satisfaction of either the Secretary or the DRE. Consequently this consent will continue to apply in all other respects other than the right to conduct mining operations until the rehabilitation of the site and these additional undertakings have been carried out satisfactorily.	Compliant	Mining operations undertaken during the audit period	
<b>Coal Extraction</b>				
6	The Applicant shall not extract more than 2.1 million tonnes of ROM coal from the site in any calendar year.	Compliant	Within limits based on Annual Reviews. Annual Review 2018 -398,336 tonnes Annual Review 2017 - 1,361,205 tonnes Annual Review 2016 - 1,238,214 tonnes	
<b>Coal Transport - Public Roads</b>				
7	The Applicant shall ensure that no laden coal trucks are dispatched from the site to public roads outside of the hours of 5:30 am to 5:30 pm, Monday to Friday, and not at all on Saturdays, Sundays or public holidays	Non-Compliant (Low Risk)	Detailed coal records only provided for 2017. This included loads and tonnages for Delta (Vales Point), Weathertex and Port Waratah Coal Service. There are no times provided in the spreadsheet. SLR requested additional spreadsheets but no detailed information was provided for 2016, 2018 and 2019 year to date. As no information was provided SLR in unable to determine if the site is compliant with this condition.	Ensure detailed records of coal transportation are recorded and able to be provided to auditors upon request. The spreadsheets should cover the requirements of the key conditions of the Development Consent.
8	The Applicant shall not dispatch from the site more than: (a) 660,000 tonnes of product coal in any calendar year to Port Waratah Coal Services for export; (b) 180,000 tonnes of product coal in any calendar year to domestic customers other than Vales Point Power Station; (c) a total of 270 laden coal trucks per day by public roads; (d) a total of 32 laden coal trucks per hour; and (e) an average of 16 laden coal trucks per hour by public roads during peak hour periods, calculated monthly, until the intersection of M1 Motorway and Sparks Road Interchange (East Side - unsignalised with stop sign) is upgraded to a signalised intersection.	Non-Compliant (Low Risk)	2018 Annual Review - 394,213 tonnes transported, but 0 t from public roads. 2017 Annual Review- 1,378,996 tonnes transported to power station. 254 tonnes on public roads. 2016 Annual Review - 1,175,523 tonnes to domestic market. 2,414 tonnes on public roads.  a) Within this limit; b) Within this limit; c) There is no evidence provided of breakdown on public roads for 2016, 2018 and 2019 year to date; d) There is no evidence provided of breakdown on public roads for 2016, 2018 and 2019 year to date; e) Based on the Annual Review data this has been met.  Detailed coal records only provided for 2017. This included loads and tonnages for Delta (Vales Point), Weathertex and Port Waratah Coal Service. There are no times provided in the spreadsheet. SLR requested additional spreadsheets but no detailed information was provided for 2016, 2018 and 2019 year to date. As no information was provided SLR in unable to determine if the site is compliant with this condition.	Ensure detailed records of coal transportation are recorded and able to be provided to auditors upon request. The spreadsheets should cover the requirements of the key conditions of the Development Consent.
<b>Coal Transport - Vales Point Power Station</b>				
9	The Applicant shall ensure that only private roads are used for the transport of coal by truck to Vales Point Power Station, except in an emergency. In an emergency, product coal may be transported by public roads, with the prior written approval of the Secretary, and subject to any restrictions that the Secretary may impose.	Compliant	Annual Review provides total tonnages. Evidence of signage. Evidence of Transport Management Plan. No reason to determine non-compliance.	
10	The Applicant shall restrict the transport of coal by truck to the Vales Point Power Station between 10 pm and 5:30 am to: (a) 16 laden trucks per hour for the Spring and Autumn months; and (b) zero during Winter months.	Non-Compliant (Low Risk)	Detailed coal records only provided for 2017. This included loads and tonnages for Delta (Vales Point), Weathertex and Port Waratah Coal Service. There are no times provided in the spreadsheet. SLR requested additional spreadsheets but no detailed information was provided for 2016, 2018 and 2019 year to date. As no information was provided SLR in unable to determine if the site is compliant with this condition.	Ensure detailed records of coal transportation are recorded and able to be provided to auditors upon request. The spreadsheets should cover the requirements of the key conditions of the Development Consent.
<b>Planning Agreement</b>				
11	Within 12 months of the date of this consent, unless otherwise agreed by the Secretary, the Applicant shall enter into a planning agreement with the WSC in accordance with Division 6 of Part 4 of the EP&A Act that provides for payment to the WSC for community enhancement purposes.  The agreement must include provision for those matters set out in condition 12 below.  If there is any dispute between the Applicant and WSC relating to the preparation or implementation of the planning agreement, then either party may refer the matter to the Secretary for resolution.	Administrative Non-Compliance	Discharge locations sighted in the field inspection.  Records of discharge volume and water quality outlined in Annual Reviews.	
<b>Community Enhancement</b>				

Condition Number	Condition	Compliance Status	Evidence	Recommended Action
12	The Applicant shall pay WSC \$0.035 for each tonne of product coal produced by the development for the purposes of improving public infrastructure and providing community projects for the communities of Summerland Point, Gwandalan, Chain Valley Bay and Mannering Park. Payments from the approval date of project approval 10_0161 must be: (a) made by the end of March, for coal produced in the previous calendar year; (b) made for each year that coal is produced by the colliery; and (c) subject to indexation in accordance with the Australian Bureau of Statistics Consumer Price Index.	Compliant	Updates on VPA's provide in Annual Reviews. 2019 is not included yet as not due for payment.  2016: As at the end of the reporting period \$212,477 had been accrued by LakeCoal. All funding associated with the VPA was transferred into a designated VPA holding account administered by the Council during the reporting period.  2017: A further \$52,206 was accrued by LakeCoal during the reporting period in accordance with the VPA agreement.  2018: A total value of \$398,336 was accrued and paid to Central Coast Council by LakeCoal during the reporting period. A further \$15,549.90 was accrued during the reporting period, which was the total indexed contribution (31/12/18). The total Voluntary Planning Agreement (VPA) required January to September (Pre Appointment) 2018 was \$11,117.70. The total VPA required from October to December (Receivership Period) 2018 was \$4,432.20.  Evidence of receipts provided to audit team.	
<b>Surrender of Existing Project Approval</b>				
15	The Applicant shall ensure that all new buildings and structures, and any alterations or additions to existing buildings and structure, that are part of the development are constructed in accordance with: (a) the relevant requirements of the BCA; and (b) any additional requirements of the MSB where the building or structure is located on land within declared Mine Subsidence Districts.  Notes: • Under Part 4A of the EP&A Act, the Applicant 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 development; and • Under Section 15 of the Mine Subsidence Compensation Act 1961, the Applicant is required to obtain the MSB's approval before constructing any improvements in a Mine Subsidence District.	Compliant	Based on site communication with Environment and Community Co-ordinator. Construction of the control room undertaken in audit period. Based on site communication there was no further construction.  A) Evidence of occupation certificate dated 15 August 2018.  B) is not applicable.	
<b>Demolition</b>				
16	The Applicant 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.	Not Triggered	Based on site communication Environment and Community Co-ordinator there was no demolition.  None outlined in Annual Reviews.	
<b>Operation of Plant and Equipment</b>				
17	The Applicant 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.	Compliant	Evidence of maintenance records for trucks and dozers. Spreadsheet records date back to 2010.	
<b>UPDATING AND STAGING STRATEGIES, PLANS OR PROGRAMS</b>				
18	The Applicant must regularly review the strategies, plans and programs required under this consent and ensure that these documents are updated to incorporate measures to improve the environmental performance of the development and reflect current best practice in the mining industry. To facilitate these updates, the Applicant may at any time submit revised strategies, plans or programs for the approval of the Secretary. With the agreement of the Secretary, the Applicant may also submit any strategy, plan or program required by this consent on a staged basis.  With the agreement of the Secretary, the Applicant may prepare a revision or stage of any strategy, plan or program required under this consent without undertaking consultation with all parties nominated under the applicable condition in this consent.  Notes: • While any strategy, plan or program may be submitted on a staged basis, the Applicant must ensure that the existing operations on site are covered by suitable strategies, plans or programs at all times. • If the submission of any strategy, plan or program is to be staged, then the relevant strategy, plan or program must clearly describe the specific stage to which the strategy, plan or program applies, the relationship of this stage to any future stages, and the trigger for updating the strategy, plan or program.	Administrative Non-Compliance	The following Management Plans are applicable to Chain Valley and outlined on the Chain Valley website: Water Management Plan - July 2015; Air Quality Management Plan - July 2014; Noise Management Plan - March 2014; Heritage - June 2014; Biodiversity Management Plan - 16 March 2016; Seagrass Management Plan - April 2014; and Environmental Management System - 2012.  Admin Non - Compliance: This condition is non - compliant as plans have not been 'regularly' updated.  Evidence of letter to DPE from LakeCoal dated 28 July 2016 stating that a series of management plans would be updated in late 2016/2017. This was not completed.	All management plans require updating due to the length of time since the previous reviews. All should in a Delta Coal template.  Ensure there is a cross referencing table covering this condition in management plans.  Additional detail including Trigger, Action, Response Tables (contingency plan) should be developed in the next round of management plan updates.
<b>Road Maintenance Contribution</b>				
19	The Applicant must pay Road Maintenance Fees to WSC in accordance with its Road Maintenance Agreement with WSC.	Compliant	Evidence of Road Maintenance Agreement on 1 July 2013 signed by both LakeCoal and Wyong Shire Council.  Evidence of road maintenance fees for 2016 (23 January 2017 email), 2017 (22 Jan 2018 email). No road maintenance required in 2018 as no road haulage.	
<b>Schedule 3 - Environmental Conditions - General</b>				
<b>Transport</b>				
<b>Monitoring of Coal Transport</b>				
1	The Applicant shall: (a) keep accurate records of the amount of coal transported from the site (on a weekly basis); and (b) make these records publicly available on its website at the end of each calendar quarter.	Non-Compliant (Low Risk)	a) Detailed coal records only provided for 2017. This included loads and tonnages for Delta (Vales Point), Weatherex and Port Waratah Coal Service. There are no times provided on the spreadsheet provided. SLR requested additional spreadsheets but no detailed information was provided for 2016, 2018 and 2019 year to date. As no information was provided SLR is unable to determine if the site is compliant with this condition. b) Evidence of publically available information regarding transport. However this information showed most quarters in 2016 and 2017. However no coal records on the website in 2018 or 2019. <u>Admin Non Compliance</u> .	See recommendation regarding detailed transport records.  Ensure transport records from this Audit period (January 2016) onwards are recorded on the website. This could be appended to the Annual Review summarising the weekly transport.
<b>Road Works</b>				
2	The Applicant shall upgrade the Ruttleys Road and Construction Road intersection within 6 months of the date of this consent, unless the Secretary directs otherwise, by: (a) installing additional signage on and adjacent to Construction Road prior to the intersection; (b) repairing the surface of Construction Road as required and ensuring the edge seal of the left turn lane is of sufficient width to accommodate coal trucks; (c) installing or replacing "Stop" signs in accordance with Austroads guidelines; (d) repainting road line markings and raised pavements associated with this intersection; and (e) installing barriers to prevent trucks parking on the gravel area adjacent to the intersection and the electricity substation located in the vicinity of this intersection.  The design and construction of these works must be undertaken in consultation with, and to the relevant satisfaction of, WSC, RMS and Delta Electricity and to the satisfaction of the Secretary.	Administrative Non-Compliance	Based on site communications with Environment and Community Co-ordinator. No upgrades completed during this audit period. However there is a <u>historical admin non - compliance</u> from the previous audit period, with these details noted by Hansen Bailey (2016).  - WSC Civil Design Approval SCC11-2013 dated 1/04/14 and WSC invoice for construction assessment and certificate dated 17/07/13; - Email from Lyle Marshall & Associated (LC construction contractor) to WSC dated 21/03/14; and - Email from LC to Delta Electricity dated 29/01/14 and response from Delta Electricity dated 11/02/14 confirming approval of the proposed works.  No evidence that the required Ruttleys Road and Construction Road intersection upgrade was to the satisfaction of RMS and DPE. Construction works for the intersection upgrade were completed on 14/08/2014, which is outside of 6 months of the date of approval of SSD-5465 (i.e. 23/06/2014). <u>Historical admin non - compliance</u> with no further action.	
<b>Road Transport Protocol</b>				

Condition Number	Condition	Compliance Status	Evidence	Recommended Action																																																																		
3	<p>The Applicant shall prepare a Road Transport Protocol to the satisfaction of the Secretary. This protocol shall:</p> <ul style="list-style-type: none"> <li>(a) be prepared in consultation with RMS, NCC, WSC, DRE and CCC and submitted to the Secretary for approval within 6 months of the date of this consent;</li> <li>(b) describe the designated haulage routes to be used (as shown in Appendix 5); the maximum number of road movements proposed and the haulage hours permitted under this consent;</li> <li>(c) include a Traffic Management Plan, which includes: <ul style="list-style-type: none"> <li>• procedures to ensure that drivers adhere to the designated haulage routes;</li> <li>• measures to maximise the use of a low frequency (regular) trucking schedule rather than an intermittently-high frequency (campaign) trucking schedule, especially during the morning peak hour;</li> <li>• contingency plans to apply when (for example) the designated haulage route is disrupted, including procedures for notifying relevant agencies and affected communities of the need to implement such contingency plans;</li> <li>• procedures to ensure that all haulage vehicles associated with the development are clearly distinguishable as Chain Valley Colliery coal haulage trucks;</li> <li>• details of procedures for receiving and addressing complaints from the community concerning traffic issues associated with truck movements to and from the site;</li> <li>• measures to ensure that the provisions of the Traffic Management Plan are implemented, eg driver training in the heavy vehicle driver's Code of Conduct and contractual agreements with heavy vehicle operators; and</li> </ul> </li> <li>• procedures for ensuring compliance with and enforcement of the heavy vehicle driver's Code of Conduct;</li> <li>(d) include a Code of Conduct for heavy vehicle drivers that addresses: <ul style="list-style-type: none"> <li>• travelling speeds;</li> <li>• instructions to avoid grouping or convoying of trucks;</li> <li>• instructions to drivers not to overtake each other on the haulage route, as far as practicable, and to maintain appropriate distances between vehicles;</li> <li>• instruction to drivers to adhere to the designated haulage routes;</li> <li>• instruction to drivers to be properly safety conscious and to strictly obey all traffic regulations; and</li> <li>• appropriate penalties for infringements of the Code.</li> </ul> </li> </ul> <p>The Applicant shall implement the approved Road Transport Protocol as approved from time to time by the Secretary.</p>	Administrative Non-Compliance	<p>Evidence of Road Transport Protocol. Road Transport Protocol, which includes; MSP-D-14559 – Coal Haulage Traffic Management Plan and POL-D-14926 Coal Haulage Driver Code of Conduct.</p> <p>Coal Haulage Traffic Management System Plan on the CVC website is dated 18/03/14. This plan has not been updated since the previous audit.</p> <p>Coal Haulage Driver Code of Conduct on the CVC website is dated 04/10/2012.</p> <p>Preparation:</p> <ul style="list-style-type: none"> <li>a) Evidence of consultation from 2014;</li> <li>b) Section 8.3;</li> <li>c) Overall document. Covered in Section 8;</li> <li>d) Code of conduct discussed in Section 8.11. Not attached to the document.</li> </ul> <p>Implementation:</p> <p>Records and training.</p> <p>Section 12 of this plan states - "The Manager of Mining Engineering or his representative shall formerly review this document every three years". No evidence of any review in 2017, therefore <u>Admin Non - Compliant</u>.</p>	<p>Ensure Coal Haulage Traffic Management Plan is reviewed as per the requirements of the consent and commitments in the management plan.</p> <p>Attach Driver Code of Conduct to the management plan.</p>																																																																		
<b>Independent Traffic Audit</b>																																																																						
4	<p>Prior to 31 March 2014, and every 12 months thereafter, unless the Secretary directs otherwise, the Applicant shall commission a suitably qualified person, whose appointment has been approved by the Secretary, to conduct an Independent Traffic Audit of the development. This audit must:</p> <ul style="list-style-type: none"> <li>(a) be undertaken without prior notice to the Applicant, and in consultation with RMS, NCC, WSC and the CCC;</li> <li>(b) assess the impact of the development on the performance and safety of the road network, including a review of: <ul style="list-style-type: none"> <li>• haulage records;</li> <li>• accident records on the haulage route, infringements relating to the code of conduct and any incidents involving haulage vehicles;</li> <li>• community complaints register; and</li> </ul> </li> <li>(c) assess the effectiveness of the Road Transport Protocol; and, if necessary, recommend measures to reduce or mitigate any adverse (or potentially adverse) impacts.</li> </ul>	Administrative Non-Compliance	<p><u>Admin Non - Compliance</u>: No evidence provided by site indicating Traffic Audits were completed annually.</p>	<p>Ensure Traffic Audits are completed annually in accordance with this condition. Ensure the report is submitted to the DPE.</p>																																																																		
5	<p>Within 1 month of receiving the audit report, or as otherwise agreed by the Secretary, the Applicant shall submit a copy of the report to the Secretary, with a detailed response to any of the recommendations contained in the audit report, including a timetable for the implementation of any measures proposed to address the recommendations in the audit report.</p> <p>A summary of the audit report must be included in the Annual Review.</p>	Administrative Non-Compliance	<p><u>Admin Non - Compliance</u>: No evidence provided by site indicating Traffic Audits were completed annually.</p>																																																																			
<b>Alternative Coal Transport Options</b>																																																																						
6	<p>Prior to 31 December 2014, and every three years thereafter, the Applicant shall prepare and submit to the Secretary for approval, a study of the reasonable and feasible options to reduce or eliminate the use of public roads to transport coal from the development. The assessment must include:</p> <ul style="list-style-type: none"> <li>(a) an analysis of the capital, construction and operating costs of the alternative transport options; and</li> <li>(b) quantified social and environmental impacts associated with road and rail transport.</li> </ul>	Administrative Non-Compliance	<p>Evidence provided of 2014 study with the letter dated 10 December 2014. The condition requires an audit every three years which would be in late 2017. No evidence of 2017 report provided to SLR, therefore <u>Admin Non - Compliance</u>.</p>	<p>Ensure the Alternative Transport Options Report is completed as per the frequency in this condition.</p>																																																																		
<b>Noise</b>																																																																						
<b>Noise Impact Assessment Criteria</b>																																																																						
7	<p>The Applicant shall ensure that the noise generated by the development at any residence on privately-owned land does not exceed the criteria for the location in Table 1 nearest to that residence.</p>	Non-Compliant (Low Risk)	<p>- Exceedance of LA1(1minute) criteria of 6dB and 7dB at ATN4 and R13 in June 2016. Documented in 2016 Annual Review and Quarterly Monitoring report (Global Acoustics report 16217_R01). Corrective actions undertaken and documented in incident report dated 05/07/2016.</p> <p>- 1dB exceedance of LAeq(15minute) criteria at ATN007 during the daytime period in October 2017 (Q4). Documented in 2017 Annual Review. However it is noted that a discrepancy between +E52 monitoring results presented in the 2017 Annual Review and Q4 Monitoring report (Global Acoustics Report 17424_R01) where no exceedance is recorded.</p> <p>- No exceedances recorded during 2018 period.</p> <p>- No exceedances recorded during the 2019 audit period (January - April 2019).</p>	<p>Continue investigations of any noise issues and, where practicable, implement reasonable and feasible mitigation measures.</p> <p>Ensure accurate/consistent monitoring results are presented in Annual Reviews.</p>																																																																		
	<table border="1"> <caption>Table 1: Noise Criteria dB(A)</caption> <thead> <tr> <th rowspan="2">Location</th> <th colspan="2">Day</th> <th colspan="2">Evening</th> <th colspan="2">Night</th> </tr> <tr> <th>L<sub>night</sub> max</th> <th>L<sub>day</sub> max</th> <th>L<sub>night</sub> max</th> <th>L<sub>day</sub> max</th> <th>L<sub>night</sub> max</th> <th>L<sub>day</sub> max</th> </tr> </thead> <tbody> <tr> <td>R8</td> <td>38</td> <td>38</td> <td>38</td> <td>38</td> <td>45</td> <td>45</td> </tr> <tr> <td>R11</td> <td>48</td> <td>48</td> <td>48</td> <td>48</td> <td>54</td> <td>54</td> </tr> <tr> <td>R12</td> <td>49</td> <td>49</td> <td>49</td> <td>49</td> <td>53</td> <td>53</td> </tr> <tr> <td>R13</td> <td>43</td> <td>43</td> <td>43</td> <td>43</td> <td>48</td> <td>48</td> </tr> <tr> <td>R15</td> <td>36</td> <td>36</td> <td>36</td> <td>36</td> <td>45</td> <td>45</td> </tr> <tr> <td>R19</td> <td>37</td> <td>37</td> <td>37</td> <td>37</td> <td>45</td> <td>45</td> </tr> <tr> <td>R22</td> <td>46</td> <td>46</td> <td>46</td> <td>46</td> <td>46</td> <td>46</td> </tr> <tr> <td>all other privately-owned land</td> <td>35</td> <td>35</td> <td>35</td> <td>35</td> <td>45</td> <td>45</td> </tr> </tbody> </table> <p>Notes:</p> <ul style="list-style-type: none"> <li>• To interpret the locations referred to in Table 1, see Appendix 6 and the EIS; and</li> <li>• Noise generated by the development is to be measured in accordance with the relevant requirements, and exemptions (including certain meteorological conditions), of the NSW Industrial Noise Policy. Appendix 8 sets out the meteorological conditions under which these criteria apply, and the requirements for evaluating compliance with these criteria.</li> </ul>				Location	Day		Evening		Night		L <sub>night</sub> max	L <sub>day</sub> max	L <sub>night</sub> max	L <sub>day</sub> max	L <sub>night</sub> max	L <sub>day</sub> max	R8	38	38	38	38	45	45	R11	48	48	48	48	54	54	R12	49	49	49	49	53	53	R13	43	43	43	43	48	48	R15	36	36	36	36	45	45	R19	37	37	37	37	45	45	R22	46	46	46	46	46	46	all other privately-owned land	35	35	35
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<b>Operation Conditions</b>																																																																						
8	<p>8. The Applicant shall:</p> <ul style="list-style-type: none"> <li>(a) implement best management practice, including all reasonable and feasible noise mitigation measures, to minimise the construction, operational and transport noise generated by the development;</li> <li>(b) regularly assess the noise monitoring and meteorological data and relocate, modify, and/or stop operations on site to ensure compliance with the relevant conditions of this consent;</li> <li>(c) minimise the noise impacts of the development during meteorological conditions under which the noise limits in this consent do not apply (see Appendix 8);</li> <li>(d) use its best endeavours to achieve the long-term noise goals in Table 2, where reasonable and feasible, and report on progress towards achieving these goals in each Annual Review;</li> <li>(e) carry out a comprehensive noise audit of the development in conjunction with each independent environmental audit; and</li> <li>(f) prepare an action plan to implement any additional reasonable and feasible onsite noise mitigation measures identified by each audit; to the satisfaction of the Secretary.</li> </ul>	Administrative Non-Compliance	<p>a) The 2016 Annual Review documented an investigation into repairs/maintenance of ventilation fan silencers. No further evidence during audit period. Therefore no continued implementation. <u>Admin Non - Compliance</u>.</p> <p>b) Evidence of real-time noise monitoring conducted throughout 2016, 2017 and 2018 where no triggers were reported. During audit site inspection the real-time noise monitor was not in operation and has been removed from site. The Environment and Community Co-ordinator stated the real-time noise monitoring was removed in January 2019. <u>Admin - Non Compliance</u>, as the monitor should have been active the entire IEA period.</p> <p>c) No evidence of reduced operations during adverse meteorological conditions.</p> <p>d) Evidence of inspection of silencers during 2016. No evidence of progress towards long term goal in the 2017-2019 audit period.</p> <p>e) Conducted as part of this Independent Audit. Note that no noise monitoring of site plant/equipment and operations was conducted as part of the audit.</p> <p>f) No evidence of action plan. <u>Admin Non - Compliance</u>.</p>	<p>The real-time noise monitor should be re-established for the site. Liaise with the DPE regarding the best location as the majority of noise complaints have resulted from Mantering Colliery operations, not CVC. Mantering Colliery is also owned by Delta Coal. Update the Noise Management Plan.</p>																																																																		
	<table border="1"> <caption>Table 2: Long-term Noise Goals dB(A)</caption> <thead> <tr> <th rowspan="2">Location</th> <th colspan="2">Day</th> <th colspan="2">Evening</th> <th colspan="2">Night</th> </tr> <tr> <th>L<sub>night</sub> max</th> <th>L<sub>day</sub> max</th> <th>L<sub>night</sub> max</th> <th>L<sub>day</sub> max</th> <th>L<sub>night</sub> max</th> <th>L<sub>day</sub> max</th> </tr> </thead> <tbody> <tr> <td>R11 - R13</td> <td>41</td> <td>41</td> <td>41</td> <td>41</td> <td>41</td> <td>41</td> </tr> <tr> <td>R22</td> <td>40</td> <td>40</td> <td>40</td> <td>40</td> <td>40</td> <td>40</td> </tr> </tbody> </table>	Location	Day		Evening		Night		L <sub>night</sub> max	L <sub>day</sub> max	L <sub>night</sub> max	L <sub>day</sub> max	L <sub>night</sub> max	L <sub>day</sub> max	R11 - R13	41	41	41	41	41	41	R22	40	40	40	40	40	40	Compliant	<p>Exceedances of long term noise goals occurred during the monitoring period. However these are longterm noise goals, not criteria.</p> <p>Quarterly noise monitoring reports indicate that noise monitoring is conducted in accordance with the Industrial Noise Policy (INP).</p>																																								
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Condition Number	Condition	Compliance Status	Evidence	Recommended Action																							
9	<p>The Applicant shall prepare a Noise Management Plan for the development to the satisfaction of the Secretary. This plan must:</p> <p>(a) be prepared in consultation with the EPA and submitted to the Secretary for approval within 4 months of the date of this consent, unless otherwise agreed by the Secretary;</p> <p>(b) describe the measures that would be implemented to ensure compliance with the noise criteria and operating conditions in this consent;</p> <p>(c) describe the proposed noise management system in detail including the mitigation measures that would be implemented to minimise noise during construction and operations, including on and off site road noise generated by vehicles associated with the development; and</p> <p>(d) include a monitoring program that:</p> <ul style="list-style-type: none"> <li>• uses attended monitoring to evaluate the compliance of the development against the noise criteria in this consent;</li> <li>• evaluates and reports on:</li> <li>• the effectiveness of the on-site noise management system; and</li> <li>• compliance against the noise operating conditions; and</li> <li>• defines what constitutes a noise incident, and includes a protocol for identifying and notifying the Department and relevant stakeholders of any noise incidents.</li> </ul> <p>The Applicant shall implement the approved management plan as approved from time to time by the Secretary.</p>	Administrative Non-Compliance	<p>Current plan dated 12 March 2014.</p> <p>Evidence of letter to DPE from LakeCoal dated 28 July 2016 stating that a series of management plans would be updated in late 2016/2017. This was not completed. <u>Admin Non - Compliance.</u></p> <p><u>Preparation:</u></p> <p>a) Compliant. Evidence from 2014;</p> <p>b) Compliant - Section 4;</p> <p>c) Compliant - Section 4;</p> <p>d) Compliant - Section 5 and 6</p> <p><u>Implementation:</u></p> <p>No evidence of audit, review and update of noise management plan during audit period as prescribed in Section 9. <u>Admin Non - Compliance.</u></p> <p>No notification to residents following recorded exceedances in accordance with Section 6.2. <u>Admin Non - Compliance.</u></p> <p>Real time noise monitor removed from site. <u>Admin Non - Compliance.</u></p>																								
<b>Air Quality</b>																											
<b>Odour</b>																											
10	The Applicant shall ensure that no offensive odours are emitted from the site, as defined under the POEO Act.	Compliant	Based on records from Annual Review and discussions with Environment Community Co-ordinator there have been no odour complaints. No odours identified in field visit.																								
<b>Air Quality Criteria</b>																											
11	<p>The Applicant shall ensure that all reasonable and feasible avoidance and mitigation measures are employed so that particulate matter emissions generated by the development do not cause exceedance of the criteria listed in Tables 3, 4 and 5 at any residence on privately-owned land.</p> <table border="1"> <caption>Table 3: Long-term criteria for particulate matter</caption> <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> <table border="1"> <caption>Table 4: Short-term criterion for particulate matter</caption> <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> <table border="1"> <caption>Table 5: Long-term criteria for deposited dust</caption> <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>	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	Non-Compliant (Low Risk)	<p>2019 - no longterm data for annual averages.</p> <p><u>Annual Review 2018</u> - Depositional dust gauges were below criteria.</p> <p>Short term PM10 <u>non-compliances</u> on 3 April 2018, 18 July 2018 and 4 December 2018. The 2018 annual average of 24hr PM10 results was 16.1 µg/m<sup>3</sup>. Daily (24-hour) results ranged from a minimum of 6.13 µg/m<sup>3</sup> to a maximum of 112.98 µg/m<sup>3</sup> during 2018. There were some data capture issues in 2018 relating to the TEOM. These were not reported as non-compliances in Section 1 or 7 of the Annual Review. <u>Low Risk Non - Compliance</u> for exceeding criteria.</p> <p><u>Annual Review 2017</u> - Excluding DDG005, deposited dust levels for the reporting period were below the EPA long term criteria annual maximum level of 4 g/m<sup>2</sup>/month at all sites. Additionally, no gauges showed annual increases in deposited dust levels above the EPA maximum of 2 g/m<sup>2</sup>/month during the reporting period. Note, the depositional dust gauge exceedance was not recorded as an exceedance in Section 1 or 7 of the Annual Review. <u>Non compliance</u> relating to exceedance of DDG5 and also not reporting in Section 1 or 7 of the Annual Review.</p> <p>The EPA long-term annual average criteria (30 µg/m<sup>3</sup>) for PM10 was not exceeded during the 2017 period. Daily (24-hour) results ranged from a minimum of 5.39 µg/m<sup>3</sup> to a maximum of 47.78 µg/m<sup>3</sup> during 2017. The 2017 annual average of 24hr PM10 results was 15.1 µg/m<sup>3</sup>. Within short term criteria. It was noted there was some data capture issues The 2017 Annual Review states that <i>'When comparing the 2017 annual results to the previous year, the data capture rate was slightly higher in 2017. This was primarily due to power outages associated with electrical storms in 2016 and a failed air conditioner during the 2016 reporting period'</i>. Data capture issues were not reported as <u>non-compliances</u> in Section 1 or 7 of the Annual Review.</p> <p><u>Annual Review 2016</u> - Deposited dust levels for the reporting period were below the EPA long term criteria annual maximum level of 4 g/m<sup>2</sup>/month at all sites. Additionally, no gauges showed annual increases in deposited dust levels above the EPA maximum of 2 g/m<sup>2</sup>/month.</p> <p>Daily (24-hour) results ranged from a minimum of 2.1 µg/m<sup>3</sup> to a maximum of 39.8 µg/m<sup>3</sup> during 2016.</p> <p>For PM10 data capture - When comparing the 2016 annual results to the previous year, the data capture rate was slightly lower in 2016. This was primarily due to power outages associated with electrical storms, a failed air conditioner unit in February 2016 and a pest infestation in the units electrical circuit. <u>Non - compliance</u> relating to data capture.</p> <p><u>Field Evidence</u></p> <p>The field assessment did not identify a high number of dust sources. There are disturbed surfaces, but these are small compared to most mines. Water truck sighted. Outside sources contribute to dust. It is highly likely that other sources contribute to dust levels.</p> <p><u>Correspondence</u></p> <p>Incidents reports are prepared and provided to DPE and EPA. Sighted by the audit team. However there is often a delay in identifying short term criterion exceedances.</p>	<p>Update the Air Quality Management Plan following this audit.</p> <p>Improve data capture for PM10. Review possibilities of backup power supply.</p> <p>Ensure issues with data capture are reported in Section 1 and 7 of the Annual Review.</p> <p>Ensure TEOM is setup with alarms/notifications for when results are approaching or have exceeded the short term criterion for particulate matter. This will ensure exceedances are immediately detected and reported as soon as possible to the EPA and DPE.</p>
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	<p>Notes for Tables 3 to 5:</p> <ul style="list-style-type: none"> <li>• a Total impact (i.e. incremental increase in concentrations due to the development plus background concentrations due to other sources);</li> <li>• b Incremental impact (i.e. incremental increase in concentrations due to the development on its own);</li> <li>• c Deposited dust is to be assessed as insoluble solids as defined by Standards Australia, AS/NZS 3580.10.1:2003: Methods for Sampling and Analysis of Ambient Air - Determination of Particulate Matter - Deposited Matter - Gravimetric Method; and</li> <li>• d Excludes extraordinary events such as bushfires, prescribed burning, dust storms, sea fog, fire incidents, illegal activities or any other activity agreed to by the Secretary.</li> </ul>	Note	-																								
<b>Operating Conditions</b>																											
12	<p>The Applicant shall:</p> <p>(a) implement best practice air quality management at the site, including all reasonable and feasible measures to minimise the off-site odour, fume and dust emissions generated by the development;</p> <p>(b) implement best practice management to minimise the risk of spontaneous combustion and related emissions;</p> <p>(c) implement all reasonable and feasible measures to minimise the release of greenhouse gas emissions from the site;</p> <p>(d) operate an air quality management system on site to ensure compliance with the relevant conditions of this consent;</p> <p>(e) minimise the air quality impacts of the development during adverse meteorological conditions and extraordinary events (see note d to Tables 3-5 above);</p> <p>(f) regularly assess the air quality monitoring data, and modify operations on site to ensure compliance with the relevant conditions of this consent, to the satisfaction of the Secretary.</p>	Administrative Non-Compliance	<p><u>Field Evidence</u></p> <p>The field assessment did not identify a high number of dust sources. There are disturbed surfaces, but these are small compared to most mines. Water truck sighted. Outside sources contribute to dust.</p> <p><u>Correspondence</u></p> <p>Incidents reports are prepared and provided to DPE and EPA. Sighted by the audit team.</p> <p>a) Evidence of dust monitoring and watercart use;</p> <p>b) Based on discussions with Environment and Community Co-ordinator there have been no issues on the surface regarding spontaneous combustion;</p> <p>c) Monitoring of fuel and energy usage;</p> <p>d) Air quality management system - for monitoring continues to be undertaken;</p> <p>e) Based on discussions with Environment and Community Co-ordinator water carts are used on exposed surfaces. Product is generally a wet product, therefore no water sprays required;</p> <p>f) The real time air quality monitor is not being used as a management tool. During the audit period there was no system to notify persons of when the TEOM identified short term impact assessment non-compliances. Non-compliances are only identified during the monthly download. <u>Admin non-compliance</u> relating to not determining TEOM exceedances as soon as they occur.</p>	<p>Update the Air Quality Management Plan following this audit.</p> <p>Improve data capture for PM10. Review possibilities of backup power supply.</p> <p>Ensure issues with data capture are reported in Section 1 and 7 of the Annual Review.</p> <p>Ensure TEOM is setup with alarms/notifications for when results are approaching or have exceeded the short term criterion for particulate matter. This will ensure exceedances are immediately detected and reported as soon as possible to the EPA and DPE.</p>																							
<b>Air Quality Management Plan</b>																											

Condition Number	Condition	Compliance Status	Evidence	Recommended Action
13	<p>The Applicant shall prepare an Air Quality Management Plan for the development to the satisfaction of the Secretary. This plan must:</p> <ul style="list-style-type: none"> <li>(a) be prepared in consultation with the EPA, and submitted to the Secretary for approval within 6 months of the date of this consent;</li> <li>(b) describe the measures that would be implemented to ensure compliance with the relevant air quality criteria and operating conditions of this consent;</li> <li>(c) describe the measures that would be implemented to minimise the release of greenhouse gas emissions from the site;</li> <li>(d) describe the proposed on-site air quality management system; and</li> <li>(e) include an air quality monitoring program that: <ul style="list-style-type: none"> <li>• is capable of evaluating the operating conditions of this consent;</li> <li>• evaluates and reports on: <ul style="list-style-type: none"> <li>• the effectiveness of the air quality management system; and</li> <li>• compliance against the air quality operating conditions;</li> </ul> </li> <li>• defines what constitutes an air quality incident, and includes a protocol for identifying and notifying the Department and relevant stakeholders of any air quality incidents.</li> </ul> </li> </ul> <p>The Applicant shall implement the approved management plan as approved from time to time by the Secretary.</p>	Administrative Non-Compliance	<p><u>Preparation:</u></p> <p>Evidence of Air Quality Management Plan dated 15 January 2016. The Air Quality Management Plan on the website 18 July 2014, with this approved on 24 July 2014. No evidence of approval provided by Delta Coal for 2016 Management Plan, therefore 2014 plan reviewed for adequacy.</p> <ul style="list-style-type: none"> <li>a) Section 1.4;</li> <li>b) Section 3;</li> <li>c) Section 4;</li> <li>d) and e) - Section 5</li> </ul> <p>Evidence of letter to DPE from LakeCoal dated 28 July 2016 stating that a series of management plans would be updated in late 2016/2017. This was not completed.</p> <p><u>Implementation:</u></p> <p>Evidence of monitoring;</p> <p>Minimal issues observed with dust management; and</p> <p>The real time air quality monitor is not being used as a management tool.</p> <p>Section 5.3 of 2014 Air Quality Management Plan states:</p> <p><i>Every 30 minutes the real time data from the monitor is sent via wireless (Next-G) connection to a web based data management system (Vista Data Vision) which is also used for the Company's real time noise monitoring system. A web based interface then allows the data to be viewed or downloaded, reports to be created and automated alarm generation when the predefined triggers are reached.</i></p> <p><u>Admin Non - Compliance</u> as no alarm was set up. The only way exceedances could be determine during the audit period was by manual download or viewing of results. This generally occurred every month.</p>	<p>Update the Air Quality Management Plan following this audit.</p> <p>Improve data capture for PM10. Review possibilities of backup power supply.</p> <p>Ensure issues with data capture are reported in Section 1 and 7 of the Annual Review.</p> <p>Ensure TEOM is setup with alarms/notifications for when results are approaching or have exceeded the short term criterion for particulate matter. This will ensure exceedances are immediately detected and reported as soon as possible to the EPA and DPE.</p>
<b>METEOROLOGICAL MONITORING</b>				
14	<p>During the life of the development, the Applicant shall ensure that there is a suitable meteorological station operating in the vicinity of the site that:</p> <ul style="list-style-type: none"> <li>(a) complies with the requirements in the Approved Methods for Sampling of Air Pollutants in New South Wales guideline; and</li> <li>(b) is capable of continuous real-time measurement of temperature lapse rate in accordance with the NSW Industrial Noise Policy, unless a suitable alternative is approved by the Secretary following consultation with the EPA.</li> </ul>	Compliant	<p>There is no current meteorological station at Chain Valley. The nearest station is at Mannering. This station at Mannering meets the requirements of a) and b).</p> <p>The 2013 Audit confirmed that the DPE and EPA (under revision of EPL 1770) approved use of Mannering Colliery monitor as representative of Chain Valley and ability to calculate temperature lapse rate by use of sigma-theta method.</p> <p>The system is real time, with this observed by SLR during the site visit.</p>	
<b>Soil and Water</b>				
Note:	Under the Water Act 1912 and/or the Water Management Act 2000, the Applicant is required to obtain the necessary water licences for the development.	Compliant	Evidence in Annual Review for Water Licence - 20BL173107 and usage.	
<b>Water Supply</b>				
15	The Applicant shall ensure that it has sufficient water for all stages of the development, and if necessary, adjust the scale of mining operations to match its available water supply, to the satisfaction of the Secretary.	Compliant	<p>Evidence in Annual Review for Water Licence - 20BL173107 and usage.</p> <p>There is excess water at Chain Valley hence discharge occurs for most days of the year.</p>	
<b>Water Pollution</b>				
16	Unless an EPL authorises otherwise, the Applicant shall comply with Section 120 of the POEO Act.	Compliant	Based on the information provided there is no evidence that the site did not comply with the POEO Act.	
<b>Sewage Management</b>				
17	The Applicant shall manage on-site sewage in accordance with NSW Environmental Guidelines: Use of Effluent by Irrigation (DEC 2004) and the National Guidelines for Sewerage Systems - Effluent Management (ANZECC 1997) or its latest version, to the satisfaction of EPA.	Administrative Non-Compliance	<p>Sewage system - 2 systems. Envirocycle for offices and second system is a septic system that handles the bathhouse and toilet facilities. This water is treated onsite.</p> <p>There is limited detail in the Water Management Plan regarding the sewage water management system. Garden Wastemaster Australia complete servicing. Evidence of one email from 6 March 2019 organising servicing. However no evidence of servicing provided. <u>Admin. Non - Compliant</u>. Evidence of testing of wastewater through lab results.</p>	<p>Include additional detail in the Water Management Plan regarding sewage management.</p> <p>Include an update of sewage system during the audit period in the Annual Review.</p> <p>Ensure servicing is completed and records kept onsite.</p>
<b>Water Management Plan</b>				
18	<p>The Applicant shall prepare a Water Management Plan for the surface facilities sites to the satisfaction of the Secretary. This plan must be prepared in consultation with DPI Water and EPA, by suitably qualified and experienced persons whose appointment has been endorsed by the Secretary, and submitted to the Secretary for approval within 6 months of the date of this consent. This plan must include:</p> <ul style="list-style-type: none"> <li>(a) a comprehensive water balance for the development that includes details of: <ul style="list-style-type: none"> <li>• sources and security of water supply;</li> <li>• water make in the underground workings;</li> <li>• water transfers from the underground operations to the surface;</li> <li>• water use; and</li> <li>• any water discharges;</li> </ul> </li> <li>(b) management plans for the surface facilities sites, that include: <ul style="list-style-type: none"> <li>• a detailed description of water management systems for each site, including: <ul style="list-style-type: none"> <li>• clean water diversion systems;</li> <li>• erosion and sediment controls; and</li> <li>• any water storages;</li> </ul> </li> <li>• measures to minimise potable water use and to reuse and recycle water;</li> <li>• measures to manage acid sulphate soils, if encountered;</li> <li>• activities that would involve ground disturbance at the site; and</li> <li>• monitoring and reporting procedures.</li> </ul> </li> </ul>	Administrative Non-Compliance	<p>The current Water Management Plan is dated July 2015. This plan was approved by the DPE on 21 July 2015. This plan is out of date due to the age of the plan and also does not cover MOD 2. Evidence of letter to DPE from LakeCoal dated 28 July 2016 stating that a series of management plans would be updated in late 2016/2017. This was not completed. <u>Admin Non - Compliance</u>.</p> <p>The Plan outlines several activities which are planned to be undertaken in 2015. Evidence of consultation in 2015 update with this outlined in Section 1.2.</p> <p><u>Preparation:</u></p> <ul style="list-style-type: none"> <li>a) Section 3 of the report. Most of the information of the Water Balance is from 2013 and should be reviewed;</li> <li>b) Section 4. Includes details of mitigation measures. Figure 4 is a detailed figure, but may require some updating based on minor</li> </ul>	Update the water balance or justify why the current water balance is still applicable to the current operations.

Condition Number	Condition	Compliance Status	Evidence	Recommended Action
	<p>(c) a Surface Water Management Plan which:</p> <ul style="list-style-type: none"> <li>includes baseline data on surface water flows and quality of Swindles Creek;</li> <li>details surface water impact assessment criteria, including trigger levels for investigating any potentially adverse impacts on surface water resources or surface water quality;</li> <li>provides a program to monitor: <ul style="list-style-type: none"> <li>surface water discharges;</li> <li>surface water flows and quality; and</li> <li>channel stability;</li> </ul> </li> <li>a Ground Water Monitoring Program which includes a program to: <ul style="list-style-type: none"> <li>monitor and report groundwater inflows to underground workings;</li> <li>predict, manage and monitor impacts to nearby groundwater bores on privately-owned land that may be impacted by the development; and</li> </ul> </li> <li>a detailed review of surface water management at the site, with particular reference to the water storages within the dirty water management system, to: <ul style="list-style-type: none"> <li>determine whether the capacity, integrity, retention time and management of the dirty water storages (particularly the final Pollution Control Dam) are sufficient to ensure that water discharged from the site meets the EPL limits and surface water impact assessment criteria within the Surface Water Management Plan; and</li> <li>propose any appropriate changes to the surface water management system.</li> </ul> </li> </ul> <p>The Applicant shall implement the approved management plan as approved from time to time by the Secretary.</p> <p>Note: The Secretary may require the Applicant to implement upgrades and other changes identified under paragraph (e), in accordance with condition 4 of schedule 2.</p>	Compliance	<p>changes at the pit top. Monitoring information outlined in Section 5;</p> <p>c) Covered in Section 4;</p> <p>d) Covered in Appendix B; and</p> <p>e) Covered in several sections.</p> <p><u>Implementation:</u></p> <ul style="list-style-type: none"> <li>The plan is a little out of date - from 2015, with some information dating back to 2013;</li> <li>Evidence of surface water and groundwater monitoring in Annual Review;</li> <li>Water management sighted in the field. Separation of water streams. Dams are stable; and</li> <li>Some desilting of a drainage line is required.</li> </ul>	Ensure dams and drainage lines are free on silt. Establish a maintenance schedule.

**BIODIVERSITY**

**Biodiversity Enhancement Strategy**

19	<p>The Applicant shall implement a Biodiversity Enhancement Strategy as described in the EIS and summarised in Table 6, in consultation with OEHL, and to the satisfaction of the Secretary.</p>	Compliant	<p>Outlined in Biodiversity Management Plan (March 2016) - Section 6.</p> <p>Enhancement mostly includes weed management with some previous rubbish removal.</p> <p>Monitoring is completed with a summary outlined in the 2016-2018 Annual Reviews. Excel and email summaries of monitoring was provided to the auditors. Final weighted scores were recorded of:</p> <ul style="list-style-type: none"> <li>80.3% - 2016;</li> <li>80.3% - 2017; and</li> <li>65% - 2018.</li> </ul> <p>No monitoring in 2019 yet.</p> <p>These are above the trigger levels, therefore no further action required.</p> <p>Excerpt from 2018 Annual Review:  <i>Annual biodiversity monitoring in accordance with the plan was continued during the reporting period, being undertaken in May 2018. The monitoring specifically looks at:</i></p> <ul style="list-style-type: none"> <li>the Swamp Oak Floodplain Forest below the sediment dams;</li> <li>weeds (both at the pit top area and ventilation shaft site); and</li> <li>feral animal activity.</li> </ul> <p>The monitoring results were assessed against the criteria and triggers within the Biodiversity Management Plan with no trigger levels being reached. Specifically, monitoring of the two established plots within the Swamp Oak floodplain forest, recorded a total weighted score of 65% which is significantly higher than the established trigger value of 60% (refer to the Biodiversity Management Plan for details on site attributes and methodology for determining the weighted score). There was no feral animal activity recorded during the 2018 monitoring</p>	<p>Include the biodiversity monitoring reports as appendices to the Annual Review.</p> <p>The current monitoring is provided in a spreadsheet with an email summary. Prepare a small Biodiversity Monitoring Report outlining results, a comparison against trigger levels and potential reasons for changes.</p>			
	<p><i>Table 6: Summary of the Biodiversity Enhancement Strategy</i></p> <table border="1"> <thead> <tr> <th>Area</th> <th>Offset Type</th> <th>Minimum Size/Amount</th> </tr> </thead> <tbody> <tr> <td>Biodiversity Enhancement Area</td> <td>Enhancement and restoration measures, including weed and rubbish removal, return of natural hydrological regime and regeneration with native endemic species.</td> <td>3 ha (in total) of Swamp Sclerophyll Floodplain Forest and Swamp Oak Floodplain Forest endangered ecological communities within the surface facilities sites</td> </tr> </tbody> </table> <p>Note: To identify the Biodiversity Enhancement Area referred to in Table 6 see the applicable figures in Appendix 7.</p> <p>Note: To identify the Biodiversity Enhancement Area referred to in Table 6 see the applicable figures in Appendix 7.</p> <p>The Applicant shall implement its preferred option of the three options set out in new dot point 1 of the Terrestrial Ecology section of its Statement of Commitments by 1 December 2016, following consultation with OEHL and to the satisfaction of the Secretary.</p>				Area	Offset Type	Minimum Size/Amount
Area	Offset Type	Minimum Size/Amount					
Biodiversity Enhancement Area	Enhancement and restoration measures, including weed and rubbish removal, return of natural hydrological regime and regeneration with native endemic species.	3 ha (in total) of Swamp Sclerophyll Floodplain Forest and Swamp Oak Floodplain Forest endangered ecological communities within the surface facilities sites					

**Biodiversity Management Plan**

20	<p>The Applicant shall prepare a Biodiversity Management Plan for the surface facilities sites, for all areas that are not, or will not, be subject to condition 7 of schedule 4, to the satisfaction of the Secretary. This plan must:</p> <p>(a) be prepared by a suitably qualified person approved by the Secretary, in consultation with OEHL, and submitted to the Secretary within 6 months of the date of this consent;</p> <p>(b) establish baseline data for the existing habitat in the Biodiversity Enhancement Area and elsewhere on the site;</p> <p>(c) describe the short, medium, and long term measures that would be implemented to:</p> <ul style="list-style-type: none"> <li>manage the impacts of clearing vegetation;</li> <li>manage the remnant vegetation and habitat in the Biodiversity Enhancement Area and elsewhere on the site; and</li> <li>implement the Biodiversity Enhancement Strategy, including detailed performance and completion criteria;</li> </ul> <p>(d) include a program to monitor and report on the effectiveness of these measures, and progress against the detailed performance and completion criteria;</p> <p>(e) identify the potential risks to the successful implementation of the Biodiversity Enhancement Strategy, and the contingency measures that would be implemented to mitigate these risks; and</p> <p>(f) include details of who would be responsible for monitoring, reviewing, and implementing the plan.</p> <p>The Applicant shall implement the approved management plan as approved from time to time by the Secretary.</p>	Administrative Non-Compliance	<p>The Biodiversity Management Plan is dated 16 March 2016. This was approved by the DPE on 20 April 2016. Covers pit top and fan sites. Seagrass management covered under a separate plan. Evidence of letter to DPE from LakeCoal dated 28 July 2016 stating that a series of management plans would be updated in late 2016/2017. This was not completed. <u>Admin Non - Compliance.</u></p> <p><u>Preparation:</u></p> <p>a) Original document prepared by EMM. Updated document prepared by LakeCoal. The original document met this timeframe;</p> <p>b) Baseline data in Section 3.2;</p> <p>c) Mostly covered in Section 4 and 5, but not split into short, medium and longterm measures;</p> <p>d) Section 11;</p> <p>e) See Table 11;</p> <p>f) Section 13.</p> <p><u>Implementation:</u></p> <p>Section 14 refers to the resubmission of this management plan within three months of submitting the Independent Environmental Audit. The previous audit is dated July 2016.</p> <p>Evidence of biodiversity monitoring reports.</p>	<p>Include the biodiversity monitoring reports as appendices to the Annual Review.</p> <p>The current monitoring is provided in a spreadsheet with an email summary. Prepare a small report outlining results, a comparison against trigger levels and potential reasons for changes.</p> <p>Prepare a separate section with short, medium and longterm measures in the Biodiversity Management Plan.</p>
20A	<p>Within 3 months of the approval of MOD 2, the Applicant shall revise the Biodiversity Management Plan to incorporate the measures required to implement its commitments described in new dot point 2 of the Terrestrial Ecology section of its Statement of Commitments, and submit it to the Secretary for approval.</p>	Compliant	<p>Mod 2 was approved 16 December 2015. Water MP is dated 15 March 2016 and revised following DPE feedback.</p>	

**Heritage**

**Heritage Management Plan**

21	<p>The Applicant shall prepare a Heritage Management Plan for the development to the satisfaction of the Secretary. This Plan must:</p> <p>(a) be prepared in consultation with any relevant Aboriginal stakeholders;</p> <p>(b) be submitted to the Secretary for approval within 6 months of the date of this consent;</p> <p>(c) include consideration of the Aboriginal and non-Aboriginal cultural context and significance of the site;</p> <p>(d) detail the responsibilities of all stakeholders; and</p> <p>(e) include programs/procedures and management measures for:</p> <ul style="list-style-type: none"> <li>the ongoing monitoring of site 45-7-0189 at Summerland Point;</li> <li>managing the discovery of any human remains or previously unidentified Aboriginal objects on site, including (in the case of human remains) stop work provisions and notification protocols;</li> <li>ongoing consultation and involvement of the Aboriginal community in the conservation and management of Aboriginal heritage within the site; (including procedures for keeping records of this);</li> <li>appropriate identification, management, conservation and protection of both Aboriginal and non-Aboriginal heritage items identified on the site; and</li> <li>ensuring relevant workers on site receive suitable heritage inductions prior to carrying out any activities which may disturb Aboriginal sites, and that suitable records are kept of these inductions.</li> </ul> <p>The Applicant shall implement the approved management plan as approved from time to time by the Secretary.</p>	Administrative Non-Compliance	<p><u>Preparation:</u></p> <p>Plan dated 23/6/2014. Evidence of letter to DPE from LakeCoal dated 28 July 2016 stating that a series of management plans would be updated in late 2016/2017. This was not completed. <u>Admin Non - Compliance.</u></p> <p>a) Section 4.4 and 4.5;</p> <p>b) Condition outside of audit period;</p> <p>c) Section 4;</p> <p>d) Section 11;</p> <p>e) In various sections.</p> <p><u>Implementation:</u></p> <p>Evidence of some monitoring of shell midden site #45-7-0189 in Annual Reviews. Monitoring every 2 years until Year 5 (Year 1, 3 and 5). 2017 was the fifth year, hence no further monitoring required.</p> <p>Section 12 of the Heritage Management Plan refers to the resubmission of this management plan within three months of submitting the Independent Environmental Audit. This was not completed.</p>	<p>Update the Heritage Management Plan, including the removal of Site #45-7-0154.</p>
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**Visual**

**Visual Amenity and Lighting**

Condition Number	Condition	Compliance Status	Evidence	Recommended Action																
22	The Applicant shall: (a) minimise visual impacts, and particularly the off-site lighting impacts, of the Surface facilities sites; (b) take all reasonable and feasible measures to further mitigate off-site lighting impacts from the development; and (c) ensure that all external lighting associated on site complies with Australian Standard AS4282 (INT) 1995 – Control of Otrusive Effects of Outdoor Lighting, to the satisfaction of the Secretary.	Administrative Non-Compliance	The most recent lighting audit for Chain Valley is from 2013. Prepared by Wadco May 2013.  a) and b) The pit top area and ventilation shaft site are not dominant features of the landscape the pit top area is somewhat overshadowed by the adjacent power station. The ventilation fans were designed to maintain a relatively low profile, below the surrounding vegetation to ensure amenity and lighting impacts were minimised. Some lights have been removed, including those at the stockpile. There were no complaints to visual or lighting during the audit period.  c) Compliance with this requirement could not be determined due to the date of the previous Visual and Lighting audit. Therefore Admin - Non - Compliance.	Complete a visual and lighting assessment against the Australian Standard AS4282 (INT) 1995 – Control of Otrusive Effects of Outdoor Lighting.																
<b>Waste</b>																				
23	The Applicant shall: (a) minimise and monitor the waste generated by the development; (b) ensure that the waste generated by the development is appropriately stored, handled and disposed of; and (c) report on waste management and minimisation in the Annual Review, to the satisfaction of the Secretary.	Compliant	a) Evidence of waste totals provided in Annual Review. b) The field inspection generally noted that waste was stored well. However the following minor improvements were identified: * Some bins are not well labelled; * Cardboard contained in some general waste bins; * 1 hydraulic oil drum not contained in bund; * Numerous empty oil drums stored on there side within the bund. This may lead to some leakage of oil from drums; * 2 larger 44 gallon drums stored outside bund in a laydown area. Unknown substances.  Numerous bins and spill containers were noted.  c) Effective reporting in the Annual Review	Ensure the minor waste management issues identified during the audit are rectified. Including: * Improve bin labelling; * Ensure all hydrocarbon containers (empty or full) are stored within bunds.																
<b>Bushfire Management</b>																				
24	The Applicant shall: (a) ensure that the development is suitably equipped to respond to any fires on site; and (b) assist the Rural Fire Service and emergency services as much as possible if there is a fire in the vicinity of the Surface facilities sites.	Compliant	The following measures are in place at Chain Valley. * A high capability for firefighting purposes through the 100mm diameter mine water reticulation line and the mine Emergency Management System; * Firebreaks and fire trails in the vicinity of the pit top area and ventilation shaft site; * Fire hydrants and depots placed in strategic positions around the pit top area; and * Regular training of mine firefighting crews and liaison with local rural firefighting brigades  Evidence of firefighting equipment noted in site inspection.  Asset Protection Zone figures outlined in the Annual Review.																	
<b>Rehabilitation</b>																				
<b>Rehabilitation Objectives</b>																				
25	The Applicant shall rehabilitate the site to the satisfaction of the DRE. This rehabilitation must be generally consistent with the proposed rehabilitation strategy described in the EIS, and comply with the objectives in Table 7.	Not Triggerred	Based on discussions with site and a review of Annual Reviews and MOP's there has been no rehabilitation.																	
	<table border="1"> <thead> <tr> <th>Feature</th> <th>Objective</th> </tr> </thead> <tbody> <tr> <td>Mine site (as a whole)</td> <td> <ul style="list-style-type: none"> <li>Safe, stable and non-polluting.</li> <li>Final land use compatible with surrounding land uses.</li> </ul> </td> </tr> <tr> <td>Rehabilitation materials</td> <td> <ul style="list-style-type: none"> <li>Materials (including topsoils, substrates and seeds of the disturbed area) are recovered, appropriately managed and used effectively as resources in rehabilitation.</li> </ul> </td> </tr> <tr> <td>Surface infrastructure</td> <td> <ul style="list-style-type: none"> <li>To be decommissioned and removed, unless the DRE agrees otherwise.</li> </ul> </td> </tr> <tr> <td>Portals and ventilation shafts</td> <td> <ul style="list-style-type: none"> <li>To be decommissioned and made safe and stable.</li> <li>Retain habitat for threatened species (eg. bats), where practicable.</li> </ul> </td> </tr> <tr> <td>Other land affected by the development</td> <td> <ul style="list-style-type: none"> <li>Restore ecosystem function, including maintaining or establishing self-sustaining ecosystems comprised of: <ul style="list-style-type: none"> <li>local native plant species (unless the DRE agrees otherwise); and</li> <li>a landform consistent with the surrounding environment.</li> </ul> </li> </ul> </td> </tr> <tr> <td>Built features damaged by mining operations</td> <td> <ul style="list-style-type: none"> <li>Repair to pre-mining condition or equivalent unless: <ul style="list-style-type: none"> <li>the owner agrees otherwise; or</li> <li>the damage is fully restored, repaired or compensated under the Mine Subsidence Compensation Act 1961.</li> </ul> </li> </ul> </td> </tr> <tr> <td>Community</td> <td> <ul style="list-style-type: none"> <li>Ensure public safety.</li> <li>Minimise the adverse socio-economic effects associated with mine closure.</li> </ul> </td> </tr> </tbody> </table>	Feature	Objective	Mine site (as a whole)	<ul style="list-style-type: none"> <li>Safe, stable and non-polluting.</li> <li>Final land use compatible with surrounding land uses.</li> </ul>	Rehabilitation materials	<ul style="list-style-type: none"> <li>Materials (including topsoils, substrates and seeds of the disturbed area) are recovered, appropriately managed and used effectively as resources in rehabilitation.</li> </ul>	Surface infrastructure	<ul style="list-style-type: none"> <li>To be decommissioned and removed, unless the DRE agrees otherwise.</li> </ul>	Portals and ventilation shafts	<ul style="list-style-type: none"> <li>To be decommissioned and made safe and stable.</li> <li>Retain habitat for threatened species (eg. bats), where practicable.</li> </ul>	Other land affected by the development	<ul style="list-style-type: none"> <li>Restore ecosystem function, including maintaining or establishing self-sustaining ecosystems comprised of: <ul style="list-style-type: none"> <li>local native plant species (unless the DRE agrees otherwise); and</li> <li>a landform consistent with the surrounding environment.</li> </ul> </li> </ul>	Built features damaged by mining operations	<ul style="list-style-type: none"> <li>Repair to pre-mining condition or equivalent unless: <ul style="list-style-type: none"> <li>the owner agrees otherwise; or</li> <li>the damage is fully restored, repaired or compensated under the Mine Subsidence Compensation Act 1961.</li> </ul> </li> </ul>	Community	<ul style="list-style-type: none"> <li>Ensure public safety.</li> <li>Minimise the adverse socio-economic effects associated with mine closure.</li> </ul>	Note	Notes: • These rehabilitation objectives apply to all subsidence impacts and environmental consequences caused by underground mining taking place after the granting of project approval MP 10_0161, and to all development surface infrastructure that is part of the development, whether constructed prior to or following the date of this consent. • Rehabilitation of subsidence impacts and environmental consequences caused by mining which took place prior to the date of project approval (MP 10_0161) may be subject to the requirements of other approvals (eg under a mining lease or a Subsidence Management Plan approval).	
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<b>Progressive Rehabilitation</b>																				
26	The Applicant shall carry out the rehabilitation of the site progressively, that is, as soon as reasonably practicable following disturbance to the satisfaction of the Secretary and DRE.	Not Triggerred	Based on discussions with site and a review of Annual Reviews and MOP's there has been no rehabilitation.																	
<b>Rehabilitation Management Plan</b>																				
27	The Applicant shall prepare a Rehabilitation Management Plan for the development, in consultation with OEH, DPI Water, WSC, LMCC, and the CCC, and to the satisfaction of the DRE. This plan must: (a) be submitted to the Secretary and the DRE for approval within 12 months of the date of approval of this development consent; (b) be prepared in accordance with any relevant DRE guideline and be consistent with the rehabilitation objectives in the EIS and in Table 7; (c) describe how the performance of the rehabilitation would be monitored and assessed against the objectives in Table 7; (d) describe the process whereby additional measures would be identified and implemented to ensure the rehabilitation objectives are achieved; (e) provide for detailed mine closure planning, including measures to minimise socio-economic effects due to mine closure, to be conducted prior to the site being placed on care and maintenance; and (f) be integrated with the other management plans required under this consent.  The Applicant shall implement the approved management plan as approved from time to time by the Secretary.  Note: The Rehabilitation Management Plan should address all land impacted by the development whether prior to, or following, the date of this consent.	Administrative Non-Compliance	Evidence of Rehabilitation Management Plan. Update dated 1 March 2019. This plan appears unapproved and no evidence of this plan being sent to the DPE. Current approved Rehabilitation Management Plan is from December 2014. Evidence of letter to DPE from LakeCoal dated 28 July 2016 stating that a series of management plans would be updated in late 2016/2017. This was not completed.  Admin Non - Compliance.  Preparation: a) Outside of audit period; b) Covers this requirement. Note, a separate MOP has also been prepared for the site; c) Section 8; d) Generally covered in Section 7; e) Section 6; f) Linked to MOP.  Implementation: There is no rehabilitation onsite. Minimal surface footprint. Extraction Plans cover subsidence management. The Rehabilitation Management Plan is not on the CVC website, which makes this Admin Non - Compliant.	Ensure a copy of the approved Rehabilitation Management Plan is put on the website.																
<b>SCHEDULE 4 - ENVIRONMENTAL CONDITIONS – UNDERGROUND MINING</b>																				
<b>Subsidence</b>																				
1	1. The Applicant shall ensure that vertical subsidence within the High Water Mark Subsidence Barrier and within seagrass beds is limited to a maximum of 20 millimetres (mm). If at any stage predicted subsidence levels are exceeded within these areas, an ecological monitoring program shall be initiated to assess the impacts to ecological communities and threatened species and if appropriate, offsets are to be provided for any impacts detected.	Administrative Non-Compliance	This condition is outlined in the Annual Review (see Section 3.16.4 in 2018 Annual Review), however no update has been provided on whether the condition has been met. Based on this the auditor can not determine compliance.	See Section 5.2 of the Main Audit Report for Subsidence Recommendations.																
<b>Performance Measures – Natural Environment</b>																				
2	The Applicant shall ensure that the development does not cause any exceedance of the performance measures in Table 8 to the satisfaction of the Secretary.																			

Condition Number	Condition	Compliance Status	Evidence	Recommended Action														
	<p><b>Table 8: Subsidence Impact Performance Measures – Natural and Heritage Features</b></p> <table border="1"> <tr> <td>Biodiversity</td> <td>Negligible environmental consequences</td> </tr> <tr> <td>Threatened species or endangered populations</td> <td></td> </tr> <tr> <td>Seagrass beds</td> <td>Negligible environmental consequences including: <ul style="list-style-type: none"> <li>negligible change in the size and distribution of seagrass beds;</li> <li>negligible change in the functioning of seagrass beds; and</li> <li>negligible change to the composition or distribution of seagrass species within seagrass beds.</li> </ul> </td> </tr> <tr> <td>Benthic communities</td> <td>Minor environmental consequences, including minor changes to species composition and/or distribution.</td> </tr> <tr> <td><b>Mine workings</b></td> <td></td> </tr> <tr> <td>First workings under an approved Extraction Plan beneath any feature where performance measures in this table require negligible environmental consequences</td> <td>To remain long-term stable and non-subsiding.</td> </tr> <tr> <td>Second workings</td> <td>To be carried out only in accordance with an approved Extraction Plan.</td> </tr> </table> <p>Notes:</p> <ul style="list-style-type: none"> <li>The Applicant will be required to define more detailed performance indicators (including impact assessment criteria) for each of these performance measures in the various management plans that are required under this consent (see Condition 7 below).</li> <li>Measurement and/or monitoring of compliance with performance measures and performance indicators is to be undertaken using generally accepted methods that are appropriate to the environment and circumstances in which the feature or characteristic is located. These methods are to be fully described in the relevant management plans. In the event of a dispute over the appropriateness of proposed methods, the Secretary will be the final arbiter.</li> <li>The requirements of this condition only apply to the impacts and consequences of mining operations, construction or demolition undertaken following the date of approval of this consent.</li> </ul>	Biodiversity	Negligible environmental consequences	Threatened species or endangered populations		Seagrass beds	Negligible environmental consequences including: <ul style="list-style-type: none"> <li>negligible change in the size and distribution of seagrass beds;</li> <li>negligible change in the functioning of seagrass beds; and</li> <li>negligible change to the composition or distribution of seagrass species within seagrass beds.</li> </ul>	Benthic communities	Minor environmental consequences, including minor changes to species composition and/or distribution.	<b>Mine workings</b>		First workings under an approved Extraction Plan beneath any feature where performance measures in this table require negligible environmental consequences	To remain long-term stable and non-subsiding.	Second workings	To be carried out only in accordance with an approved Extraction Plan.	Administrative Non-Compliance	<p>The subsidence performance is outlined in the Annual Reviews. There is no specific table or section addressing if the site has met these performance measures.</p> <p>Reports from 2016 to 2018 titled Seagrass Survey of Chain Valley Bay, Summerland Point, Bardens Bay and Crangan Bay, Lake Macquarie, NSW. These reports do not assess against these performance measures as the word 'negligible' is not in the report. There is no definition of negligible.</p> <p>Biodiversity Monitoring Reports do not cover these performance measures.</p> <p>Benthic monitoring reports do not specifically address these performance measures.</p> <p>Despite this there is no evidence that these performance measures have been exceeded, however the auditor is not able to determine compliance based on the information provided.</p>	See Section 5.2 of the Main Audit Report for Subsidence Recommendations.
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<b>Offsets</b>																		
3	<p>If the Applicant exceeds the performance measures in Table 8 and the Secretary determines that:</p> <p>(a) it is not reasonable or feasible to remediate the impact or environmental consequence; or</p> <p>(b) the remediation measures implemented by the Applicant have failed to satisfactorily remediate the impact or environmental consequence;</p> <p>then the Applicant shall provide a suitable offset to compensate for the impact or environmental consequence to the satisfaction of the Secretary.</p> <p>Note: Any offset required under this condition must be proportionate with the significance of the impact or environmental consequence.</p>	Administrative Non-Compliance	<p>There is no specific assessment against subsidence criteria in the Annual Review, therefore we cannot determine compliance.</p> <p>The 2017 Annual Review stated there was an exceedance of predicted subsidence values over the MW7-12 mining area, but not an exceedance of the performance measures in this table..</p>	See Section 5.2 of the Main Audit Report for Subsidence Recommendations.														
<b>Performance Measures - Built Features</b>																		
4	<p>The Applicant shall ensure that the development does not cause any exceedances of the performance measures in Table 9, to the satisfaction of the Secretary.</p> <table border="1"> <tr> <td colspan="2"><b>Table 9: Subsidence Impact Performance Measures – Built Features</b></td> </tr> <tr> <td><b>Built Features</b></td> <td><b>Performance Measure</b></td> </tr> <tr> <td>Trinity Point Marina Development</td> <td> <ul style="list-style-type: none"> <li>Always safe.</li> <li>Serviceability should be maintained wherever practicable. Loss of serviceability must be fully compensated.</li> <li>Damage must be fully repaired, replaced or fully compensated.</li> </ul> </td> </tr> <tr> <td>Other built features</td> <td></td> </tr> <tr> <td><b>Public Safety</b></td> <td></td> </tr> <tr> <td>Public Safety</td> <td>Negligible additional risk.</td> </tr> </table> <p>Notes:</p> <ul style="list-style-type: none"> <li>The Applicant will be required to define more detailed performance indicators for each of these performance measures in Built Features Management Plans or a Public Safety Management Plan (see Condition 7 below).</li> <li>Measurement and/or monitoring of compliance with performance measures and performance indicators is to be undertaken using generally accepted methods that are appropriate to the environment and circumstances in which the feature or characteristic is located. These methods are to be fully described in the relevant management plans. In the event of a dispute over the appropriateness of proposed methods, the Secretary will be the final arbiter.</li> <li>The requirements of this condition only apply to the impacts and consequences of mining operations undertaken following the date of this development consent.</li> <li>Requirements regarding safety or serviceability do not preclude preventative actions or mitigation being taken prior to or during mining in order to achieve or maintain these outcomes.</li> <li>Requirements under this condition may be met by measures undertaken in accordance with the Mine Subsidence Compensation Act 1961.</li> </ul>	<b>Table 9: Subsidence Impact Performance Measures – Built Features</b>		<b>Built Features</b>	<b>Performance Measure</b>	Trinity Point Marina Development	<ul style="list-style-type: none"> <li>Always safe.</li> <li>Serviceability should be maintained wherever practicable. Loss of serviceability must be fully compensated.</li> <li>Damage must be fully repaired, replaced or fully compensated.</li> </ul>	Other built features		<b>Public Safety</b>		Public Safety	Negligible additional risk.	Compliant	<p>Based on discussions with Environment and Community Co-ordinator feno peg monitoring has been completed at Trinity Point. Results outlined in Annual Review.</p> <p>Subsidence monitoring results for Trinity Point peninsula, Brightwaters peninsular and subsidence monitoring lines numbers 23, 33, 32 and 24 are included in Appendix 7 of the Annual Review. These are purely just numbers with no discussion on compliance against the subsidence impact performance measures in this table.</p> <p>No evidence of subsidence impacts to built features. Based on discussions with the site, the Audit team understands there has been no damage to the marina. No evidence of damage in Annual Reviews.</p>	See Section 5.2 of the Main Audit Report for Subsidence Recommendations.		
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5	<p>Any dispute between the Applicant and the owner of any built feature over the interpretation, application or implementation of the subsidence performance measures in Table 9 is to be settled by the Secretary, following consultation with the MSB and the DRE. Any decision by the Secretary shall be final and not subject to further dispute resolution under this consent.</p>	Note	See Schedule 4 Condition 7.															
5	<p>Any dispute between the Applicant and the owner of any built feature over the interpretation, application or implementation of the subsidence performance measures in Table 9 is to be settled by the Secretary, following consultation with the MSB and the DRE. Any decision by the Secretary shall be final and not subject to further dispute resolution under this consent.</p>	Not Triggered	Based on discussions provided and site records this has not been triggered.															
<b>Multi-Seam Mining Feasibility Investigation</b>																		
6	<p>Prior to the submission of an Extraction Plan for Miniwalls 41 to 45 in Chain Valley Bay, the Applicant must prepare a detailed Multi-Seam Mining Feasibility Investigation to the satisfaction of the Secretary. This plan must:</p> <p>(a) be prepared in consultation with DRE by suitably qualified and experienced persons whose appointment has been endorsed by the Secretary;</p> <p>(b) assess the extent of the soft claystone floor/roof conditions within former workings in the Great Northern and Wallarah Seams;</p> <p>(c) assess the stability of remnant coal pillars within former workings in the Great Northern and Wallarah Seams;</p> <p>(d) give particular consideration to the risks of irregular subsidence, pillar run and long-term subsidence leading to subsidence outside of the predicted angle of draw;</p> <p>(e) include revised multi-seam subsidence predictions for the proposed second workings; and</p> <p>(f) recommend final design of the second workings and any necessary adaptive management measures.</p>	Compliant	<p>The 2018 Annual Review provides an update on this condition.</p> <p><i>In accordance with the requirements of SSD 5465 LakeCoal submitted the multi-seam mining feasibility investigation required for the mining of the miniwalls in the Chain Valley Bay Area (shown as MW41-45 in SSD 5465) during the reporting period. While the consent conceptually approved 5 miniwalls in this area (subject to the feasibility investigation) LakeCoal lodged an extraction plan for only 3 miniwalls during the reporting period. Extensive consultation with the Department of Resources and Energy as well as the Department of Planning and Environment was undertaken during the reporting period as part of the Extraction Plan development for the Chain Valley Bay Miniwalls. As at 31 December 2017 LakeCoal had not received approval for miniwall panels CVB2 and CVB3 which were subject to further investigations /assessment.</i></p> <p>Evidence provided of:</p> <ul style="list-style-type: none"> <li>DgS Subsidence Report - Multi-Seam Mining Feasibility Study for the Proposed Miniwalls CVB1 - 4 at Chain Valley - May 2017. Generally meets the requirements of Condition a-f.</li> <li>Evidence of letter from DPE- RR outlining proposed changes to report.</li> </ul>															
<b>Extraction Plan</b>																		

Condition Number	Condition	Compliance Status	Evidence	Recommended Action																			
7	<p>The Applicant shall prepare an Extraction Plan for all second workings on site, to the satisfaction of the Secretary. Each Extraction Plan must:</p> <p>(a) be prepared by suitably qualified and experienced persons whose appointment has been endorsed by the Secretary;</p> <p>(b) be approved by the Secretary before the Applicant carries out any second workings covered by the plan;</p> <p>(c) include detailed plans of existing and proposed first and second workings and any associated surface development, including any applicable adaptive management measures;</p> <p>(d) include detailed performance indicators for each of the performance measures in Tables 8 and 9;</p> <p>(e) provide revised predictions of the potential subsidence effects, subsidence impacts and environmental consequences of the proposed second workings, incorporating any relevant information obtained since this consent;</p> <p>(f) describe the measures that would be implemented to ensure compliance with the performance measures in Tables 8 and 9, and manage or remediate any impacts and/or environmental consequences;</p> <p>(g) include a Built Features Management Plan, which has been prepared in consultation with DRE and the owners of affected public infrastructure, to manage the potential subsidence impacts and/or environmental consequences of the proposed second workings, and which addresses in appropriate detail all items of public infrastructure and other public infrastructure and all classes of other built features;</p> <ul style="list-style-type: none"> <li>has been prepared following appropriate consultation with the owner/s of potentially affected feature/s;</li> <li>recommends appropriate remedial measures and includes commitments to mitigate, repair, replace or compensate all predicted impacts on potentially affected built features in a timely manner; and;</li> </ul>	Compliant	<p>A summary of Extraction Plans are outlined below:</p> <table border="1"> <thead> <tr> <th>Year</th> <th>Longwalls</th> <th>Extraction Plan Reference</th> </tr> </thead> <tbody> <tr> <td>2016</td> <td>MW10-11-12</td> <td>MW 7-12 Extraction Plan (Extraction Plan 1)</td> </tr> <tr> <td rowspan="3">2017</td> <td>MW12</td> <td>MW 7-12 Extraction Plan (Extraction Plan 1)</td> </tr> <tr> <td>MW5A</td> <td>MW 7-12 Extraction Plan – MW5A Mod (Extraction Plan 2 – Mod to EP1)</td> </tr> <tr> <td>MW CV81</td> <td>MW CV8 1-3 Extraction Plan (Extraction Plan 3)</td> </tr> <tr> <td>2018</td> <td>N1/S1</td> <td>Miniwalls S1/N1 (Extraction Plan 4)</td> </tr> <tr> <td>2019</td> <td>N1/S1</td> <td>Miniwalls S1/N1 (Extraction Plan 4)</td> </tr> </tbody> </table> <p>There are other Extraction Plans that have not yet been approved or Chain Valley have not implemented. With the mining of MW5A, this is a modification to Extraction Plan 1 and does not contain a full set of documentation.</p> <p><u>Preparation:</u></p> <p>a) Covered in EP 1, 3 and 4. These plans have been endorsed by Secretary with dates outlined in Section 2.1 of each report.</p> <p>b) Approval letters for EP1 - 4 were provided to the Audit team.;</p> <p>c) EP1 - 4 include detailed plans (including graphical plans) meeting this condition;</p> <p>d) EP 2 (Mod) not included. EP 2 - Section 4. EP 3 and 4 - Section 3.3. Also some performance measures included in Appendices;</p> <p>e) Detailed predictions by specialists summarised in EP reports. No predictions provided for EP 2 (Mod). Separate appendix for subsidence report;</p> <p>f) Subsidence Management sections are outlined in the EP 1,3 and 4. Subsidence Management also outlined in specific management plans required under the overarching EP;</p> <p>g) EP's have been approved by the DPE with no requirement to complete a Built Features Management Plan. Wording in EP 1 (Section 6) and EP 3 and 4 (Section 4).</p>	Year	Longwalls	Extraction Plan Reference	2016	MW10-11-12	MW 7-12 Extraction Plan (Extraction Plan 1)	2017	MW12	MW 7-12 Extraction Plan (Extraction Plan 1)	MW5A	MW 7-12 Extraction Plan – MW5A Mod (Extraction Plan 2 – Mod to EP1)	MW CV81	MW CV8 1-3 Extraction Plan (Extraction Plan 3)	2018	N1/S1	Miniwalls S1/N1 (Extraction Plan 4)	2019	N1/S1	Miniwalls S1/N1 (Extraction Plan 4)	
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			<p><u>Implementation:</u></p> <p>A summary of subsidence monitoring is provided in the Annual Review. Although there is some analysis of subsidence impacts, there is no specific assessment of how the site has tracked against the key subsidence impact performance measures in Schedule 4 Condition 2 and 4 of this Development Consent.</p> <p>The 2017 Annual Review states exceedance of vertical subsidence over MW7-12.</p>	See Section 5.2 of the Main Audit Report for Subsidence Recommendations.																			
	<p>(h) include a Benthic Communities Management Plan, which has been prepared in consultation with OEH, LMCC, and DPI Fisheries, which provides for the management of the potential impacts and/or environmental consequences of the proposed second workings on benthic communities, and which includes:</p> <ul style="list-style-type: none"> <li>surveys of the lake bed to enable contours to be produced and changes in depth following subsidence to be accurately measured;</li> <li>benthic species surveys within the area subject to second workings, as well as control sites outside the area subject to second workings (at similar depths) to establish baseline data on species number and composition within the communities;</li> <li>a program of ongoing seasonal monitoring of benthic species in both control and impact sites;</li> <li>development of a model to predict likely impact of increased depth and associated subsidence impacts and effects, including but not limited to light reduction and sediment disturbance, on benthic species number and benthic communities composition, incorporating the monitoring and survey data collected; and</li> <li>updating the model every 2 years using the most recent monitoring and survey data;</li> </ul>	Administrative Non-Compliance	<p><u>Preparation:</u></p> <p>Evidence of Benthic Communities Management Plans in EP 1, 3 and 4. Overall Extraction Plan and management plans have been approved by the DPE. No Benthic Communities Management Plan for EP 2 (Modification to EP 1). Plan updated for each EP. The Plans cover the requirements of the sub conditions. Evidence of consultation included in management plans.</p> <p><u>Implementation:</u></p> <p>Evidence of bi-annual benthic communities monitoring during the Audit period. Reports are prepared every six months except no evidence of September 2018 report provided to SLR. Reports prepared by John and Emma Laxton. Results are also summarised in the Annual Review.</p> <p>There is no definition of what a 'minor' impact is in the Benthic Communities Management Plan or the bi-annual monitoring reports, with this being a subsidence performance criteria in Schedule 4 Condition 2.</p> <p>- <i>Minor environmental consequences including minor changes to species composition of distribution.</i></p> <p>There is no definitive guide as to what constitutes reporting of an incident or non - compliance ie. "What is greater than minor?" See Section 6 of May 2018 Benthic Communities Management Plan. As there is little interpretation of results against subsidence performance measures this is a <u>Admin Non - Compliance</u>.</p> <p>The Extraction Plan - EP3 (Appendix 1) outlines a Trigger Action Response Plan (TARP). It has triggers relating to statistical change in benthic communities. eg. Trigger Level 1 = ANOVA/ANOSIM level is approaching 5%. There is no discussion in the bi-annual reports about how the site is tracking against those triggers.</p>	See Section 5.2 of the Main Audit Report for Subsidence Recommendations.																			
	<p>(i) include a Seagrass Management Plan, which has been prepared in consultation with OEH, LMCC, and DPI Fisheries, which provides for the management of the potential impacts and/or environmental consequences of the proposed second workings on seagrass beds, and which includes:</p> <ul style="list-style-type: none"> <li>a program of ongoing monitoring of seagrasses in both control and impact sites, and</li> <li>a program to predict and manage subsidence impacts and environmental consequences to seagrass beds to ensure the performance measures in Table 8 are met;</li> </ul>	Compliant	<p><u>Preparation:</u></p> <p>Evidence of Seagrass Management Plans developed for EP1, 3 and 4. Evidence of trigger levels in Section 4.1 of the February 2018 document.</p> <p><u>Summary of Seagrass monitoring results from 2018 Annual Review.</u></p> <p><i>Seagrass cover has been high consistently at each transect since 2012, with seagrass health and condition being good.</i></p> <p><i>During the 2018 monitoring most sites reported similar results to the previous year and in most cases, when compared to the 2008 baseline data have shown a significant increase in seagrass cover. A significant portion of the sites sampled have achieved a 100% seagrass cover value.</i></p> <p><u>Implementation:</u></p> <p>There is minimal wording in the Annual Seagrass Monitoring Report or the Annual Review regarding how the site has tracked against the Subsidence Performance Criteria eg. Negligible impacts (see Schedule 4 Condition 2). Based on monitoring results there appears to be negligible change. The Seagrass Management Plan defines negligible impacts, however this definition is not based on quantitative data.</p> <p>There is little mention of how the site has tracked against the trigger levels in Section 4.1 of the February 2018 Seagrass Management Plan within the Annual Review. There is some mention of this in the 2018 Seagrass Monitoring Report, including Table 7.2 of the 2018 report which highlights changes where there has been a 20% change.</p>	See Section 5.2 of the Main Audit Report for Subsidence Recommendations.																			
	<p>(j) include a Public Safety Management Plan, which has been prepared in consultation with DRE, to ensure public safety;</p> <p>(k) include a Subsidence Monitoring Program which has been prepared in consultation with DRE, to:</p> <ul style="list-style-type: none"> <li>provide data to assist with the management of the risks associated with subsidence;</li> <li>validates the subsidence predictions;</li> <li>analyses the relationship between the predicted and resulting subsidence effects and predicted and resulting impacts under the plan and any ensuing environmental consequences; and</li> <li>informs the contingency plan and adaptive management process;</li> </ul> <p>(l) include a contingency plan that expressly provides for adaptive management where monitoring indicates that there has been an exceedance of any performance measure in Tables 8 and 9, or where any such exceedance appears likely;</p> <p>(m) include appropriate revisions to the Rehabilitation Management Plan required under Condition 28 of Schedule 3; and</p> <p>(n) include a program to collect sufficient baseline data for future Extraction Plans.</p>		<p>j) Public Safety Management Plans prepared for EP 3 and 4. Not required for EP1 and 2, with these EP's being approved by the DPE;</p> <p>k) Subsidence Monitoring Program developed for EP 1, 3 and 4. Meets requirements of consent;</p> <p>l) Subsidence Management TARP's have been completed for EP 3 and 4. These have sufficient detail. No TARP for EP1, however this</p>																				

Condition Number	Condition	Compliance Status	Evidence	Recommended Action
	The Applicant shall implement the approved management plan as approved from time to time by the Secretary.  Notes: • To identify the underground mining areas approved under this consent referred to in this condition, see Appendix 3. • This condition does not limit secondary extraction under a Subsidence Management Plan approved as at the date of this consent.	Compliant	document was prepared in 2013 (outside current audit period); m) Rehabilitation Management Plan attached to EP's; and n) Monitoring outlined in the Subsidence Monitoring Program.	
8	The Applicant shall ensure that the management plans required under conditions 7(g)-(j) above include: (a) an assessment of the potential environmental consequences of the Extraction Plan, incorporating any relevant information that has been obtained since this consent; and (b) a detailed description of the measures that would be implemented to remediate predicted impacts.	Compliant	This information is available in management plans.	
<b>First Workings</b>				
9	The Applicant shall not carry out first workings on site that are not generally in accordance with the approved mine plan without written approval of the Secretary.	Compliant	Revised first workings approval for the North Mining Area. 20 July 2018. Miniwalls N1/S1.	
9A	Within 3 months of the approval of MOD 1, the Applicant shall produce and subsequently implement a Built Features Management Plan that considers surface infrastructure potentially affected by the first workings of the Underground Linkage between Chain Valley Colliery and Mannering Colliery, including WCS's MP01 sewer rising main, TransGrid's electricity transmission assets and infrastructure associated with the Vales Point Power Station, to the satisfaction of the Secretary.	Not Triggered	This is a historical condition. Wording from prior Audit report. Not applicable to this audit period.  See CVC Link Road Built Features Management System Plan MSP-19193 dated 18/05/15. LakeCoal sought an extension from DP&E to the date required to submit the Built Features Management System Plan via letter on 11/02/15. Viewed the response letter from DP&E dated 13/02/15 confirming that an extension for submission date to 27/05/15 was approved. Viewed letter from DP&E dated 4/06/15 approving the CVC Link Road Built Features Management System Plan as submitted on 18/05/15.	
<b>Payment of Reasonable Costs</b>				
10	The Applicant shall pay all reasonable costs incurred by the Department to engage suitably qualified, experienced and independent experts to review the adequacy of any aspect of an Extraction Plan.	Compliant	Evidence of report provided by Delta Coal titled: Subsidence Data Review for the Proposed Miniwalls CVB1 to CVB3 at Chain Valley Colliery (15 November 2017, DgS).	
<b>SCHEDULE 5 - ADDITIONAL PROCEDURES</b>				
<b>ADDITIONAL PROCEDURES</b>				
<b>NOTIFICATION OF LANDOWNERS</b>				
1	As soon as practicable after obtaining monitoring results showing: (a) an exceedance of any relevant criteria in Schedule 3, the Applicant shall notify affected landowners in writing of the exceedance, and provide regular monitoring results to each affected landowner until the development is again complying with the relevant criteria; and (b) an exceedance of any relevant air quality criteria in Schedule 3, the Applicant shall send a copy of the NSW Health fact sheet entitled "Mine Dust and You" (as may be updated from time to time) to the affected landowners and/or existing tenants of the land (including the tenants of any mine-owned land).	Administrative Non-Compliance	a) 2018 - Short term PM10 non-compliances on 3 April 2018, 18 July 2018 and 4 December 2018. For 2018 there was evidence provided to SLR through correspondence with EPA that these dust events were regional. There was however no evidence provided of contact with 'affected landowners' (Admin Non-Compliance).  2017 - Noise non-compliance in 2017 (24 October 2017 at ATN007 (Summerland Point). Evidence of report to the DPE on 8 November 2017. No evidence of notifying 'affected landowner/s'.  2016 - Exceedance of daily discharge limit at LDP1 on January 2016 as a result of heavy rainfall (SLR believes no affected landowners, therefore no notification required).  Exceedance of night time LA1 Minute criteria at two residential receivers during Q2 2016 monitoring.  b) No evidence that the 'Mine Dust and You' fact sheet was provided for 2018 dust exceedances for 'affected landowners'. However as these events were proven to be regional, the auditors do not believe this is required for the 2018 exceedances.	Define who are potentially 'affected landowners' in the Air Quality Management Plan?  Affected landowners should be contacted when there is a non-compliance relating to dust or noise. This should be completed even if it is a regional dust event as Delta Coal are still recording it as a non-compliance in the Annual Review.
<b>INDEPENDENT REVIEW</b>				
2	If an owner of privately-owned land considers the development to be exceeding the relevant criteria in Schedule 3, then he/she may ask the Secretary in writing for an independent review of the impacts of the development on his/her land.  If the Secretary is satisfied that an independent review is warranted, then within 2 months of the Secretary's decision the Applicant shall: (a) commission a suitably qualified, experienced and independent person, whose appointment has been approved by the Secretary, to: • consult with the landowner to determine his/her concerns; • conduct monitoring to determine whether the development is complying with the relevant criteria in Schedule 3; and • if the development is not complying with these criteria then identify the measures that could be implemented to ensure compliance with the relevant criteria; and (b) give the Secretary and landowner a copy of the independent review.	Not Triggered	Environment and Community Co-ordinator provided the site complaints records.  Based on discussions with the Environment and Community Co-ordinator there was a complaint to the EPA in August 2018 regarding noise, dust and vibration. Other complaints have also been received during the audit period.  Based on discussions with the Environment and Community Co-ordinator there was no request for an independent review.	
<b>SCHEDULE 6 - ENVIRONMENTAL MANAGEMENT, REPORTING AND AUDITING</b>				
<b>ENVIRONMENTAL MANAGEMENT</b>				
<b>Environmental Management Strategy</b>				
1	1. The Applicant shall prepare an Environmental Management Strategy for the development to the satisfaction of the Secretary. This strategy must: (a) be submitted to the Secretary for approval within 7 months of the date of this consent; (b) provide the strategic framework for environmental management of the development; (c) identify the statutory approvals that apply to the development; (d) describe the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the development; (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 development; • receive, handle, respond to, and record complaints; • resolve any disputes that may arise during the course of the development; • respond to any non-compliance; • respond to emergencies; and (f) include: • copies of any strategies, plans and programs approved under the conditions of this consent; and • a clear plan depicting all the monitoring required to be carried out under the conditions of this consent.  The Applicant shall implement the approved management strategy as approved from time to time by the Secretary.	Administrative Non-Compliance	EMS Document is dated 12 October 2012. The EMS was approved by DP&E with a letter dated 6/11/12. Evidence of letter to DPE from LakeCoal dated 28 July 2016 stating that a series of management plans would be updated in late 2016/2017. This was not completed. <u>Admin Non-Compliance.</u>  No evidence that the EMS was updated following the last audit or other modifications.  Preparation: a) - NA as outside audit period; b) Framework provided as part of document; c) Approvals are listed but are out of date; d) Section 9.5; e) Covered in Several Sections 8-11; f) Plans listed in Section 9.  Implementation: There is evidence of complaints and incident management. No evidence of landowners being contacted for dust or noise exceedances. Non-complaint for implementation (Admin Non-Compliance). The EMS is supposed to be reviewed every three years. Last review was 2012, therefore <u>Admin Non-Compliance.</u>	Prepare a cross referencing table outlining where sub conditions have been covered.  Ensure plans are reviewed as per Schedule 6 Condition 5.  Include Schedule 5 Condition 2 requirement in the EMS to notify landowners of exceedances 'as soon as practical'. Define a time period for as soon as practical.
<b>Adaptive Management</b>				

Condition Number	Condition	Compliance Status	Evidence	Recommended Action
2	<p>The Applicant must assess and manage development-related risks to ensure that there are no exceedances of the criteria and/or performance measures in Schedules 3 and 4. Any exceedance of these criteria and/or performance measures constitutes a breach of this consent and may be subject to penalty or offence provisions under the EP&amp;A Act or EP&amp;A Regulation.</p> <p>Where any exceedance of these criteria and/or performance measures has occurred, the Applicant must, at the earliest opportunity:</p> <p>(a) take all reasonable and feasible steps to ensure that the exceedance ceases and does not recur;</p> <p>(b) consider all reasonable and feasible options for remediation (where relevant) and submit a report to the Department describing those options and any preferred remediation measures or other course of action; and</p> <p>(c) implement remediation measures as directed by the Secretary, to the satisfaction of the Secretary.</p>	Non-Compliant (Low Risk)	<p>There have been some exceedances of criteria during the audit period.</p> <p>a) Exceedances noted for air (regional dust), noise and a discharge volume issue during the audit period. Also non compliance relating to subsidence which is outlined in the 2017 Annual Review. Evidence of exceedance/incident reports provided;</p> <p>b) Incident reports submitted to the DPE, however some reports have been well after the incident or non - compliance occurred;</p> <p>c) Remedial measures - additional subsidence modelling completed following MW7-12 subsidence exceedance.</p> <p>Exceedances have generally been investigated with no further recommendations.</p>	
<b>Management Plan Requirements</b>				
3	<p>The Applicant shall ensure that the management plans required under this consent are prepared in accordance with any relevant guidelines, and include:</p> <p>(a) detailed baseline data;</p> <p>(b) a description of:</p> <ul style="list-style-type: none"> <li>the relevant statutory requirements (including any relevant approval, licence or lease conditions);</li> <li>any relevant limits or performance measures/criteria;</li> <li>the specific performance indicators that are proposed to be used to judge the performance of, or guide the implementation of, the development or any management measures;</li> </ul> <p>(c) a description of the measures that would be implemented to comply with the relevant statutory requirements, limits, or performance measures/criteria;</p> <p>(d) a program to monitor and report on the:</p> <ul style="list-style-type: none"> <li>impacts and environmental performance of the development;</li> <li>effectiveness of any management measures (see c above);</li> </ul> <p>(e) a contingency plan to manage any unpredicted impacts and their consequences and to ensure that ongoing impacts reduce to levels below relevant impact assessment criteria as quickly as possible;</p> <p>(f) a program to investigate and implement ways to improve the environmental performance of the development over time;</p> <p>(g) a protocol for managing and reporting any:</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> <p>(h) a protocol for periodic review of the plan.</p> <p>Note: The Secretary may waive some of these requirements if they are unnecessary or unwarranted for particular management plans.</p>	Compliant	<p>DPE provided a letter to LakeCoal on 29 August 2016 outlining that: <i>'With the exception of the Air Quality Management Plan (AQMP), we are satisfied that Chain Valley Colliery has a comprehensive suite of approved management plans and strategies in place (subject to the proposed revision program outlined in your letter dated 28 July 2016)'. That letter committed to all the management plans being updated in late 2016 and early 2017. That has not been completed. Despite this, the plans contain the relevant aspects of this condition.</i></p> <p>The all management plan condition has been reviewed for the site management plans, with the exception of the EMS and the Extraction Plan (not required).</p> <p>Condition requirements a) - h) have generally been covered by the site management plans therefore this condition is compliant. However there is little information regarding contingency response for some plans. It is noted that plans do not contain a checklist of this condition.</p>	<p>All management plans require updating due to the length of time since the previous reviews. Include in a Delta Coal template.</p> <p>Ensure there is a cross referencing table covering this condition in management plans.</p> <p>Additional detail including Trigger, Action, Response Tables (contingency plan) should be developed in the next round of management plan updates.</p>
<b>Annual Review</b>				
4	<p>By the end of March each year, or other timing as may be agreed by the Secretary, the Applicant shall review the environmental performance of the development to the satisfaction of the Secretary. This review must:</p> <p>(a) describe the development (including any rehabilitation) that was carried out in the past calendar year, and the development that is proposed to be carried out over the current calendar year;</p> <p>(b) include a comprehensive review of the monitoring results and complaints records of the development over the past calendar year, which includes a comparison of these results against the:</p> <ul style="list-style-type: none"> <li>relevant statutory requirements, limits or performance measures/criteria;</li> <li>requirements of any plan or program required under this consent;</li> <li>monitoring results of previous years; and</li> <li>relevant predictions in the documents listed in condition 2 of Schedule 2;</li> </ul> <p>(c) identify any non-compliance over the past calendar year, and describe what actions were (or are being) taken to ensure compliance;</p> <p>(d) identify any trends in the monitoring data over the life of the development;</p> <p>(e) identify any discrepancies between the predicted and actual impacts of the development, and analyse the potential cause of any significant discrepancies; and</p> <p>(f) describe what measures will be implemented over the current financial year to improve the environmental performance of the development.</p>	Administrative Non-Compliance	<p>The 2016, 2017 and 2018 Annual Reviews were reviewed as part of the IEA.</p> <p>a) Section 1 and 2;</p> <p>b) Section 3. Some sections do not report against all Development Consent criteria eg. subsidence;</p> <p>c) Section 7 - however this is different to the Annual Review guidelines;</p> <p>d) Trends covered for water management and air quality;</p> <p>e) Limited information on this condition in the Annual Reviews;</p> <p>f) Section 8;</p> <p>The Annual Reviews have not been prepared to cover the current Annual Review Guidelines. See link: <a href="https://www.planning.nsw.gov.au/Policy-and-Legislation/Mining-and-Resources/~media/3AA21D35168042FE813DD0FB92E00E58.aspx">https://www.planning.nsw.gov.au/Policy-and-Legislation/Mining-and-Resources/~media/3AA21D35168042FE813DD0FB92E00E58.aspx</a></p> <p>Therefore Admin Non - Compliance.</p>	<p>The Annual Reviews are set out differently to the DPE Annual Review Guidelines (2015). Ensure table of contents matches the guidelines.</p> <p>Ensure transport records from this Audit period (January 2016) onwards are recorded on the website. This could be appended to the Annual Review summarising the weekly transport.</p> <p>Include the biodiversity monitoring reports as appendices to the Annual Review.</p> <p>See Section 5.2 of the Main Audit Report for Subsidence Recommendations.</p>
<b>Revision of Strategies, Plans and Programs</b>				
5	<p>Within 3 months of:</p> <p>(a) the submission of an annual review under Condition 4 above;</p> <p>(b) the submission of an incident report under Condition 7 below;</p> <p>(c) the submission of an audit report under Condition 9 below; or</p> <p>(d) any modification to the conditions of this consent, (unless the conditions require otherwise), the Applicant shall review, and if necessary revise, the strategies, plans, and programs required under this consent, to the satisfaction of the Secretary. Where this review leads to revisions in any such document, then within 4 weeks of the review the revised document must be submitted for the approval of the Secretary.</p> <p>Note: This is to ensure the strategies, plans and programs are updated on a regular basis, and incorporate any recommended measures to improve the environmental performance of the development.</p>	Administrative Non-Compliance	<p>This timing has not been met. Several of the management plans were not updated since the previous audit.</p>	<p>Include statement in future Annual Reviews stating that Management Plans have been reviewed and state which management plans will or will not be updated within 3 months.</p> <p>Develop and implement a plan to update Chain Valley's Strategies, Plans and Programs.</p>
<b>Community Consultative Committee</b>				
6	<p>The Applicant shall continue to operate a Community Consultative Committee (CCC) for the development to the satisfaction of the Secretary. This CCC must be operated in accordance with the Guidelines for Establishing and Operating Community Consultative Committees for Mining Developments (Department of Planning, 2007, or its latest version).</p> <p>Notes:</p> <ul style="list-style-type: none"> <li>The CCC is an advisory committee. The Department and other relevant agencies are responsible for ensuring that the Applicant complies with this consent.</li> <li>In accordance with the guideline, the Committee should be comprised of an independent chair and appropriate representation from the Applicant, Council, recognised environmental groups and the local community.</li> <li>In operating the CCC, the Department will accept the continued representation from existing CCC members.</li> </ul>	Compliant	<p>Evidence if CCC meeting minutes on website across the audit period.</p> <p>CCC appears to operate as per the guidelines.</p> <p>CCC committee members outlined in the Annual Review.</p>	
<b>REPORTING</b>				
<b>Incident Reporting</b>				
7	<p>The Applicant shall immediately notify the Secretary and any other relevant agencies of any incident that has caused, or threatens to cause, material harm to the environment. For any other incident associated with the development, the Applicant shall notify the Secretary and any other relevant agencies as soon as practicable after the Applicant becomes aware of the incident. Within 7 days of the date of the incident, the Applicant shall provide the Secretary and any relevant agencies with a detailed report on the incident, and such further reports as may be requested.</p>	Administrative Non-Compliance	<p>Evidence of incident notification in 'Incident Management' folder provided to SLR. Evidence provided in Annual Reviews.</p> <p>No evidence of any incident causing material harm requiring immediate notification.</p> <p>Evidence of notification to Secretary and EPA for dust incidents in 2018. One incident occurred on 18 July 2018, with the site finding this non compliance on 1 August 2018. The exceedance was then reported on 10 August 2018 (greater than 7 days - Admin Non - Compliance). It appears that short term dust exceedances are only determined during the monthly data download, with reporting some times occurring two to three weeks after an incident occurs. The two other dust exceedances in 2018 appear to have been reported as per this condition.</p> <p>2017 - Noise non - compliance in 2017 (24 October 2017 at ATN007 (Summerland Point). Evidence of report to the DPE on 8 November 2017. Greater than 7 days - Admin Non - Compliance.</p> <p>There was a non - compliance relating to an exceedance of predicted subsidence. The non - compliance was determined based on bathymetric surveys (October 2017) but was not reported (as per Exceedance Report) until 13 December 2017.</p>	<p>Ensure TEOM is setup with alarms/notifications for when results are approaching or have exceeded the short term criterion for particulate matter. This will ensure exceedances are immediately detected and reported as soon as possible to the EPA and DPE.</p> <p>Ensure exceedances and other incidents are reported as per this condition (Detailed Incident Report within 7 days).</p>
<b>Regular Reporting</b>				

Condition Number	Condition	Compliance Status	Evidence	Recommended Action
8	The Applicant shall provide regular reporting on the environmental performance of the development on its website, in accordance with the reporting arrangements in any plans or programs approved under the conditions of this consent.	Administrative Non-Compliance	Evidence of reporting on the Lake Coal and Delta Coal website. Note Schedule 3 Condition 1 outlines requirements to report transport.  The Applicant shall: (a) keep accurate records of the amount of coal transported from the site (on a weekly basis); and (b) make these records publicly available on its website at the end of each calendar quarter.  Admin Non - Compliance: This has not been completed.  No EIS's shown on the LakeCoal or Delta Coal website.  Information now available on the Delta Coal website. However no management plans and EIS's are on the website.  No Rehabilitation Management Plan was on the website.  No noise monitoring reports on website.	Ensure website reporting meets the conditions of the Development Consent.
<b>INDEPENDENT ENVIRONMENTAL AUDIT</b>				
9	By the end of February 2016 (or other such timing as agreed by the Secretary), and every 3 years thereafter, unless the Secretary directs otherwise, the Applicant shall commission and pay the full cost of an Independent Environmental Audit of the development. This audit must: (a) be conducted by a suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Secretary; (b) include consultation with the relevant agencies; (c) assess the environmental performance of the development and assess whether it is complying with the requirements in this consent and any relevant EPL or Mining Lease (including any assessment, plan or program required under these approvals); (d) review the adequacy of strategies, plans or programs required under the abovementioned approvals; and (e) recommend appropriate measures or actions to improve the environmental performance of the development, and/or any assessment, plan or program required under the abovementioned approvals.  Note: This audit team must be led by a suitably qualified auditor and include experts in any field specified by the Secretary.	Compliant	Evidence of Audit from Hanson Bailey dated July 2016. The audit covered the period from 1 November 2012 - 31 December 2015.  a) 2016 report prepared by Suitably qualified experts - Hansen Bailey who were endorsed by the DPE; b) Evidence of consultation with agencies - Section 1.5.3 and Table 4. c) Performance assessed as per this condition; d) Relevant plans assessed; e) Recommendations proposed.	
10	Within 6 weeks of the completion of this audit, or as otherwise agreed by the Secretary, the Applicant shall submit a copy of the audit report to the Secretary, together with its response to any recommendations contained in the audit report.	Administrative Non-Compliance	No evidence has been provided of the submission of the previous audit report.  The submission timing for this audit has been extended by the DPE until 25 June 2019.	
<b>ACCESS TO INFORMATION</b>				
11	The Applicant shall: (a) make copies of the following publicly available on its website: • the EIS; • all current statutory approvals for the development; • all approved strategies, plans and programs required under the conditions of this consent; • a comprehensive summary of the monitoring results of the development, which have been reported in accordance with the various plans and programs approved under the conditions of this consent; • a complaints register (updated monthly); • minutes of CCC meetings; • the Annual Reviews of the development; • any Independent Environmental Audit, and any other audit, and the Applicant's response to the recommendations in these audits; • any other matter required by the Secretary; and (b) keep this information up-to-date, to the satisfaction of the Secretary.	Administrative Non-Compliance	a) and b) Copies of this information is still available on the Lakecoal website. With the exception of EIS's, Admin Non - Compliant.  Information now available on the Delta Coal website. However no management plans and EIS's are on the website.  No Rehabilitation Management Plan on the website.  No noise monitoring reports on website.	Ensure all relevant information is brought across to the Delta Coal website.
<b>NOISE COMPLIANCE ASSESSMENT</b>				
<b>Applicable Meteorological Conditions</b>				
1	The noise criteria in Table 1 of the conditions are to apply under all meteorological conditions except the following: (a) during periods of rain or hail; (b) average wind speed at microphone height exceeds 5 m/s; (c) wind speeds greater than 3 m/s measured at 10 m above ground level; or (d) temperature inversion conditions greater than 3°C/100 m.	Compliant	Quarterly noise monitoring reports indicate that noise monitoring is with appropriate weather exclusion methodology.	
<b>Determination of Meteorological Conditions</b>				
2	Except for wind speed at microphone height, the data to be used for determining meteorological conditions shall be that recorded by the meteorological station described in condition 15 of schedule 3.	Compliant	Evidence of meteorological data. Spreadsheet provided with measurements.  2012 audit confirmed that DPE and EPA (under revision of EPL 1770) approved use of Mannering Colliery monitor as representative of Chain Valley and ability to calculate temperature lapse rate by use of sigma-theta method.	
<b>Compliance Monitoring</b>				
3	Attended monitoring is to be used to evaluate compliance with the relevant conditions of this consent.	Compliant	Operator attended noise monitoring conducted on a quarterly basis. Meets this condition.	
4	This monitoring must be carried out at least 4 times in each calendar year (ie at least once every 3 months), unless the Secretary directs otherwise.	Compliant	Operator attended noise monitoring conducted on a quarterly basis. Meets this condition.	
5	Unless otherwise agreed with the Secretary, this monitoring is to be carried out in accordance with the relevant requirements for reviewing performance set out in the NSW Industrial Noise Policy (as amended from time to time), in particular the requirements relating to: (a) monitoring locations for the collection of representative noise data; (b) meteorological conditions during which collection of noise data is not appropriate; (c) equipment used to collect noise data, and conformity with Australian Standards relevant to such equipment; and (d) modifications to noise data collected, including for the exclusion of extraneous noise and/or penalties for modifying factors apart from adjustments for duration.	Compliant	Quarterly noise monitoring reports indicate that noise monitoring is conducted using calibrated sound level meters and acoustic calibrators in accordance with the relevant standards and monitoring is conducted at representative locations. Modifying factors, are applied when triggered as evidenced in the Q4 2017 exceedance at R22 where a low frequency penalty was applicable to the measured CVC noise contribution.	

Statement of Commitments - SSD 5465

Audit Period = 1 January 2016 – 5 April 2019

Condition Number	Condition	Compliance Status	Evidence	Recommended Action
<b>APPENDIX 9 - STATEMENT OF COMMITMENTS</b>				
<b>Item</b>	<b>Commitment</b>			
Groundwater	<p>In addition to the management and mitigation measures undertaken at the Colliery for groundwater as described in the WMP, the following commitments specific to the Proposal will be undertaken. Some commitments are already undertaken under the WMP. LakeCoal will:</p> <ul style="list-style-type: none"> <li>assess whether abnormal or significant groundwater inflow changes occur in the active panels;</li> <li>maintain the water flow monitoring appliances used to measure pumped water volumes to and from the Colliery in good working order;</li> <li>maintain and plot records of daily total Colliery water pumping and annually communicate an interpretation of the findings within the Annual Review. A copy of the Annual Review will be supplied to DPI Water;</li> <li>measure water levels and quality within private bores, where access is possible, in relevant areas to assess if any adverse effects occur due to subsidence from the Proposal; and</li> <li>develop groundwater assessment criteria and triggers, response protocols and contingency measures. Although it is not anticipated that private bore yields would be impacted due to subsidence, should such a situation arise, LakeCoal would provide an alternative water supply until the impacted bore recovers.</li> </ul> <p>Any monitored or reported adverse impacts on the yield, saturated thickness or quality of a private registered bore will be investigated by LakeCoal. In the event of a groundwater level drop of over 2 m for a period of two months or more, a notable increase in iron hydroxide, or an adverse change in salinity as a consequence of subsidence, LakeCoal will enter into negotiations with the affected landowners and the Mine Subsidence Board with the intent of formulating an agreement which provides for one, or a combination of:</p> <ul style="list-style-type: none"> <li>re-establishment of saturated thickness in the affected bore(s) through bore deepening;</li> <li>establishment of additional bores to provide a yield at least equivalent to the affected bore prior to mining;</li> <li>provision of access to alternative sources of water; and/or</li> <li>compensation to reflect increased water extraction costs (eg. due to lowering pumps or installation of additional or alternative pumping equipment).</li> </ul>	Compliant	<p>Evidence of the Water Management Plan.</p> <p>Evidence of groundwater monitoring, including results in Annual Reviews.</p> <p>Annual Review supplied to Doi Water</p> <p>Based on discussions with the Environment and Community Co-ordinator, groundwater monitoring on private bores is completed 'where property access is granted'. There has been an attempt from LakeCoal (letter dated 23 April 2012) to contact the council to obtain further details of the owners of groundwater bores. No further information was provided to SLR in terms of whether the owners were contacted. As an attempt has been made to contact property owners regarding groundwater monitoring this condition has been called compliant.</p>	Attempt to contact property owners and ask for permission to monitor the private groundwater bores. Some additional consultation with Council may be required.
Surface water	<p>Management and monitoring of surface water will continue to be undertaken in accordance with the Colliery's WMP, which will be reviewed and updated as required to include the commitments made below. LakeCoal will:</p> <ul style="list-style-type: none"> <li>update the WMP to include any changes as a result of the proposed modification;</li> <li>limit the main underground pumps to a maximum pump out rate of 10.5 ML/day within 12 months of approval;</li> <li>request an amendment of EPL1770 to include a condition on the daily discharge volume limit stating that "Exceedance of the volume limit for Point 1 is permitted only if the discharge from Point 1 occurs solely as a result of rainfall at the premises exceeding 10 mm during the 24 hours immediately prior to commencement of the discharge";</li> <li>undertake daily measurements of discharge volumes and report publicly on a monthly basis via LakeCoal's website;</li> <li>continue collection of baseline water quality data to aid in the development of appropriate discharge water quality trigger values;</li> <li>engage suitably qualified expert to conduct an assessment of the metals contained within discharge water in accordance with the ANZECC water quality guidelines and provide this assessment to the EPA by 31 December 2013;</li> <li>investigate water saving measures to minimise the amount of potable water required from WSC for Colliery operations;</li> <li>quantify the groundwater storage capacity in the Great Northern and Wallarah Seams;</li> <li>continue effluent monitoring regime of receiving soils from the AWTS in accordance with the parameters and testing frequencies identified in the Colliery's WMP. The results of this monitoring program will be reviewed by a suitably qualified expert and used to determine the appropriateness of the existing irrigation area to receive this effluent;</li> <li>develop a program to monitor creek line channel stability and the health of riparian vegetation within Swindles Creek. Monitoring will be undertaken in accordance with Section 8.5.2 of the Surface Water Impact Assessment (EIS Appendix E) and incorporated into the Colliery's WMP or Biodiversity Management Plan; and</li> <li>record monitoring data in accordance with the Colliery's WMP and EPL 1770. Monitoring data will be interpreted as it is received to ensure appropriate operational guidance on monitoring water quality within desired parameters. Results of water quality monitoring will be reported in the Annual Review and made available to the CCC as well as Wyong and Lake Macquarie Councils.</li> </ul>	Administrative Non-Compliance	<p>Evidence of the Water Management Plan.</p> <p>Evidence of surface water monitoring, including results in Annual Reviews.</p> <p><u>Admin Non - Compliant:</u> Evidence of photos provided of channel stability monitoring of Swindles Creek, however it does not appear to have been completed in accordance with Section 5.4 of the Water Management Plan. No evidence of:</p> <ul style="list-style-type: none"> <li>Documenting general observations of water quantity and quality;</li> <li>Documenting locations and dimensions of significant erosive or depositional features;</li> <li>Documenting evidence of erosion and exposed soils;</li> <li>Documenting general indicators of stream health, including abundance of flora and fauna; and</li> <li>Review and comparison of results to previous rounds of monitoring.</li> </ul> <p>There is also no timing proposed for inspections in the Water Management Plan.</p>	A separate report should be completed for Stream Health Channel Flow and Riparian Vegetation Monitoring. This should compare results from previous inspections. Information to be included in the Annual Review.
Noise	<p>Management and monitoring of noise will continue to be undertaken in accordance with the Colliery's NMP, which will be reviewed and updated as required to include the commitments made below. LakeCoal will:</p> <ul style="list-style-type: none"> <li>continue attended compliance monitoring on site which will be used to identify potential hot spots and primary noise sources;</li> <li>continue real-time noise monitoring alerts to site personnel to enable implementation of any required rapid noise management initiatives;</li> <li>manage potential non-compliance through a noise complaint handling and response system, including the identification of responsible sources to enable targeted remedial action;</li> <li>assess if further noise mitigation options for the ventilation fans are reasonable and feasible following the receipt of attenuation proposals; and</li> <li>discuss potential management measures or agreement options with the landowner at 275 Cams Boulevard, following receipt of proposals from acoustics specialists.</li> </ul> <p>In addition to the above, LakeCoal is committed to the progressive implementation of feasible measures to target long term noise goals which are designed to reduce noise emissions from the Colliery. Long term options for investigation include:</p> <ul style="list-style-type: none"> <li>modification to belt/movement alarms;</li> <li>investigation of surface conveyor and coal preparation equipment, to determine if noise reductions are possible;</li> <li>identifying sound attenuation options for the surface bulldozer and front end loader;</li> <li>strategic placement of acoustic barriers;</li> <li>attenuation for the surface screener/shaker;</li> <li>installation of quiet rollers for surface conveyor belts;</li> <li>acoustic treatments around compressors; and</li> <li>the use of a conveyor stacker for product coal stockpiling.</li> </ul>	Administrative Non-Compliance	<p>No evidence of review or update of Noise Management Plan during audit period. <u>Admin Non - Compliance.</u></p> <p>Real time noise monitoring system removed during the audit period and has not been replaced.</p> <p>No evidence of progressive noise mitigation implementation</p>	<p>Continue investigations of any noise issues and, where practicable, implement reasonable and feasible mitigation measures.</p> <p>Ensure accurate/consistent monitoring results are presented in Annual Reviews.</p> <p>The real - time noise monitor should be re-established for the site. Liaise with the DPE regarding the best location as the majority of noise complaints have resulted from Mannering Colliery operations, not Chain Valley. Mannering Colliery is also owned by Delta Coal. Update the Noise Management Plan.</p>
Air Quality and greenhouse gases	<p>Management and monitoring of air quality and greenhouse gases will continue to be undertaken in accordance with the Colliery's AQCHCMP, which will be reviewed and updated as required to include the commitments made below. LakeCoal will:</p> <ul style="list-style-type: none"> <li>investigate the use of a stacker to replace hauling between current conveyor system and stockpiles;</li> <li>undertake GHG monitoring comprising measurement of carbon dioxide and methane at the ventilation shaft and fan sites; and</li> <li>record and report annual diesel, oil, grease, acetylene and electricity use to fulfil National Greenhouse and Energy Reporting Scheme requirements.</li> </ul>	Compliant	The MP covers this requirement. Recording of data in Annual Reviews and site records.	
Traffic and transport	<p>Management and monitoring of traffic and transport will continue to be undertaken in accordance with the Colliery's RTP. In addition, LakeCoal will continue to investigate alternative options for transporting export coal to the PWCS, specifically the preferred rail transport option, requiring the construction of a private haul road to the VPPS coal unloading facility and associated infrastructure upgrades. In addition, LakeCoal will:</p> <ul style="list-style-type: none"> <li>provide a detailed feasibility report of rail transport options to DP&amp;I as part of the next coal transport options report to be submitted, by 31 December 2014. Should the report identify that coal transport via rail is feasible, and subject to obtaining necessary agreements, LakeCoal will prepare and lodge an application to modify the relevant approval so as to permit the installation and operation of facilities necessary to undertake rail transport of coal to PWCS;</li> <li>discuss the potential to utilise proposed rail loading facilities associated with the Wallarah 2 Coal Project, following this project receiving approval; and</li> <li>investigate options to reduce peak hour traffic would be investigated including potentially limiting the peak hourly volumes of the Colliery truck traffic which would be permitted to travel via this intersection should the Colliery not be using rail transport for export coal by five years from the granting of development consent. Alternatively, a pro rata financial contribution to the cost of installing traffic signals at the southbound intersection of the F3 and Sparks Road interchange could be made commensurate with the percentage of Colliery generated traffic using the intersection.</li> </ul>	Not Triggered	Evidence of document dated 10 December 2014. Outside of audit period, therefore not triggered for this period.	
Subsidence	<p>Management and monitoring of subsidence will continue to be undertaken in accordance with the Colliery's SMP, which will be reviewed and updated as required to include the commitments made below. LakeCoal will:</p> <ul style="list-style-type: none"> <li>provide raw subsidence survey data to OEH within 7 days of completion;</li> <li>undertake annual bathymetric surveys of the lake bed to determine actual subsidence and undertake a comparison with predicted levels. Should measured subsidence significantly exceed predicted levels, LakeCoal will review future panel designs to limit future impacts to acceptable levels;</li> <li>install a new foreshore survey line above the first and second workings panels where the underground linkage passes beneath them and possibly extending from the foreshore to the point of connection with the MC workings;</li> <li>inspect existing conditions in the Fassifern Seam and undertake geotechnical and geological mapping in the roadways proximate to the proposed linkage in both CVC and MC workings;</li> <li>complete representative borehole core drilling and sampling of the Fassifern Seam floor at the start and finishing ends of the underground linkage and where the headings pass beneath the SPB. Development below the foreshore will be limited to two headings only until floor conditions can be confirmed;</li> <li>develop infrastructure monitoring and management plans in consultation with infrastructure owners and other relevant stakeholders;</li> <li>re-establish and re-survey Survey Line 24;</li> <li>install a suitable survey line at the starting end above Great Northern Seam first workings to provide early warning monitoring data for the tension towers and switchyard structures;</li> <li>monitor tension and suspension towers and switchyard conductor suspension frames directly above the panels, foreshore and adjacent inlet canal wall;</li> <li>ensure that a monitoring and management plan for the MP01 sewer rising main is in place prior to commencement of mining that may impact Council's infrastructure; and</li> <li>complete an annual subsidence report and make this report publicly available on the Colliery's website.</li> </ul>	Non-Compliant (Low Risk)	<p>Subsidence is managed under Extraction Plans, not SMP's. SMP's cover past mining areas.</p> <p>Separate Extraction Plan requirements including monitoring and reporting.</p> <p>Some of the aspects in this condition have not been triggered, however due to a lack of a defined subsidence report it has been difficult for SLR to determine which conditions are not triggered and which are relevant.</p> <p>Subsidence impacts are reported in the Annual Review, however it would be preferable if a standalone subsidence report was prepared. There is not a separate Annual Subsidence Report, therefore <u>Admin Non - Compliant.</u></p> <p>No evidence of raw survey result being provided to OEH within 7 days of completion. <u>Admin Non - Compliant.</u></p> <p>No evidence provided regarding - "complete representative borehole core drilling and sampling of the Fassifern Seam floor at the start and finishing ends of the underground linkage and where the headings pass beneath the SPB"</p>	<p>Assess the subsidence conditions regarding the Statement of Commitments and review which conditions are applicable for current mining and proposed future operations.</p> <p>A separate subsidence impact assessment report should be prepared annually and appended to the Annual Review. This report should be prepared or peer reviewed by a subsidence specialist. This should assess subsidence performance measures from the Project Approval and triggers/commitments from the Extraction Plans.</p>

Condition Number	Condition	Compliance Status	Evidence	Recommended Action
Marine ecology	<p>Management and monitoring of marine ecology will continue to be undertaken in accordance with the Colliery's BCMP and SGMP, which will be reviewed and updated as required to include the commitments made below. LakeCoal will</p> <ul style="list-style-type: none"> <li>• revise the BCMP to include the sampling locations in the assessment of the Proposal;</li> <li>• undertake seasonal surveys (spring and autumn) for the Site as required under the BCMP;</li> <li>• commission additional independent sampling and analysis to validate results obtained during monitoring, and review future panel design if impacts due to subsidence are determined to be moderate or greater;</li> <li>• revise the SGMP to include the transect locations utilised in the assessment of the Proposal;</li> <li>• continue annual seagrass surveys/monitoring;</li> <li>• continue annual subsidence surveys (bathymetric surveys) and land based surveys;</li> <li>• include results from the BCMP and SGMP within the Colliery's Annual Review; and</li> <li>• make the Annual Review and annual subsidence surveys available on the Colliery's website.</li> </ul>	Compliant	<p>Evidence of benthic organism and seagrass monitoring.</p> <p>Evidence of monitoring reports by independent consultants.</p> <p>Meets the requirements of this statement of commitments. However additional recommendation provided.</p>	See previous recommendations regarding biodiversity and Annual Reporting.
Terrestrial ecology	<p>In addition to the management and mitigation measures undertaken at the Colliery for terrestrial ecology as described in the BMP, the following commitments specific to the Proposal will be undertaken. Some commitments are already undertaken under the BMP. LakeCoal will:</p> <ul style="list-style-type: none"> <li>• investigate one of the following options in consultation with OEH to offset the biodiversity impacts arising from the proposed modification: <ul style="list-style-type: none"> <li>o provide \$10,000 of funding, which is equivalent to the biodiversity being lost (i.e. 5 credits x \$2,000 per credit) to existing environmental programs at the site which benefits the Swamp Sclerophyll EEC; or</li> <li>o consult with OEH to identify a suitable conservation program and provide \$10,000 of funding; or</li> <li>o purchase and retire 5 credits on the Biobanking register.</li> </ul> </li> <li>• update the BMP to include the following: <ul style="list-style-type: none"> <li>o the completion of pre-disturbance surveys in the survey area for Black-eyed Susan, Leafless Tongue Orchid and Variable Midge Orchid during their flowering periods (July to December, November to February and September to October, respectively);</li> <li>o pre-disturbance surveys by an ecologist to determine the important components of vegetation communities and fauna habitats that should be preferentially retained in the APZs;</li> <li>o installation of delineation fencing around threatened flora populations (if found) to ensure their protection during development and maintenance of the APZs;</li> <li>o condition monitoring for threatened flora populations (if found);</li> <li>o retention of hollow-bearing trees in the APZs, where possible, with details to be included in a hollow tree register;</li> <li>o installation of nest boxes (or salvaged hollows) within the APZs under the supervision of a suitably qualified ecologist or wildlife carer to replace hollows where hollow-bearing trees cannot be retained;</li> <li>o measures for APZ maintenance that include weed control;</li> <li>o clearing of hollow-bearing trees (if required) under the supervision of a suitably qualified ecologist;</li> <li>o any injured fauna would be taken to the nearest veterinary hospital for treatment before release; and</li> <li>o relocation of suitable hollow-bearing felled trees adjacent to the APZs to create additional fauna habitat;</li> </ul> </li> </ul>	Compliant	<p>Evidence from 2016 Annual Review.</p> <p>LakeCoal provided an offset payment of \$10,000 for the proposed APZ's during the reporting period in accordance with the Statement of Commitment's in SSD 5465. APZ's have been established.</p> <p>Evidence of weed management in biodiversity management report. Limited weeds onsite.</p> <p>Based on discussions with site no clearing of hollow bearing trees during the audit period.</p> <p>Biodiversity monitoring completed however no specific report provided, only data summary spreadsheets.</p>	<p>As per Schedule 3 Condition 20 recommendation.</p> <p>Include the biodiversity monitoring reports as appendices to the Annual Review.</p> <p>The current monitoring is provided in a spreadsheet with an email summary. Prepare a small report outlining results, a comparison against trigger levels and potential reasons for changes.</p> <p>Prepare a separate section with short, medium and longterm measures in the Biodiversity Management Plan.</p>
Terrestrial ecology	<ul style="list-style-type: none"> <li>• undertake the design of the dam embankment and spillway works in consultation with an ecologist to minimise potential impacts on the Swamp Oak Floodplain Forest EEC;</li> <li>• ensure pre-clearing surveys are undertaken by an ecologist to minimise the potential impact to fauna and significant vegetation prior to clearing works being undertaken within the embankment and spillway area;</li> <li>• clearly delineate the clearing footprint and cordon off surrounding vegetation as a 'no go' zone during works to the dam embankment and spillway;</li> <li>• minimise disturbance areas where possible by ensuring all stockpiling of materials, parking of machinery etc, is undertaken in previously cleared areas;</li> <li>• ensure that, wherever possible, dead standing timber and fallen timber will be avoided by any clearing works, or if required to be removed, be relocated into suitable habitat areas nearby;</li> <li>• ensure all equipment used for the earthworks associated with the dam embankment and spillway will be cleaned of excess soil potentially containing pathogens and weed seeds prior to entering the Site;</li> <li>• install sediment fencing surrounding the proposed earthwork areas, in accordance with a site-specific erosion and sediment control plan for the works;</li> <li>• ensure that in the event that sedimentation dam water is released from Dam 10 prior to the works being undertaken, it will be undertaken in a controlled manner over a number of days to ensure that the release does not result in significant erosion and sedimentation to the Swamp Oak Floodplain Forest;</li> <li>• continue the management and monitoring of flora and fauna in accordance with the BMP for the life of the mine, including: <ul style="list-style-type: none"> <li>- the condition and composition of the Swamp Oak Floodplain Forest area;</li> <li>- the condition of vegetation adjacent to the ventilation shaft and fans;</li> <li>- the location and distribution of weed infestations; and</li> <li>- the abundance and distribution of feral animal use.</li> </ul> </li> <li>• noxious weeds will be removed and continually controlled from the pit top area, allowing for natural regeneration of vegetation;</li> <li>• weed invasion will be monitored as part of the Colliery's BMP; and</li> <li>• the condition of the EEC areas will be monitored through the Colliery's BMP.</li> </ul>	Not Triggered	<p>Dam embankment work completed in 2014 which is outside of this period.</p> <p>Evidence of weed management provided. Weed management sighted during field inspection.</p>	
Heritage	<p>Management and monitoring of heritage will continue to be undertaken in accordance with the Colliery's HMP, which will be reviewed and updated as required to include the commitments made below. LakeCoal will:</p> <ul style="list-style-type: none"> <li>• review and revise the HMP to remove site #45-7-0154 and incorporate any other changes as a result of the proposed modification;</li> <li>• update the HMP following approval of the Proposal to include the extended area to which it relates;</li> <li>• ensure that should unanticipated Aboriginal or historic heritage artefacts be found during dam embankment and diversion works, work will cease and the site assessed by an archaeologist; and</li> <li>• ensure that in the unlikely event that skeletal remains are found during dam embankment and diversion works, work will cease immediately in the area and the NSW Police Coroner called to determine if the material is of Aboriginal origin. OEH and relevant Aboriginal community stakeholders will be notified if the remains are positively identified as being of Aboriginal origin to determine their appropriate management prior to works recommencing.</li> </ul>	Administrative Non-Compliance	<p>The most recent date of the Heritage Management Plan is 23 June 2014. The highlighted condition is from MOD 2 (December 2015). Site 45-7-0154 is still included the document.</p> <p>Other aspects of this statement of commitments have been met.</p>	Update the Heritage Management Plan, including the removal of Site #45-7-0154.
Waste	<p>Management and monitoring of waste will continue to be undertaken in accordance with the Colliery's Waste Management Standard. In addition, LakeCoal will continue to try and improve its waste volumes and waste management practices in line with its objective for 60% of all wastes generated at the Colliery (excluding wastewater) to be recyclable or reusable.</p>	Compliant	Waste management outlined in the Annual Reviews. Some minor waste management recommendations outlined in Schedule 3 Condition 23.	
Hazards	<p>Management and monitoring of hazards will continue in accordance with the Colliery's existing hazard management measures. Periodic review of the effectiveness of existing measures will occur in accordance with the Colliery's safety management system and additional measures implemented as warranted.</p>	Note	This is a safety condition, outside the scope of this audit.	
Visual	<p>Management and monitoring of visual impacts will continue to be undertaken in accordance with the Colliery's existing commitment. In addition, LakeCoal will: ensure additional surface lighting at the Colliery complies with AS4282 (INT) 1995 – Control of Obtrusive Effects of Outdoor Lighting.</p>	Compliant	<p>The most recent lighting audit for Chain Valley is from 2013. Prepared by Wadco May 2013.</p> <p>The pit top area and ventilation shaft site are not dominant features of the landscape the pit top area is somewhat overshadowed by the adjacent power station. The ventilation fans were designed to maintain a relatively low profile, below the surrounding vegetation to ensure amenity and lighting impacts were minimised. Some lights have been removed, including those at the stockpile. There were no complaints to visual or lighting during the audit period.</p> <p>Minimal aspects have been installed at site since the previous audit, hence condition is compliant.</p>	

Condition Number	Condition	Compliance Status	Evidence	Recommended Action
Soil	Soil Management and monitoring of soils will continue to be undertaken in accordance with the Colliery's WMP, which will be reviewed and updated as required to include the commitments made below. LakeCoal will: <ul style="list-style-type: none"> <li>• prevent disturbance of ASS where practicable during any construction activities;</li> <li>• prepare an ASSMP where there is potential that ASS will be disturbed;</li> <li>• test and handle any ASS disturbed in accordance with the ASSMP and treat or dispose of to an appropriately licensed facility;</li> <li>• limit the area of any disturbance at the surface infrastructure sites and period of exposure;</li> <li>• implement site management procedures such as watering of disturbed areas and unsecured stockpiles;</li> <li>• ensure relevant licences and management plans are in place for the correct storage and handling of hydrocarbons;</li> <li>• maintain suitable bunding around all hazardous liquid storage areas;</li> <li>• maintain oil separation facilities on the wash down sump for the treatment of oily water; and</li> <li>• remove all waste oil from site and dispose via a licensed external waste collection company.</li> </ul>	Compliant	Minimal disturbance at site, therefore no soil testing completed. Evidence of land farming areas for hydrocarbon soil. Evidence of oily water separator and management system. The field inspection generally noted that waste was stored well. However the following minor things were identified: * Some bins are not well labelled and contain a mix of substances; * Cardboard contained in some general waste bins; * 1 hydraulic oil drum not contained in bund; * Numerous empty oil drums stored on the side within bund. This may lead to some leakage of oil from drums; * 2 larger 44 gallon drums stored outside bund in a laydown area. Unknown substances. Numerous bins and spill containers were noted.	Ensure the minor waste management issues identified during the audit are rectified. * Improve bin labelling; * Ensure all hydrocarbon containers (empty or full) are stored within bunds.
Rehabilitation and mine closure	Rehabilitation will be undertaken in accordance with the Colliery's RMP and the MOP in force at the time. Detailed management and monitoring proposals for final rehabilitation will be included within a Mine Closure Plan to be prepared at least two years prior to cessation of mining activities.	Not Triggered	No area available for rehabilitation.	
Economic	LakeCoal will contribute \$0.035/t of coal from the Colliery into a dedicated community fund to improve public infrastructure and for the provision of community projects in the surrounding communities of Chain Valley Bay, Mannering Park, Summerland Point and Gwandalan.	Compliant	The VPA was not executed with the WSC within the required date - 23 December 2014. There were numerous attempts between 2013 to 2016 to execute this agreement (based on evidence from prior audit). The VPA was executed on 1 September 2016. Evidence of payment in the 2016, 2017 and 2018 Annual Reviews. Evidence of receipts from 19 March 2018 and 23 March 2017.	
Social	LakeCoal will continue to implement management measures and monitoring programs to prevent or minimise negative impacts and enhance positive impacts in accordance with its Environment and Community Policy. LakeCoal will: <ul style="list-style-type: none"> <li>• maintain open and constructive communication with affected individuals and groups;</li> <li>• participate in the CCC;</li> <li>• provide environmental monitoring data and other relevant information in a timely manner via the LakeCoal website;</li> <li>• be responsive to community issues and actual and/or perceived impacts from the Colliery's activities;</li> <li>• work in partnership with stakeholders to address community needs;</li> <li>• ensure effective management of LakeCoal's social impacts;</li> <li>• liaise regularly with relevant government agencies and councils;</li> <li>• provide regular Colliery updates with landowners and local residents through the CCC;</li> <li>• continue payments, throughout the life of the Proposal, to the community fund established; and</li> <li>• consider individual sponsorship opportunities throughout the life of the Proposal.</li> </ul>	Compliant	* Evidence of CCC meeting minutes; * Monitoring data on the website; * Evidence of VPA payments; * Evidence of interactions with community through Delta Coal.	
Other	LakeCoal will commit to only carrying out mining operations in the extension areas consistent with the development consent granted pursuant to this Proposal.	Compliant	Discharge locations sighted in the field inspection. Records of discharge volume and water quality outlined in Annual Reviews.	

# Environment Protection Licence

Audit Period = 1 January 2016 – 5 April 2019

Condition Number	Condition	Compliance Status	Evidence	Recommended Action										
<b>1 Administrative Conditions</b>														
A1	What the licence authorises and regulates													
A1.1	This licence authorises the carrying out of the scheduled activities listed below at the premises specified in A2. The activities are listed according to their scheduled activity classification, fee-based activity classification and the scale of the operation.  Unless otherwise further restricted by a condition of this licence, the scale at which the activity is carried out must not exceed the maximum scale specified in this condition.	Compliant	In general activities completed in accordance with this licence.											
	<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>0 - 2000000 T annual handing capacity</td> </tr> <tr> <td>Mining for coal</td> <td>Mining for coal</td> <td>&gt; 500000 - 2000000 T annual production capacity</td> </tr> </tbody> </table>	Scheduled Activity	Fee Based Activity	Scale	Coal works	Coal works	0 - 2000000 T annual handing capacity	Mining for coal	Mining for coal	> 500000 - 2000000 T annual production capacity	Compliant	From Annual Reviews: 2018 - 0.4Mt 2017- 1.2Mt 2016 - 1.2Mt  Within levels for 2019.		
Scheduled Activity	Fee Based Activity	Scale												
Coal works	Coal works	0 - 2000000 T annual handing capacity												
Mining for coal	Mining for coal	> 500000 - 2000000 T annual production capacity												
A1.2	The licensee must not produce by mining activities more than 1.5 million tonnes of coal within any calendar year.  Note: These limits on the scale of the fee based activities are based on Project Approval SSD5465 granted under the S.89E of the Environmental Planning and Assessment Act 1979 which limits extraction to 1.5 million tonnes of run of mine (ROM) coal per calendar year.	Compliant	Within limit during audit period.											
A2	Premises or plant to which this licence applies													
A2.1	The licence applies to the following premises:													
	<table border="1"> <thead> <tr> <th>Premises Details</th> </tr> </thead> <tbody> <tr> <td>CHAIN VALLEY COLLIERY</td> </tr> <tr> <td>CONSTRUCTION ROAD</td> </tr> <tr> <td>CHAIN VALLEY BAY</td> </tr> <tr> <td>NSW 2259</td> </tr> <tr> <td>SURFACE PREMISES OF THE COLLIERY IDENTIFIED IN PLAN TITLED "EPL PREMISES PLAN FIGURE 2 - SURFACE EXTENTS" 12 MARCH 2015 DOC162919 AND UNDERGROUND PREMISES (MINING FOR COAL) INCLUDES ONLY MINING FOR COAL IN THE FASSIFERN COAL SEAM AND GREAT NORTHERN COAL SEAM AS IDENTIFIED IN THE PLAN TITLED "FIGURE 1: GENERAL LAYOUT OF THE CHAIN VALLEY EXTENSION PROJECT" 28/1/14 ACCOMPANYING THE LICENCE APPLICATION DOC1410989 AND THE UNDERGROUND ROAD JOINING MANNERING COLLIERY TITLED "LOCATION OF UNDERGROUND LINKAGE" DOC1428895-02 ACCOMPANYING SSD5465-MOD 1 APPROVAL AND THE PLAN TITLED "EPL PREMISES PLAN - FIG 1 PROJECT EXTENTS, MONITORING AND COMPLIANCE LOCATIONS" 12 MARCH 2015 DOC1683810.</td> </tr> </tbody> </table>	Premises Details	CHAIN VALLEY COLLIERY	CONSTRUCTION ROAD	CHAIN VALLEY BAY	NSW 2259	SURFACE PREMISES OF THE COLLIERY IDENTIFIED IN PLAN TITLED "EPL PREMISES PLAN FIGURE 2 - SURFACE EXTENTS" 12 MARCH 2015 DOC162919 AND UNDERGROUND PREMISES (MINING FOR COAL) INCLUDES ONLY MINING FOR COAL IN THE FASSIFERN COAL SEAM AND GREAT NORTHERN COAL SEAM AS IDENTIFIED IN THE PLAN TITLED "FIGURE 1: GENERAL LAYOUT OF THE CHAIN VALLEY EXTENSION PROJECT" 28/1/14 ACCOMPANYING THE LICENCE APPLICATION DOC1410989 AND THE UNDERGROUND ROAD JOINING MANNERING COLLIERY TITLED "LOCATION OF UNDERGROUND LINKAGE" DOC1428895-02 ACCOMPANYING SSD5465-MOD 1 APPROVAL AND THE PLAN TITLED "EPL PREMISES PLAN - FIG 1 PROJECT EXTENTS, MONITORING AND COMPLIANCE LOCATIONS" 12 MARCH 2015 DOC1683810.	Note	Note					
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	Note: An updated plan of the premises must be provided to the EPA by the licensee, to the EPA's specifications.	Note												
A3	Other activities													
A3.1	This licence applies to all other activities carried on at the premises, including:													
	<table border="1"> <thead> <tr> <th>Ancillary Activity</th> </tr> </thead> <tbody> <tr> <td>Sewage Treatment Systems</td> </tr> </tbody> </table>	Ancillary Activity	Sewage Treatment Systems	Compliant	Evidence of sewage system certification.									
Ancillary Activity														
Sewage Treatment Systems														
A4	Information supplied to the EPA													
A4.1	Works and activities must be carried out in accordance with the proposal contained in the licence application, except as expressly provided by a condition of this licence.  In this condition the reference to "the licence application" includes a reference to: 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 b) the licence information form provided by the licensee to the EPA to assist the EPA in connection with the issuing of this licence.	Compliant	Works generally carried out in accordance with this condition.											
<b>2 Discharges to Air and Water and Applications to Land</b>														
P1	Location of monitoring/discharge points and areas													
P1.1	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.													
	<table border="1"> <thead> <tr> <th rowspan="2">EPA Identification no.</th> <th rowspan="2">Type of Monitoring Point</th> <th colspan="2">Air</th> </tr> <tr> <th>Type of Discharge Point</th> <th>Location Description</th> </tr> </thead> <tbody> <tr> <td>25</td> <td>Air Monitoring Point Particulate Matter PM10 Thermo Fisher Scientific TEOM 1405</td> <td>MPSTP Compound</td> <td>220 Tall Timbers Road Doyalson NSW 2262</td> </tr> </tbody> </table>	EPA Identification no.	Type of Monitoring Point	Air		Type of Discharge Point	Location Description	25	Air Monitoring Point Particulate Matter PM10 Thermo Fisher Scientific TEOM 1405	MPSTP Compound	220 Tall Timbers Road Doyalson NSW 2262	Compliant	Evidence of PM10 monitor. Evidence of data.	
EPA Identification no.	Type of Monitoring Point			Air										
		Type of Discharge Point	Location Description											
25	Air Monitoring Point Particulate Matter PM10 Thermo Fisher Scientific TEOM 1405	MPSTP Compound	220 Tall Timbers Road Doyalson NSW 2262											
P1.2	The following utilisation areas referred to in the table below are identified in this licence for the purposes of the monitoring and/or the setting of limits for any application of solids or liquids to the utilisation area.	Note	Note											
P1.3	The following points referred to in the table are identified in this licence for the purposes of the monitoring and/or the setting of limits for discharges of pollutants to water from the point.													

Condition Number	Condition	Compliance Status	Evidence	Recommended Action																											
	<p style="text-align: center;"><b>Water and land</b></p> <table border="1"> <thead> <tr> <th>EPA Identification no.</th> <th>Type of Monitoring Point</th> <th>Type of Discharge Point</th> <th>Location Description</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Discharge to waters Discharge quality and volume monitoring</td> <td>Discharge to waters Discharge quality and volume monitoring</td> <td>Discharge to waters and monitoring from final settlement pond via low level discharge identified as EPA 1 on plan of the premises titled "EPL premises Plan Fig 1 Project Extents, Monitoring and Compliance Locations" dated 12 March 2015 DOC15/83810.</td> </tr> <tr> <td>27</td> <td>Discharge to waters Discharge quality and volume monitoring</td> <td>Discharge to waters Discharge quality and volume monitoring</td> <td>Discharge to waters via concrete high level spillway from final settlement pond adjacent to EPA 1 on plan of the premises titled "EPL premises Plan Fig 1 Project Extents, Monitoring and Compliance Locations" dated 12 March 2015 DOC15/83810.</td> </tr> </tbody> </table>	EPA Identification no.	Type of Monitoring Point	Type of Discharge Point	Location Description	1	Discharge to waters Discharge quality and volume monitoring	Discharge to waters Discharge quality and volume monitoring	Discharge to waters and monitoring from final settlement pond via low level discharge identified as EPA 1 on plan of the premises titled "EPL premises Plan Fig 1 Project Extents, Monitoring and Compliance Locations" dated 12 March 2015 DOC15/83810.	27	Discharge to waters Discharge quality and volume monitoring	Discharge to waters Discharge quality and volume monitoring	Discharge to waters via concrete high level spillway from final settlement pond adjacent to EPA 1 on plan of the premises titled "EPL premises Plan Fig 1 Project Extents, Monitoring and Compliance Locations" dated 12 March 2015 DOC15/83810.	Compliant	Discharge locations sighted in the field inspection. Records of discharge volume and water quality outlined in Annual Reviews.																
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P1.4	The following points referred to in the table below are identified in this licence for the purposes of weather and/or noise monitoring and/or setting limits for the emission of noise from the premises.																														
	<p style="text-align: center;"><b>Noise</b></p> <table border="1"> <thead> <tr> <th>EPA Identification no.</th> <th>Type of monitoring point</th> <th>Location description</th> </tr> </thead> <tbody> <tr> <td>9</td> <td>Noise monitoring</td> <td>(R8) 109 Griffith Street, MANNERING PARK, 2259</td> </tr> <tr> <td>12</td> <td>Noise monitoring</td> <td>(R11) 35 Lakeshore Avenue, CHAIN VALLEY BAY, 2259</td> </tr> <tr> <td>13</td> <td>Noise monitoring</td> <td>(R12) 20 Lakeshore Avenue, Kingfisher Shores, CHAIN VALLEY BAY, 2259</td> </tr> <tr> <td>14</td> <td>Noise monitoring</td> <td>(R13) 33 Karoola Avenue, Kingfisher Shores, CHAIN VALLEY BAY, 2259</td> </tr> <tr> <td>16</td> <td>Noise monitoring</td> <td>(R15) Short Street, Macquarie Shores, CHAIN VALLEY BAY, 2259</td> </tr> <tr> <td>20</td> <td>Noise monitoring</td> <td>(R19) 2 Sunset Parade, CHAIN VALLEY BAY, 2259</td> </tr> <tr> <td>23</td> <td>Noise monitoring</td> <td>(R20) 275a Camis Boulevard, CHAIN VALLEY BAY, 2259</td> </tr> <tr> <td>26</td> <td>Meteorological Station</td> <td>Rutleys Road Doyalson</td> </tr> </tbody> </table>	EPA Identification no.	Type of monitoring point	Location description	9	Noise monitoring	(R8) 109 Griffith Street, MANNERING PARK, 2259	12	Noise monitoring	(R11) 35 Lakeshore Avenue, CHAIN VALLEY BAY, 2259	13	Noise monitoring	(R12) 20 Lakeshore Avenue, Kingfisher Shores, CHAIN VALLEY BAY, 2259	14	Noise monitoring	(R13) 33 Karoola Avenue, Kingfisher Shores, CHAIN VALLEY BAY, 2259	16	Noise monitoring	(R15) Short Street, Macquarie Shores, CHAIN VALLEY BAY, 2259	20	Noise monitoring	(R19) 2 Sunset Parade, CHAIN VALLEY BAY, 2259	23	Noise monitoring	(R20) 275a Camis Boulevard, CHAIN VALLEY BAY, 2259	26	Meteorological Station	Rutleys Road Doyalson	Compliant	Based on a review of monitoring data the site has been compliant with monitoring locations.	
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<b>2 Limit Conditions</b>																															
L1	Pollution of waters																														
L1.1	Except as may be expressly provided in any other condition of this licence, the licensee must comply with section 120 of the Protection of the Environment Operations Act 1997.	Compliant	Based on the information provided to SLR, the site has generally complied with these requirements. No evidence of material harm.																												
L2	Concentration limits																														
L2.1	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.																														
L2.2	Where a pH quality limit is specified in the table, the specified percentage of samples must be within the specified ranges.																														
L2.3	To avoid any doubt, this condition does not authorise the pollution of waters by any pollutant other than those specified in the table's.																														
L2.4	Water and/or Land Concentration Limits																														
	<p>POINT 1,27</p> <table border="1"> <thead> <tr> <th>Pollutant</th> <th>Units of Measure</th> <th>80 percentile concentration limit</th> <th>90 percentile concentration limit</th> <th>300M concentration limit</th> <th>100 percentile concentration limit</th> </tr> </thead> <tbody> <tr> <td>Faecal Coliforms</td> <td>colony forming units per 100 millilitres</td> <td></td> <td></td> <td></td> <td>200</td> </tr> <tr> <td>pH</td> <td>pH</td> <td></td> <td></td> <td></td> <td>6.5-8.5</td> </tr> <tr> <td>Total suspended solids</td> <td>milligrams per litre</td> <td></td> <td></td> <td></td> <td>50</td> </tr> </tbody> </table>	Pollutant	Units of Measure	80 percentile concentration limit	90 percentile concentration limit	300M concentration limit	100 percentile concentration limit	Faecal Coliforms	colony forming units per 100 millilitres				200	pH	pH				6.5-8.5	Total suspended solids	milligrams per litre				50	Compliant	Evidence of discharge water quality in Annual Review. Within criteria of this condition between 2016 - 2018 Annual Reviews. Based on information provided by the Environment and Community Co-ordinator there have been no exceedances during 2019.	The Annual Reviews need to provide a clear statement regarding whether discharge criteria have been met.			
Pollutant	Units of Measure	80 percentile concentration limit	90 percentile concentration limit	300M concentration limit	100 percentile concentration limit																										
Faecal Coliforms	colony forming units per 100 millilitres				200																										
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Total suspended solids	milligrams per litre				50																										
L3	Volume and mass limits																														
L3.1	For each discharge point or utilisation area specified below (by a point number), the volume/mass of: a) liquids discharged to water; or; b) solids or liquids applied to the area; must not exceed the volume/mass limit specified for that discharge point or area.																														
	<table border="1"> <thead> <tr> <th>Point</th> <th>Unit of Measure</th> <th>Volume/Mass Limit</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>kilolitres per day</td> <td>12161</td> </tr> <tr> <td>27</td> <td>kilolitres per day</td> <td>12161</td> </tr> </tbody> </table>	Point	Unit of Measure	Volume/Mass Limit	1	kilolitres per day	12161	27	kilolitres per day	12161	Non-Compliant (Low Risk)	Discharge volumes have been recorded at site. No exceedances in 2017 or 2018 Annual Reviews. Based on information provided by Environment and Community Co-ordinator no exceedances for 2019. <u>Non-compliant:</u> There were two exceedances of the daily volumetric limit (12,161 kL) during the 2016 which were related to significant rainfall events. These exceedances occurred on the: 1. 6 January 2016 – A total of 14,152 kL was discharged 2. 5 June 2016 – A total of 16,391 kL was discharged. No further recommendations.																			
Point	Unit of Measure	Volume/Mass Limit																													
1	kilolitres per day	12161																													
27	kilolitres per day	12161																													
L3.2	The volumetric daily discharge limit for the premises is the combined discharge measured at EPA discharge points 1 and 27 and must not exceed 12161 kilolitres per day.	Non-Compliant (Low Risk)	There were two exceedances of the daily volumetric limit (12,161 kL) during 2016 which were related to significant rainfall events. These exceedances occurred on the: 1. 6 January 2016 – A total of 14,152 kL was discharged. 2. 5 June 2016 – A total of 16,391 kL was discharged. No further recommendations.																												
L4	Waste																														
L4.1	The licensee must not cause, permit or allow any waste to be received at the premises, except the wastes expressly referred to in the column titled "Waste" and meeting the definition, if any, in the column titled "Description" in the table below. Any waste received at the premises must only be used for the activities referred to in relation to that waste in the column titled "Activity" in the table below. Any waste received at the premises is subject to those limits or conditions, if any, referred to in relation to that waste contained in the column titled "Other Limits" in the		No evidence of waste receipt.																												

Condition Number	Condition	Compliance Status	Evidence	Recommended Action																				
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Code	Waste	Description	Activity	Other Limits																				
NA	Waste	Any other waste received on the premises for storage, treatment, processing, sorting or disposal and which receipt is not a scheduled activity under Schedule 1 of the FROCO Act, as in force from time to time.	-	-																				
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L5	Noise Limits																							
L5.1	Noise generated at the premises that is measured at each noise monitoring point established under this licence must not exceed the noise levels specified in Column 4 of the table below for that point during the corresponding time periods specified in Column 1 when measured using the corresponding measurement parameters listed in Column 2.	Non-Compliant (Low Risk)	<ul style="list-style-type: none"> <li>- Exceedance of LA1(1minute) criteria of 7dB at Point 14 in June 2016. Documented in 2016 Annual Review and Quarterly Monitoring report (Global Acoustics report 16217_R01). Corrective actions undertaken and documented in incident report dated 05/07/2016</li> <li>- 1dB exceedance of LAeq(15minute) criteria at Point 23 during the daytime period in October 2017 (Q4). Documented in 2017 Annual Review. However it is noted that a discrepancy between+E52 monitoring results presented in the 2017 Annual Review and Q4 Monitoring report (Global Acoustics Report 17424_R01) where no exceedance is recorded.</li> <li>- No exceedances recorded during 2018 period.</li> <li>- No evidence obtained on performance during the 2019 audit period.</li> </ul> <p>Nil recommendation with monitoring to continue.</p>																					
	<p>POINT 12</p> <table border="1"> <thead> <tr> <th>Time period</th> <th>Measurement parameter</th> <th>Measurement frequency</th> <th>Noise level dB(A)</th> </tr> </thead> <tbody> <tr> <td>Day</td> <td>Day-LAeq (15 minute)</td> <td>-</td> <td>49</td> </tr> <tr> <td>Evening</td> <td>Evening-LAeq (15 minute)</td> <td>-</td> <td>49</td> </tr> <tr> <td>Night</td> <td>Night-LAeq (15 minute)</td> <td>-</td> <td>49</td> </tr> <tr> <td>Night</td> <td>Night-LA1 (1 minute)</td> <td>-</td> <td>54</td> </tr> </tbody> </table>	Time period	Measurement parameter	Measurement frequency	Noise level dB(A)	Day	Day-LAeq (15 minute)	-	49	Evening	Evening-LAeq (15 minute)	-	49	Night	Night-LAeq (15 minute)	-	49	Night	Night-LA1 (1 minute)	-	54	Note		
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	<p>POINT 14</p> <table border="1"> <thead> <tr> <th>Time period</th> <th>Measurement parameter</th> <th>Measurement frequency</th> <th>Noise level dB(A)</th> </tr> </thead> <tbody> <tr> <td>Day</td> <td>Day-LAeq (15 minute)</td> <td>-</td> <td>43</td> </tr> <tr> <td>Evening</td> <td>Evening-LAeq (15 minute)</td> <td>-</td> <td>43</td> </tr> <tr> <td>Night</td> <td>Night-LAeq (15 minute)</td> <td>-</td> <td>43</td> </tr> <tr> <td>Night</td> <td>Night-LA1 (1 minute)</td> <td>-</td> <td>49</td> </tr> </tbody> </table>	Time period	Measurement parameter	Measurement frequency	Noise level dB(A)	Day	Day-LAeq (15 minute)	-	43	Evening	Evening-LAeq (15 minute)	-	43	Night	Night-LAeq (15 minute)	-	43	Night	Night-LA1 (1 minute)	-	49	Note		
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L5.2	<p>The licensee must ensure that noise generated on the premises does not exceed:</p> <p>a) 35 LAeq(15min) during the day, evening or night at any privately owned land nearest to the residence apart from those receivers identified in Condition 5.1; and b) 45 LA1(1min) during the night at any privately owned land nearest to the residence apart from those receivers identified in Condition 5.1.</p> <p>Note: The licensee may provide to the EPA written evidence of any agreement with a landholder which is subject to the above noise limits. The written evidence may be submitted with a licence variation to remove the landholder from the above tables.</p>	Compliant	Given compliance was generally achieved at defined noise monitoring locations, no further monitoring at other receivers was required.																					
L5.3	<p>For the purpose of condition L5.1 and condition L5.2:</p> <p>(a) Day is defined as the period from 7am to 6pm Monday to Saturday and 8am to 6pm Sunday and public holidays; (b) Evening is defined as the period 6pm to 10pm, and (c) Night is defined as the period from 10pm to 7am Monday to Saturday and 10pm to 8am Sunday and public holidays.</p>	Note																						
L5.4	<p>The noise limits set out in condition L5.1 and condition L5.2 apply under all meteorological conditions except for any one of the following:</p> <p>(a) Wind speeds greater than 3 metres/second at 10 metres above ground level; or (b) Stability category F temperature inversion conditions and wind speeds greater than 2 metres/second at 10 metres above ground level; or (c) Stability category G temperature inversion conditions.</p>	Note																						
L5.5	<p>For the purpose of condition L5.4:</p> <p>(a) the meteorological data to be used for determining meteorological conditions is the data recorded at the meteorological station identified in this licence as EPA Identification Point 26. (b) Stability category temperature inversion conditions are to be determined by the sigma-theta method referred to in Part E4 of Appendix E to the NSW industrial Noise Policy (EPA 2000)</p> <p>Note: The weather station must be designed, commissioned and operated in a manner to obtain the necessary parameters required under the above condition.</p>	Compliant	<p>Evidence of meteorological data. Spreadsheet provided with measurements.</p> <p>2012 audit confirmed that DPE and EPA (under revision of EPL 1770) approved use of Mannering Colliery monitor as representative of Chain Valley and ability to calculate temperature lapse rate by use of sigma-theta method.</p>																					
L5.6	<p>For the purpose of determining the noise generated at the premises the licensee must use a Class 1 or Class 2 noise monitoring device as defined by AS IEC61672.1 and AS IEC61672.2-2004, or other noise monitoring equipment accepted by the EPA in writing.</p>	Compliant	Quarterly noise monitoring reports indicate that noise monitoring is conducted using calibrated sound level meters and acoustic calibrators in accordance with the relevant standards.																					
L5.7	<p>To determine compliance:</p> <p>1. With the LAeq(15 min) noise limits in condition L5.1 and condition L5.2, the licensee must locate noise monitoring equipment;</p> <p>(a) within 30 metres of a dwelling facade (but not closer than 3 metres) where any dwelling on the property is situated more than 30 metres from the property boundary that is closest to the premises;</p> <p>(b) approximately on the boundary where any dwelling is situated 30 metres or less from the property boundary that is closest to the premises, or, where applicable,</p> <p>(c) within approximately 50 metres if the boundary of a national park or nature reserve.</p> <p>2. With the LA1(1 minute) noise limits in condition L5.1 and L5.2, the noise monitoring equipment must be located within 1 metre of a dwelling facade.</p> <p>3. With the noise limits in condition L5.1 and condition L5.2, the noise monitoring equipment must be located;</p> <p>(a) at the most affected point at a location where there is no dwelling at the location, or (b) at the most affected point within an area at a location prescribed by conditions L5.7 1(a) or L5.7 1(b).</p>	Administrative Non-Compliance	It is noted that monitoring for LA1(1minute) noise levels is not completed at 1m from a façade - however such noise monitoring is generally not practical due to disturbance to residents during the sensitive night-time period.																					

Condition Number	Condition	Compliance Status	Evidence	Recommended Action
L5.8	A non-compliance of condition L5.1 or condition L5.2 will still occur where noise generated from the premises in excess of the appropriate limit is measured; a) at a location other than an area prescribed by conditions L5.7 1(a) and L5.7 1(b), and /or b) at a point other than the most affected point at a location.	Noted		
L5.9	For the purposes of determining the noise generated at the premises the modification factors in Section 4 of the NSW Industrial Noise Policy must be applied, as appropriate, to the noise levels measured by the noise monitoring equipment.	Compliant	Modifying factors, are applied when triggered as evidenced in the Q4 2017 exceedance at Point 23 where a low frequency penalty was applicable to the measured CVC noise contribution.	
<b>4 Operating Conditions</b>				
O1	Activities must be carried out in a competent manner	Compliant	Generally activities have been completed in a competent manner.	
O1.1	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.	Compliant	a) and b). From a review of records and inspection of waste in the field operations have generally been carried out in a competent manner.  Evidence of waste totals provided in Annual Review. The field inspection generally noted that waste was stored well. However the following minor things were identified: * Some bins are not well labelled and contain a mix of substances; * Cardboard contained in some general waste bins; * 1 hydraulic oil drum not contained in bund; * Numerous empty oil drums stored on the side within bund. This may lead to some leakage of oil from drums; * 2 larger 44 gallon drums stored outside bund in a laydown area. Unknown substances.  Numerous bins and spill containers were noted.	Ensure the minor waste management issues identified during the audit are rectified: * Improve bin labelling; * Ensure all hydrocarbon containers (empty or full) are stored within bunds.
O2	Maintenance of plant and equipment			
O2.1	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.	Compliant	Evidence of maintenance records for trucks and dozers. Spreadsheet records date back to 2010.	
O3	Dust			
O3.1	The premises must be maintained in a condition which minimises or prevents the emission of dust on or from the premises.	Compliant	Non - compliance relating to dust criteria are outlined in Schedule 3 Condition 11.  The field assessment did not identify a high number of dust sources. There are disturbed surfaces, but these are small compared to most mines. Water truck sighted. It is highly likely that other sources contribute to dust levels.	Ensure TEOM is setup with alarms/notifications for when results are approaching or have exceeded the short term criterion for particulate matter. This will ensure exceedances are immediately detected and reported as soon as possible to the EPA and DPE.  Ensure exceedances and other incidents are reported as per this condition (Detailed Incident Report within 7 days).
O3.2	Activities occurring in or on the premises must be carried out in a manner that will minimise the generation of wind-blown or traffic generated dust.	Compliant		
O3.3	All trafficable areas, coal stockpile(s) and storage areas, and vehicle manoeuvring areas in or on the premises must be maintained, at all times, in a condition that will minimise the generation of dust.	Compliant		
O3.4	All vehicles transporting coal from the premises must be covered immediately after loading to prevent wind blown emissions and spillage.	Compliant	No reason to determine otherwise. No evidence of non - compliance. No complaints regarding truck haulage.	
O3.5	Activities occurring in or on the premises must be carried out in a manner that will minimise the tracking of dust from the premises.	Compliant	The field assessment did not identify a high number of dust sources. There are disturbed surfaces, but these are small compared to most mines. Water truck sighted. Outside sources contribute to dust. It is highly likely that other sources contribute to dust levels.	
O4	Effluent application to land			
O4.1	An area must be provided for the use of effluent from the sewage treatment plant. The design of the system must be in accordance with the DEC's Environmental Guideline: Use of Effluent By Irrigation.	Compliant	Sewage system - 2 systems. Envirocycle for offices and second system is a septic system that handles the bathhouse and toilet facilities. This water is treated onsite.  There is limited detail in the Water Management Plan regarding the sewage water management system.	
O4.2	The quantity of wastewater applied to the utilisation area(s) must not exceed the capacity of the utilisation area(s) to effectively utilise the effluent.  For the purpose of this condition, "effectively utilise" includes the ability of the soil to absorb the nutrient, salt and hydraulic loads and the applied organic material without causing harm to the environment.	Compliant	Sewage system - 2 systems. Envirocycle for offices and second system is a septic system that handles the bathhouse and toilet facilities. This water is treated onsite.  There is limited detail in the Water Management Plan regarding the sewage water management system. A series of laboratory results for treated effluent testing provided for this audit.  The system currently operates below the capacity.	
O5	Emergency response			
O5.1	The licensee must maintain, and implement as necessary, a current emergency response plan for the premises. The licensee must keep the emergency response plan on the premises at all times. The emergency response plan must document systems and procedures to deal with all types of incidents (e.g. spills, explosions or fire) that may occur at the premises or that may be associated with activities that occur at the premises and which are likely to cause harm to the environment. If a current emergency response plan does not exist at the date on which this condition is attached to the licence, the licensee must develop an emergency response plan within three months of that date.	Administrative Non-Compliance	A PIRMP has been prepared for the site. Latest dated 21 September 2018.  Evidence of testing PIRMP - including details of tests from 21 December 2018.  Although there were some incidents, it does not appear any incident required the PIRMP to be enacted.  * PIRMP is kept on-site.  * <b>Observation:</b> The PIRMP is labelled LakeCoal, has persons listed in it who are no longer at site, does not have email details for government contacts, and figures do not clearly show the location of hazardous substances and where pollution response equipment is stored.	* Update the PIRMP to include: - Current site contacts; - Email details for government contacts; and - Figures that clearly show the location of hazardous substances and where pollution response equipment is stored.
O6	Waste management			

Condition Number	Condition	Compliance Status	Evidence	Recommended Action																								
O6.1	The licensee must ensure that any liquid and/or non liquid waste generated and/or stored at the premises is assessed and classified in accordance with the EPA's Waste Classification Guidelines as in force from time to time.	Compliant	Detailed testing program of waster water was sighted. Waste has been stored at the premises generally consistent with the EPA's Guideline. Evidence of waste management including recycling and disposal.																									
O6.2	The licensee must ensure that waste identified for recycling is stored separately from other waste.	Compliant	The field inspection generally noted that waste was stored well. However the following minor things were identified: * Some bins are not well labelled and contain a mix of substances; * Cardboard contained in some general waste bins; * 1 hydraulic oil drum not contained in bund; * Numerous empty oil drums stored on the side within bund. This may lead to some leakage of oil from drums; * 2 larger 44 gallon drums stored outside bund in a laydown area. Unknown substances.  Numerous bins and spill containers were noted.	Ensure the minor waste management issues identified during the audit are rectified. Including: * Improve bin labelling; * Ensure all hydrocarbon containers (empty or full) are stored within bunds.																								
O7	Other operating conditions Sewage Treatment																											
O7.1	All sewage generated on the premises must be directed, collected and treated by the sewage treatment system(s).	Compliant	Despite minimal evidence of servicing being provided based on information provided, it appears sewage from the site is treated onsite based on reporting in the Annual Review.																									
O7.2	The licensee is responsible for the correct operation of the sewage treatment system(s) on their premises.	Administrative Non-Compliance	Sewage system - 2 systems. Envirocycle for offices and second system is a septic system that handles the bathhouse and toilet facilities. This water is treated onsite.  There is limited detail in the Water Management Plan regarding the sewage water management system. Garden Wastemaster Australia complete servicing. Evidence of one email from 6 March 2019 organising servicing. However no evidence of servicing provided. Evidence of testing of wastewater through lab results	Include additional detail in the Water Management Plan regarding sewage management.  Include an update of sewage system during the audit period in the Annual Review.  Ensure servicing is completed and records kept onsite.																								
O7.3	Correct operation involves regular supervision and system maintenance. The licensee must be aware of the system requirements and must ensure that the necessary service contracts are in place.	Administrative Non-Compliance																										
O7.4	The sewage treatment system(s) must be serviced by a suitably qualified and experienced waste water technician at least once each quarterly period and a minimum of four times per year.	Administrative Non-Compliance																										
O7.5	The licensee must record each inspection and any actions required or recommended by the technician; including all results from tests performed on the sewage treatment system(s) by the technician as defined in Condition O7.4.	Administrative Non-Compliance																										
O7.6	All treated sewage that is discharged from the premises must be discharged through licensed discharge point "EPA Identification no. 1", as defined in condition P1.3.	Compliant	Treated water is discharged through this point.																									
O7.7	All above ground tanks containing material that is likely to cause material harm to the environmental must be banded or have an alternative spill containment system in place.	Compliant	Evidence of bunding sighted during the field inspection around fuel tanks. Other chemicals stored within banded area and report to the oily water separator.																									
<b>5 Monitoring and Recording Conditions</b>																												
M1	Monitoring records																											
M1.1	The results of any monitoring required to be conducted by this licence or a load calculation protocol must be recorded and retained as set out in this condition.	Compliant	Based on the evidence provided this condition has been met. Evidence of raw monitoring data for air and water.																									
M1.2	All records required to be kept by this licence must be: a) in a legible form, or in a form that can readily be reduced to a legible form; b) kept for at least 4 years after the monitoring or event to which they relate took place; and c) produced in a legible form to any authorised officer of the EPA who asks to see them.	Compliant	Evidence of raw monitoring data. Evidence of data dating back four years.																									
M1.3	The following records must be kept in respect of any samples required to be collected for the purposes of this licence: a) the date(s) on which the sample was taken; b) the time(s) at which the sample was collected; c) the point at which the sample was taken; and d) the name of the person who collected the sample.	Compliant	Evidence of chain of custody forms and monitoring results for air and water. Meets condition a-d requirements.																									
M2	Requirement to monitor concentration of pollutants discharged																											
M2.1	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:	Administrative Non-Compliance	There has been data capture issues identified in Annual Reviews for PM10. <u>Admin Non - Compliance.</u>	Update the Air Quality Management Plan following this audit.  Improve data capture for PM10. Review possibilities of backup power supply.  Ensure issues with data capture are reported in Section 1 and 7 of the Annual Review.																								
M2.2	Air Monitoring Requirements	Administrative Non-Compliance	There were some issues with data capture with this outlined in Annual Reviews. See Schedule 3 Condition 11 of the Development Consent.	Ensure TEOM is setup with alarms/notifications for when results are approaching or have exceeded the short term criterion for particulate matter. This will ensure exceedances are immediately detected and reported as soon as possible to the EPA and DPE.																								
	<p>POINT 25</p> <table border="1"> <thead> <tr> <th>Pollutant</th> <th>Units of measure</th> <th>Frequency</th> <th>Sampling Method</th> </tr> </thead> <tbody> <tr> <td>Particulate matter</td> <td>micrograms per cubic metre</td> <td>Continuous</td> <td>AM-22</td> </tr> </tbody> </table>	Pollutant	Units of measure	Frequency	Sampling Method	Particulate matter	micrograms per cubic metre	Continuous	AM-22																			
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M2.3	Water and/ or Land Monitoring Requirements																											
	<p>POINT 1</p> <table border="1"> <thead> <tr> <th>Pollutant</th> <th>Units of measure</th> <th>Frequency</th> <th>Sampling Method</th> </tr> </thead> <tbody> <tr> <td>Biochemical oxygen demand</td> <td>milligrams per litre</td> <td>Once a month (min. of 4 weeks)</td> <td>Grab sample</td> </tr> <tr> <td>Enterococci</td> <td>colony forming units per 100 millilitres</td> <td>Once a month (min. of 4 weeks)</td> <td>Grab sample</td> </tr> <tr> <td>Faecal Coliforms</td> <td>colony forming units per 100 millilitres</td> <td>Once a month (min. of 4 weeks)</td> <td>Grab sample</td> </tr> <tr> <td>pH</td> <td>pH</td> <td>Once a month (min. of 4 weeks)</td> <td>Grab sample</td> </tr> <tr> <td>Total suspended solids</td> <td>milligrams per litre</td> <td>Once a month (min. of 4 weeks)</td> <td>Grab sample</td> </tr> </tbody> </table>	Pollutant	Units of measure	Frequency	Sampling Method	Biochemical oxygen demand	milligrams per litre	Once a month (min. of 4 weeks)	Grab sample	Enterococci	colony forming units per 100 millilitres	Once a month (min. of 4 weeks)	Grab sample	Faecal Coliforms	colony forming units per 100 millilitres	Once a month (min. of 4 weeks)	Grab sample	pH	pH	Once a month (min. of 4 weeks)	Grab sample	Total suspended solids	milligrams per litre	Once a month (min. of 4 weeks)	Grab sample	Compliant	Based on evidence provided (Annual Review monitoring results) surface water discharge monitoring was completed as per this schedule.	
Pollutant	Units of measure	Frequency	Sampling Method																									
Biochemical oxygen demand	milligrams per litre	Once a month (min. of 4 weeks)	Grab sample																									
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M3	Testing methods - concentration limits																											

Condition Number	Condition	Compliance Status	Evidence	Recommended Action																																			
M3.1	.1 Monitoring for the concentration of a pollutant emitted to the air required to be conducted by this licence must be done in accordance with: a) any methodology which is required by or under the Act to be used for the testing of the concentration of the pollutant; or b) if no such requirement is imposed by or under the Act, any methodology which a condition of this licence requires to be used for that testing; or c) if no such requirement is imposed by or under the Act or by a condition of this licence, any methodology approved in writing by the EPA for the purposes of that testing prior to the testing taking place.  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".	Compliant	Based on evidence provided monitoring has generally been completed as per these requirements. Spreadsheet with results provided.  Note, for PM10 monitoring there were some times during the audit period where there was a failure of the unit.																																				
M3.2	Subject to any express provision to the contrary in this licence, monitoring for the concentration of a pollutant discharged to waters or applied to a utilisation area must be done in accordance with the Approved Methods Publication unless another method has been approved by the EPA in writing before any tests are conducted.	Compliant	Discharge monitoring appears to have been completed in accordance with requirements. Grab samples are tested at the laboratory. Discharge point sighted in the field inspection.																																				
M4	Environmental monitoring Requirement to monitor noise																																						
M4.1	To determine compliance with condition L5.1, attended noise monitoring must be undertaken in accordance with conditions L5.7 and L5.8, and  (a) at each one of the locations listed in condition L5.1; (b) occur quarterly within the reporting period of the Environment Protection Licence with at least 2 months between monitoring periods; (c) occur during each day, evening and night period as defined in the NSW Industrial Noise Policy (EPA 2000) for a minimum of 15 minutes for three of the quarters; (d) the night time 15 minute attended monitoring in accordance with c) must be undertaken between the hours of 1am and 4am; (e) the night time LA1 (1 min) attended monitoring in accordance with c) must be undertaken between the hours of 1am and 4am; (f) one quarterly monitoring must occur during each day, evening and night period as defined in the NSW Industrial Noise Policy (EPA 2000) for a minimum of 1.5 hours during the day; 30 minutes during the evening; and 1 hour during the night, and (g) each quarterly monitoring must be undertaken on a different day(s) of the week not including Saturdays, Sundays and public holidays; and (h) these monitoring conditions take effect in the 2015 Reporting period.  Note: The intention of this condition is that quarterly monitoring be undertaken at each sensitive receiver. That at each sensitive receiver monitoring is undertaken over a range of different days excluding weekends and public holidays during the reporting period so as to be representative of operating hours. That night time 15 minute attended monitoring and the LA1 (1min) monitoring for three of the quarters be undertaken at worst case being the most stable atmospheric conditions and when noise would be most intrusive to sleep. All of the sensitive receivers do not have to be monitored on the same day, evening and night for sub condition f.	Administrative Non-Compliance	- Q1 2016 - monitoring at Point 12/Point 13 conducted for only 15 minutes during the evening period - Q2 2016 - monitoring during the night-time period conducted prior to 1:00 am. <u>Non - Compliance.</u> - Q3 2016 - monitoring conducted prior to 1:00am. <u>Non - Compliance.</u> - Q4 2016 - monitoring conducted prior to 1:00am and within 2 months of Q3 2016 monitoring. <u>Non - Compliance.</u> - Q3 2017 monitoring conducted within 2 months of Q2 2017 monitoring. - 2018 monitoring has been completed as per requirements. - 2019 Q1 - monitoring conducted prior to 1:00am. - Measurements are generally taken over a range of days however on occasion some quarters are conducted on the same days.  It is noted that following 2016 with the exception of Q1 2017 and Q1 2018 where extended noise monitoring was conducted in accordance with (f) night time noise monitoring during the night time was conducted between 1am and 4am.	Update Noise Management Plan. Ensure monitoring is completed in accordance with Noise Management Plan.																																			
M4.2	For the Annual Reporting Period ending March 2015 the EPA will accept all monitoring required by the current Department of Planning and Environment consent (usually quarterly monitoring for noise as dB(A) Leq15minutes) for compliance with noise monitoring requirements in this licence, as a single report attached to the Annual Return for the premises.	Administrative Non-Compliance	No evidence of a consolidated noise report prepared for the Annual Returns. Evidence from 2015/16, but none during the audit period.	For future Annual Returns a single noise monitoring report should be prepared and attached to the Annual Return.																																			
M5	Weather monitoring																																						
M5.1	At the point(s) identified below, the licensee must monitor (by sampling and obtaining results by analysis) the parameters specified in Column 1 of the table below, using the corresponding sampling method, units of measure, averaging period and sampling frequency, specified opposite in the Columns 2, 3, 4 and 5 respectively.																																						
	<p>POINT 26</p> <table border="1"> <thead> <tr> <th>Parameter</th> <th>Sampling method</th> <th>Units of measure</th> <th>Averaging period</th> <th>Frequency</th> </tr> </thead> <tbody> <tr> <td>Rainfall</td> <td>AM-4</td> <td>millimetres</td> <td>24 hours</td> <td>Continuous</td> </tr> <tr> <td>Wind Direction at 10 metres</td> <td>AM-2 &amp; AM-4</td> <td>Degrees</td> <td>1 hour</td> <td>Continuous</td> </tr> <tr> <td>Wind speed</td> <td>AM-2 &amp; AM-4</td> <td>metres per second</td> <td>1 hour</td> <td>Continuous</td> </tr> <tr> <td>Temperature at 10 metres</td> <td>AM-4</td> <td>degrees Celsius</td> <td>1 hour</td> <td>Continuous</td> </tr> <tr> <td>Sigma theta</td> <td>AM-2 &amp; AM-4</td> <td>Degrees</td> <td>15 minutes</td> <td>Continuous</td> </tr> <tr> <td>Relative humidity</td> <td>AM-4</td> <td>percent</td> <td>1 hour</td> <td>Continuous</td> </tr> </tbody> </table>	Parameter	Sampling method	Units of measure	Averaging period	Frequency	Rainfall	AM-4	millimetres	24 hours	Continuous	Wind Direction at 10 metres	AM-2 & AM-4	Degrees	1 hour	Continuous	Wind speed	AM-2 & AM-4	metres per second	1 hour	Continuous	Temperature at 10 metres	AM-4	degrees Celsius	1 hour	Continuous	Sigma theta	AM-2 & AM-4	Degrees	15 minutes	Continuous	Relative humidity	AM-4	percent	1 hour	Continuous	Compliant	Evidence of meteorological data from Mannering weather station. Spreadsheet provided with measurements.  2012 audit confirmed that DPE and EPA (under revision of EPL 1770) approved use of Mannering Colliery monitor as representative of Chain Valley and ability to calculate temperature lapse rate by use of sigma-theta method.	
Parameter	Sampling method	Units of measure	Averaging period	Frequency																																			
Rainfall	AM-4	millimetres	24 hours	Continuous																																			
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Relative humidity	AM-4	percent	1 hour	Continuous																																			
M6	Recording of pollution complaints																																						
M6.1	The licensee must keep a legible record of all complaints made to the licensee or any employee or agent of the licensee in relation to pollution arising from any activity to which this licence applies.	Compliant	Evidence of complaints greater than 4 years.																																				
M6.2	The record must include details of the following: a) the date and time of the complaint; b) the method by which the complaint was made; c) any personal details of the complainant which were provided by the complainant or, if no such details were provided, a note to that effect; d) the nature of the complaint; e) the action taken by the licensee in relation to the complaint, including any follow-up contact with the complainant; and f) if no action was taken by the licensee, the reasons why no action was taken.	Administrative Non-Compliance	*Admin Non-compliant: The Complaints Register does not include the personal details of the complainant. * Not all complaints registered in the register included the method by which the complaint was made. * There are additional complaints outlined in the Annual Review compared to the Complaints Registers provided to the auditor.	Ensure all complaints are recorded in the internal database on site and the relevant details required under this condition are outlined in the Annual Review.																																			
M6.3	The record of a complaint must be kept for at least 4 years after the complaint was made.	Compliant	Evidence of complaints greater than 4 years.																																				
M6.4	The record must be produced to any authorised officer of the EPA who asks to see them.	Note																																					
M7	Telephone complaints line																																						
M7.1	The licensee must operate during its operating hours a telephone complaints line for the purpose of receiving any complaints from members of the public in relation to activities conducted at the premises or by the vehicle or mobile plant, unless otherwise specified in the licence.	Compliant	Community hotline advertised on the Lake Coal website (now redundant). Also contact line provided on Delta Coal website.																																				
M7.2	The licensee must notify the public of the complaints line telephone number and the fact that it is a complaints line so that the impacted community knows how to make a complaint.	Administrative Non-Compliance	*Telephone line for complaints advertised on the LakeCoal and Delta Coal websites. * However no evidence of notifying to the community that the complaints line exists.	With the new ownership an advertisement should be placed in the paper/newsletter providing a link to the Delta Coal website and outlining the complaint management details.																																			
M7.3	The preceding two conditions do not apply until 3 months after the date of the issue of this licence.	Noted	Outside of audit period.																																				
M7.4	The licensee must notify the EPA with contact details of personnel capable of a timely response to emergencies or any other exigent circumstances.  (a) the nominated contact must be available at all times. (b) contact details must include a telephone number and must be current. (c) such notification must be made within 14 days of receiving this licence.	Administrative Non-Compliance	* Designated representatives of the company included in the Pollution Incident Response Plan (PIRMP), dated September 2018. * Admin Non-compliant: The designated representatives of the company, included in the PIRMP, are not current.	Update the details of designated representatives of the company in the PIRMP.																																			
M8	Requirement to monitor volume or mass																																						
M8.1	For each discharge point or utilisation area specified below, the licensee must monitor: a) the volume of liquids discharged to water or applied to the area; b) the mass of solids applied to the area; c) the mass of pollutants emitted to the air; at the frequency and using the method and units of measure, specified below.																																						

Condition Number	Condition	Compliance Status	Evidence	Recommended Action												
	<p>POINT 1</p> <table border="1"> <thead> <tr> <th>Frequency</th> <th>Unit of Measure</th> <th>Sampling Method</th> </tr> </thead> <tbody> <tr> <td>Continuous during discharge</td> <td>kilolitres per day</td> <td>In line instrumentation</td> </tr> </tbody> </table> <p>POINT 27</p> <table border="1"> <thead> <tr> <th>Frequency</th> <th>Unit of Measure</th> <th>Sampling Method</th> </tr> </thead> <tbody> <tr> <td>Continuous during discharge</td> <td>kilolitres per day</td> <td>In line instrumentation</td> </tr> </tbody> </table>	Frequency	Unit of Measure	Sampling Method	Continuous during discharge	kilolitres per day	In line instrumentation	Frequency	Unit of Measure	Sampling Method	Continuous during discharge	kilolitres per day	In line instrumentation	Compliant	Data for volume monitoring provided. Also summarised in Annual Review.	
Frequency	Unit of Measure	Sampling Method														
Continuous during discharge	kilolitres per day	In line instrumentation														
Frequency	Unit of Measure	Sampling Method														
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<b>6 Reporting Conditions</b>																
R1	Annual return documents															
R1.1	<p>1 The licensee must complete and supply to the EPA an Annual Return in the approved form comprising:</p> <ol style="list-style-type: none"> <li>1. a Statement of Compliance,</li> <li>2. a Monitoring and Complaints Summary,</li> <li>3. a Statement of Compliance - Licence Conditions,</li> <li>4. a Statement of Compliance - Load based Fee,</li> <li>5. a Statement of Compliance - Requirement to Prepare Pollution Incident Response Management Plan,</li> <li>6. a Statement of Compliance - Requirement to Publish Pollution Monitoring Data,</li> <li>7. a Statement of Compliance - Environmental Management Systems and Practices; and</li> <li>8. a Statement of Compliance - Environmental Improvement Works.</li> </ol> <p>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.</p>	Compliant	Evidence of: 2016-17 AR and 2017-18 AR. The 2018-19 was not due at the time of the audit. Completed on EPA form.													
R1.2	<p>An Annual Return must be prepared in respect of each reporting period, except as provided below.</p> <p>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.</p>	Compliant	Evidence of: 2016-17 AR and 2017-18 AR. The 2018-19 was not due at the time of the audit. Completed on EPA form.													
R1.3	<p>Where this licence is transferred from the licensee to a new licensee:</p> <ol style="list-style-type: none"> <li>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</li> <li>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.</li> </ol> <p>Note: An application to transfer a licence must be made in the approved form for this purpose.</p>	Compliant	Evidence of: 2016-17 AR and 2017-18 AR. The 2018-19 was not due at the time of the audit. Completed on EPA form.  LakeCoal and Delta Coal are in the process of preparing separate Annual Returns based on the change of ownership for the 2018-19 period.	LakeCoal and Delta Coal to prepare Annual Returns based on the period of the Annual Return and dates of the sale of Chain Valley.												
R1.4	<p>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:</p> <ol style="list-style-type: none"> <li>a) in relation to the surrender of a licence - the date when notice in writing of approval of the surrender is given; or</li> <li>b) in relation to the revocation of the licence - the date from which notice revoking the licence operates.</li> </ol>	Not Triggered														
R1.5	The Annual Return for the reporting period must be supplied to the EPA by registered post not later than 60 days after the end of each reporting period or in the case of a transferring licence not later than 60 days after the date the transfer was granted (the 'due date').	Administrative Non-Compliance	<p>The 2017-18 Annual Return is dated 4 June 2018 and was supposed to be submitted to the EPA by 30 May 2018. From the date of the Annual Return it appears it wasn't submitted to the EPA time</p> <p>The 2016-17 Annual Return was dated within the 60 days.</p>	Ensure Annual Returns are completed as per the EPA requirements and submitted within the due date.												
R1.6	The licensee must retain a copy of the Annual Return supplied to the EPA for a period of at least 4 years after the Annual Return was due to be supplied to the EPA.	Compliant	Evidence of Annual Returns from past years sighted.													
R1.7	<p>Within the Annual Return, the Statements of Compliance must be certified and the Monitoring and Complaints Summary must be signed by:</p> <ol style="list-style-type: none"> <li>a) the licence holder; or</li> <li>b) by a person approved in writing by the EPA to sign on behalf of the licence holder.</li> </ol>	Compliant	Evidence of: 2016-17 AR and 2017-18 AR. The 2018-19 was not due at the time of the audit. Completed on EPA form. Signed.													
R2	Notification of environmental harm															
	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.	Not Triggered	<p>A PIRMP has been prepared for the site. Latest dated 21 Sept 2018.</p> <p>Evidence of testing PIRMP with this dated in EPL Annual Returns.</p> <p>Although there were some incidents, it does not appear any incident required the PIRMP to be enacted.</p> <p>PIRMP is currently being updated. No material harm identified.</p>													
R2.1	Notifications must be made by telephoning the Environment Line service on 131 555.															
R2.2	The licensee must provide written details of the notification to the EPA within 7 days of the date on which the incident occurred.															
R3	Written report															
R3.1	<p>Where an authorised officer of the EPA suspects on reasonable grounds that:</p> <ol style="list-style-type: none"> <li>a) where this licence applies to premises, an event has occurred at the premises; or</li> <li>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.</li> </ol>	Not Triggered	Based on discussions with the Environment and Community Co-ordinator this condition has not been triggered.													
R3.2	The licensee must make all reasonable inquiries in relation to the event and supply the report to the EPA within such time as may be specified in the request. The request may require a report which includes any or all of the following information:	Not Triggered	Based on discussions with the Environment and Community Co-ordinator this condition has not been triggered.													
R3.3	<ol style="list-style-type: none"> <li>a) the cause, time and duration of the event;</li> <li>b) the type, volume and concentration of every pollutant discharged as a result of the event;</li> <li>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;</li> <li>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;</li> <li>e) action taken by the licensee in relation to the event, including any follow-up contact with any complainants;</li> <li>f) details of any measure taken or proposed to be taken to prevent or mitigate against a recurrence of such an event; and</li> <li>g) any other relevant matters.</li> </ol>	Not Triggered	Based on discussions with the Environment and Community Co-ordinator this condition has not been triggered.													
R3.4	The EPA may make a written request for further details in relation to any of the above matters if it is not satisfied with the report provided by the licensee. The licensee must provide such further details to the EPA within the time specified in the request.	Not Triggered	Based on discussions with the Environment and Community Co-ordinator this condition has not been triggered.													
R4	Other reporting conditions															
	Noise Monitoring Report															

Condition Number	Condition	Compliance Status	Evidence	Recommended Action																								
R4.1	<p>The licensee must submit to the EPA a noise compliance assessment report at the end of each reporting period. The report must be submitted with the Environment Protection Licence Annual Return. The report must be prepared by a suitably qualified and experienced acoustical consultant which:</p> <p>(a) details the noise monitoring undertaken in accordance with condition M4;  (b) assesses compliance with noise limits presented in condition L5.1 and condition 5.2; and  (c) outlines any management actions taken within the monitoring period to address any exceedances of limits contained in condition L5.1 and condition L5.2.</p> <p>Note: The licensee must provide the EPA with one report, but this report may be a combination of the monitoring undertaken by the licensee as part of their quarterly monitoring program as required by the Project Approval SSD-5456 and must include LA1(1min).</p>	Administrative Non-Compliance	No evidence of a consolidated noise report prepared for the Annual Returns. Evidence from 2015/16, but none during the audit period.	Send a combined noise report for the Annual Return period to the EPA.																								
<b>7 General Conditions</b>																												
G1	Copy of licence kept at the premises or plant																											
G1.1	A copy of this licence must be kept at the premises to which the licence applies.	Compliant	A copy of the licence was provided by the Environment and Community Co-ordinator.																									
G1.2	The licence must be produced to any authorised officer of the EPA who asks to see it.	Noted																										
G1.3	The licence must be available for inspection by any employee or agent of the licensee working at the premises.	Compliant	A copy of the licence was provided by the Environment and Community Co-ordinator. A copy was included in hard copy.																									
G2	Other general conditions																											
G2.1	Completed Programs																											
	<table border="1"> <thead> <tr> <th>PRP</th> <th>Description</th> <th>Completed Date</th> </tr> </thead> <tbody> <tr> <td>Coal Mine Particulate Matter Control Best Practice</td> <td>Requires licensee to conduct a site specific Best Management Practice (BMP) determination to identify ways to reduce particle emissions</td> <td>28-September-2012</td> </tr> <tr> <td>Assessment of Potential Impacts of Metals in wastewater</td> <td>The licensee must conduct an assessment of metals detected in wastewater discharges from the mine in accordance with the ANZECC water quality guidelines. To obtain a greater understanding of the type and concentration of metals discharged in mine water and entering the receiving waters. To limit the concentration of metals discharged in mine water within ANZECC guidelines.</td> <td>23-October-2013</td> </tr> <tr> <td>Air Quality Monitoring</td> <td>The licensee must evaluate best locations and install monitoring devices as defined in Project Approval MP10_0161 under the Environment Planning &amp; Assessment Act 1979.</td> <td>31-December-2013</td> </tr> <tr> <td>PRP4 - Upgrade to Clean and Dirty Water Management System</td> <td>The licensee must review and upgrade separation of the Clean and Dirty Water Management System and review and upgrade bunding.</td> <td>14-August-2015</td> </tr> <tr> <td>PRP5 - Remediation of Dam Wall and Spillway formalisation</td> <td>The licensee must design and remediate the dam wall on the final control pond and formalise a spillway to prevent dam seepage and to ensure that volumetric discharge can be monitored</td> <td>27-February-2015</td> </tr> <tr> <td>PRP 6 Upgrade to Sewage Treatment Systems</td> <td>Assessment of options for improved disinfection of effluent from STP on licenced premises.</td> <td>06-January-2015</td> </tr> <tr> <td>PRP7 Sewage Treatment System Concept Design</td> <td>Provide the EPA with a Concept Design and Timetable for Implementation of Upgrade to the Sewage Treatment System</td> <td>19-February-2016</td> </tr> </tbody> </table>	PRP	Description	Completed Date	Coal Mine Particulate Matter Control Best Practice	Requires licensee to conduct a site specific Best Management Practice (BMP) determination to identify ways to reduce particle emissions	28-September-2012	Assessment of Potential Impacts of Metals in wastewater	The licensee must conduct an assessment of metals detected in wastewater discharges from the mine in accordance with the ANZECC water quality guidelines. To obtain a greater understanding of the type and concentration of metals discharged in mine water and entering the receiving waters. To limit the concentration of metals discharged in mine water within ANZECC guidelines.	23-October-2013	Air Quality Monitoring	The licensee must evaluate best locations and install monitoring devices as defined in Project Approval MP10_0161 under the Environment Planning & Assessment Act 1979.	31-December-2013	PRP4 - Upgrade to Clean and Dirty Water Management System	The licensee must review and upgrade separation of the Clean and Dirty Water Management System and review and upgrade bunding.	14-August-2015	PRP5 - Remediation of Dam Wall and Spillway formalisation	The licensee must design and remediate the dam wall on the final control pond and formalise a spillway to prevent dam seepage and to ensure that volumetric discharge can be monitored	27-February-2015	PRP 6 Upgrade to Sewage Treatment Systems	Assessment of options for improved disinfection of effluent from STP on licenced premises.	06-January-2015	PRP7 Sewage Treatment System Concept Design	Provide the EPA with a Concept Design and Timetable for Implementation of Upgrade to the Sewage Treatment System	19-February-2016	Compliant	PRP 7 is relevant to the audit period. Document is dated 19 February 2016. Evidence of email submission provided.	
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<b>8 Pollution Studies and Reduction Programs</b>																												
U1	PRP 8 - Construction of Sewerage System																											
U1.1	<p>By 07 July 2017 the licensee must construct a pump station, rising main and other infrastructure in order to connect the sewage from Chain Valley Colliery to Wyong Shire Council's sewerage system. The construction must be undertaken by an appropriately qualified experienced person. The Licensee must:</p> <p>a) obtain the appropriate approvals and permits required for the development;  b) construct option A or option B in accordance with the document titled "Concept Design Report for Sewage Treatment System Upgrade Chain Valley Colliery" dated 1 February 2016 and prepared by RGH Consulting Group;  c) include connection of sewage from the administration building to the rising main;  d) notify the EPA in writing at hunter.region@epa.nsw.gov.au within 2 weeks of the pump station and rising main being commissioned; and  e) provide the EPA with a report on commissioning of the pump station and rising main which details the final option constructed within 2 weeks of the pump station and rising main being commissioned.</p>	Administrative Non-Compliance	<p>The upgrade has been designed but not yet constructed.</p> <p>This was supposed to be completed by 7 July 2017.</p>	<p>Liaise with the EPA regarding the current status of the Sewage System Project. Implement any agreed actions in terms of timing.</p>																								

# Consolidated Coal Lease 721

Audit Period = 1 January 2016 – 5 April 2019

Condition Number	Condition	Compliance Status	Evidence	Recommended Action
<b>Mining Lease Conditions 2008</b>				
1	<b>Notice to Landholders</b> Within a period of three months from the date of granting or renewal of this lease or within such further time as the Minister may allow, the lease holder must serve on each landholder of the land a notice in writing indicating that this lease has been granted/renewed and whether the lease includes the surface. An adequate plan and description of the lease area must accompany the notice.  If there are ten or more landholders affected, 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 lease has been granted/renewed; state whether the lease includes the surface and must contain an adequate plan and description of the lease area.	Not Triggered	Not within period.	
2	<b>Environmental Harm</b> The proponent shall implement all practicable measures to prevent and/or minimise any harm to the environment that may result from the construction, operation or rehabilitation of the development.	Compliant	Based on information provided there is no evidence of material harm.	
3	<b>Mining Operations Plan</b> (a) Mining operations must not be carried out otherwise than in accordance with: a Mining Operations Plan (MOP) which has been approved by the Director-General of the Department of Primary Industries. (b) The MOP must: i) identify areas that will be disturbed by mining operations; ii) detail the staging of specific mining operations; iii) identify how the mine will be managed to allow mine closure; iv) identify how mining operations will be carried out on site in order to prevent and/or minimise harm to the environment; v) reflect the conditions of approval under: the Environmental Planning and Assessment Act 1979 the Protection of the Environment Operations Act 1997 and any other approvals relevant to the development including the conditions of this lease; and vi) have regard to any relevant guidelines adopted by the Director-General. (c) The titleholder may apply to the Director-General to amend an approved MOP at any time. (d) It is not a breach of this condition if: i) the operations constituting the breach were necessary to comply with a lawful order or direction given under the Mining Act 1992, the Environmental Planning and Assessment Act 1979, Protection of the Environment Operations Act 1997 or the Occupational Health and Safety Act 2000; and ii) the Director-General had been notified in writing of the terms of the order or direction prior to the operations constituting the breach being carried out. (e) A MOP ceases to have effect 7 years after date of approval or other such period as identified by the Director-General. An approved amendment to the MOP under condition 5 does not constitute an approval for the purpose of this paragraph unless otherwise identified by the Director-General.	Non-Compliant (Low Risk)	Two MOPs provided for this audit. MOP 1 - 1 April 2015 - 31 March 2018. MOP 2 - 1 October 2018 - 31 December 2020.  There appears to be a gap in the MOPs between March and October 2017. There has been no evidence of the reason why there was a gap and whether the site was approved to operate without a MOP in that period. As there is no information provided this condition is non-compliant. There is now an approved MOP therefore there is no further recommendation relating to this period of time.  Both MOPs cover the required aspects of this condition.  <u>Implementation:</u> No areas available for rehabilitation at site.	
4	<b>Environmental Management Reporting</b> The lease holder must lodge Environmental Management Reports (EMR) with the Director-General annually or at dates otherwise directed by the Director-General.	Compliant	Evidence of Annual Reviews from 2016, 2017 and 2018. Evidence of lodgements.	
5	<b>The EMR must:</b>  a) report against compliance with the MOP; b) report on progress in respect of rehabilitation completion criteria; c) report on the extent of compliance with regulatory requirements; and d) have regard to any relevant guidelines adopted by the Director-General.	Administrative Non-Compliance	a) Admin Non-compliant: The 2016, 2017 & 2018 Annual Reviews do not report against compliance with the MOP. b) N/A - Rehabilitation has not commenced at the site; c) 2016, 2017 & 2018 Annual Reviews - Executive Summary & Section 3; and d) Admin Non-compliant: 2016, 2017 and 2018 Annual Reviews not prepared in accordance with the DPE Annual Review guidelines.	Report against compliance with the MOP in future Annual Reviews.  As per recommendations in Schedule 6 Condition 4.
6	Additional environmental reports may be required on specific surface disturbing operations or environmental incidents from time to time as directed in writing by the Director-General and must be lodged as instructed.	Compliant	Additional reporting was prepared for subsidence. Work appears to have been completed as per the direction and feedback from the Resources Regulator.	
7	<b>Rehabilitation</b>  Disturbed land must be rehabilitated to a sustainable/agreed end land use to the satisfaction of the Director-General.	Not Triggered	No areas available for rehabilitation.	
8	<b>Subsidence Management</b>  (a) The lease holder 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 longwalls or miniwalls, associated first workings (gateroads, installation roads and associated main headings, etc), and pillar extractions, and are otherwise defined by the Applications for Subsidence Management Approvals guidelines (EDG17) (c) The lease holder 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 Mine Health & Safety Act 2004, or the document New Subsidence Management Plan Approval Process - Transitional Provisions (EDP09). (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 3 and will be subject to the Annual Environmental Management Report process as set out under Condition 4. The SMP is also subject to the requirements for subsidence monitoring and reporting set out in the document New Approval Process for Management of Coal Mining Subsidence - Policy.	Compliant	Subsidence Management Plans prepared prior to this audit period. Several Extraction Plans prepared during the audit period. They are prepared under a separate Extraction Plan Guideline and do not specifically need to cover this condition.	
9	<b>Working Requirement</b>  The lease holder must: (a) ensure that at least 142 competent people are efficiently employed on the lease area on each week day except Sunday or any week day that is a public holiday, OR (b) expend on operations carried out in the course of prospecting or mining the lease area, an amount of not less than \$2,485,000 per annum whilst the lease is in force. The Minister may at any time or times, by instrument in writing served on the lease holder, increase or decrease the expenditure required or the number of people to be employed.	Compliant	Operations meet sub condition b.	
10	<b>Control of Operations</b>			

Condition Number	Condition	Compliance Status	Evidence	Recommended Action
	(a) If an Environmental Officer of the Department believes that the lease holder is not complying with any provision of the Act or any condition of this lease relating to the working of the lease, he may direct the lease holder to:- (i) cease working the lease; or (ii) cease that part of the operation not complying with the Act or conditions; until in the opinion of the Environmental Officer the situation is rectified. (b) The lease holder must comply with any direction given. The Director-General may confirm, vary or revoke any such direction. (c) A direction referred to in this condition may be served on the Mine Manager.	Not Triggered	Discharge locations sighted in the field inspection. Records of discharge volume and water quality outlined in Annual Reviews.	
11	<b>Reports</b> The lease holder must provide an exploration report, within a period of twenty-eight days after each anniversary of the date this lease has effect or at such other date as the Director-General may stipulate, of each year. The report must be to the satisfaction of the Director-General and contain the following: (a) Full particulars, including results, interpretation and conclusions, of all exploration conducted during the twelve months period; (b) Details of expenditure incurred in conducting that exploration; (c) A summary of all geological findings acquired through mining or development evaluation activities; (d) Particulars of exploration proposed to be conducted in the next twelve months period; (e) All plans, maps, sections and other data necessary to satisfactorily interpret the report.	Administrative Non-Compliance	Evidence of submission for 2016, 2017 and 2018 Group Exploration Reports. LakeCoal received a PIN from the Resources Regulator on 7 November 2017 for late lodgement. In the version supplied to SLR there are no figures.	Ensure Group Exploration Reports meet the required timeframe. Ensure figures are included in the reports.
12	<b>Licence to Use Reports</b> (a) The lease holder grants to the Minister, by way of a non-exclusive licence, the right in copyright to publish, print, adapt and reproduce all exploration reports lodged in any form and for the full duration of copyright (b) The non-exclusive licence will operate as a consent for the purposes of section 365 of the Mining Act 1992.	Note		
13	<b>Confidentiality</b> (a) All exploration reports submitted in accordance with the conditions of this lease will be kept confidential while the lease is in force, except in cases where: (i) the lease holder has agreed that specified reports may be made non-confidential. (ii) reports deal with exploration conducted exclusively on areas that have ceased to be part of the lease. (b) Confidentiality will be continued beyond the termination of a lease where an application for a flow-on title was lodged during the currency of the lease. The confidentiality will last until that flow-on title or any subsequent flow-on title, has terminated. (c) The Director-General may extend the period of confidentiality.	Note		
14	<b>Terms of the non-exclusive licence</b> The terms of the non-exclusive copyright licence granted under condition 12 are: (a) the Minister may sub-licence others to publish, print, adapt and reproduce but not on-licence reports. (b) the Minister and any sub-licencee will acknowledge the lease holder's and any identifiable consultant's ownership of copyright in any reproduction of the reports, including storage of reports onto an electronic database. (c) the lease holder does not warrant ownership of all copyright works in any report and, the lease holder will use best endeavours to identify those parts of the report for which the lease holder owns the copyright. (d) there is no royalty payable by the Minister for the licence. (e) if the lease holder has reasonable grounds to believe that the Minister has exercised his rights under the non-exclusive copyright licence in a manner which adversely affects the operations of the lease holder, that licence is revocable on the giving of a period of not less than three months notice.	Note		
15	<b>Blasting</b> (a) Ground Vibration The lease holder must ensure that the ground vibration peak particle velocity generated by any blasting within the lease area does not exceed 10 mm/second and does not exceed 5 mm/second in more than 5% of the total number of blasts over a period of 12 months at any dwelling or occupied premises as the case may be, unless determined otherwise by the Department of Environment and Climate Change. (b) Blast Overpressure The lease holder must ensure that the blast overpressure noise level generated by any blasting within the lease area does not exceed 120 dB (linear) and does not exceed 115 dB (linear) in more than 5% of the total number of blasts over a period of 12 months, at any dwelling or occupied premises, as the case may be, unless determined otherwise by the Department of Environment and Climate Change.	Not Triggered	No surface blasting has been undertaken during the audit period.	
16	<b>Safety</b> Operations must be carried out in a manner that ensures the safety of persons or stock in the vicinity of the operations. All drill holes shafts and excavations must be appropriately protected, to the satisfaction of the Director-General, to ensure that access to them by persons and stock is restricted. Abandoned shafts and excavations opened up or used by the lease holder must be filled in or otherwise rendered safe to a standard acceptable to the Director-General.	N/A	This is not a safety audit.	
17	<b>Exploratory Drilling</b> (a) At least twenty eight days prior to commencement of drilling operations the lease holder must notify the relevant Department of Water and Energy Regional Hydrologist of the intention to drill exploratory drill holes together with information on the location of the proposed holes. (b) If the lease holder drills exploratory drill holes he must satisfy the Director-General that:- (i) all cored holes are accurately surveyed and permanently marked in accordance with Departmental guidelines so that their location can be easily established; (ii) all holes cored or otherwise are sealed to prevent the collapse of the surrounding surface; (iii) all drill holes are permanently sealed with cement plugs to prevent surface discharge of groundwater's; (iv) if any drill hole meets natural or noxious gases it is plugged or sealed to prevent their escape; (v) if any drill hole meets an artesian or sub-artesian flow it is effectively sealed to prevent contamination of aquifers. (vi) once any drill hole ceases to be used the hole must be sealed in accordance with Departmental guidelines. Alternatively, the hole must be sealed as instructed by the Director-General. (vii) once any drill hole ceases to be used the land and its immediate vicinity is left in a clean, tidy and stable condition.	Not Triggered	Based on site communications no exploration drilling in this lease area.	
18	<b>Prevention of Soil Erosion and Pollution</b> Operations must be carried out in a manner that does not cause or aggravate air pollution, water pollution (including sedimentation) or soil contamination or erosion, unless otherwise authorised by a relevant approval, and in accordance with an accepted Mining Operations Plan. For the purpose of this condition, water shall be taken to include any watercourse, waterbody or groundwaters. The lease holder must observe and perform any instructions given by the Director-General in this regard.	Compliant	The field inspection around the pit top and other areas did not identify any significant areas of erosion.	
19	<b>Transmission lines, Communication lines and Pipelines</b> Operations must not interfere with or impair the stability or efficiency of any transmission line, communication line, pipeline or any other utility on the lease area without the prior written approval of the Director-General and subject to any conditions he may stipulate.	Not Triggered	Based on information provided to SLR this has not been triggered.	
20	<b>Fences, Gates</b> (a) Activities on the lease must not interfere with or damage fences without the prior written approval of the owner thereof or the Minister and subject to any conditions the Minister may stipulate. (b) Gates within the lease area	Not Triggered	Based on information provided to SLR this has not been triggered.	
21	<b>Roads and Tracks</b> (a) Operations must not affect any road unless in accordance with an accepted Mining Operations Plan or with the prior written approval of the Director-General and subject to any conditions he may stipulate. (b) The lease holder must pay to the designated authority in control of the road (generally the local council or the Roads and Traffic Authority) the cost incurred in fixing any damage to roads caused by operations carried out under the lease, less any amount paid or payable from the Mine Subsidence Compensation Fund.	Not Triggered	Based on information provided to SLR this has not been triggered.	
22	<b>Trees and Timber</b> (a) The lease holder must not fell trees, strip bark or cut timber on the lease without the consent of the landholder who is entitled to the use of the timber, or if such a landholder refuses consent or attaches unreasonable conditions to the consent, without the approval of a warden. (b) The lease holder must not cut, destroy, ringbark or remove any timber or other vegetative cover on the lease area except such as directly obstructs or prevents the carrying on of operations. Any clearing not authorised under the Mining Act 1992 must comply with the provisions of the Native Vegetation Act 2003. (c) The lease holder must obtain all necessary approvals or licences before using timber from any Crown land within the lease area.	Not Triggered	Based on information provided to SLR this has not been triggered.	

Condition Number	Condition	Compliance Status	Evidence	Recommended Action
25	<b>Resource Recovery</b> (a) Notwithstanding any description of mining methods and their sequence or of proposed resource recovery contained within the Mining Operations Plan, if at any time the Director-General is of the opinion that minerals which the lease entitles the lease holder to mine and which are economically recoverable at the time are not being recovered from the lease area, or that any such minerals which are being recovered are not being recovered to the extent which should be economically possible or which for environmental reasons are necessary to be recovered, he may give notice in writing to the lease holder requiring the holder to recover such minerals. (b) The notice shall specify the minerals to be recovered and the extent to which they are to be recovered, or the objectives in regard to resource recovery, but shall not specify the processes the lease holder shall use to achieve the specified recovery. (c) The lease holder must, when requested by the Director-General, provide such information as the Director-General may specify about the recovery of the mineral resources of the lease area. (d) The Director-General shall issue no such notice unless the matter has firstly been thoroughly discussed with and a report to the Director-General has incorporated the views of the lease holder. (e) The lease holder may object to the requirements of any notice issued under this condition and on receipt of such an objection the Minister shall refer it to a Warden for inquiry and report under Section 334 of the Mining Act, 1992. (f) After considering the Warden's report the Minister shall decide whether to withdraw, modify or maintain the requirements specified in the original notice and shall give the lease holder written notice of the decision. The lease holder must comply with the requirements of this notice.	Not Triggered	Based on information provided to SLR this has not been triggered.	
26	<b>Indemnity</b> The lease holder must indemnify and keep indemnified the Crown from and against all actions, suits, claims and demands of whatsoever nature and all costs, charges and expenses which may be brought against the lease holder or which the lease holder may incur in respect of any accident or injury to any person or property which may arise out of the construction, maintenance or working of any workings now existing or to be made by the lease holder within the lease area or in connection with any of the operations notwithstanding that all other conditions of this lease shall in all respects have been observed by the lease holder or that any such accident or injury shall arise from any act or thing which the lease holder may be licensed or compelled to do.	Note	- Exceedance of LA1(1minute) criteria of 6dB and 7dB at ATN4 and R13 in June 2016. Documented in 2016 Annual Review and Quarterly Monitoring report (Global Acoustics report 16217_R01). Corrective actions undertaken and documented in incident report dated 05/07/2016. - 1dB exceedance of LAeq(15minute) criteria at ATN007 during the daytime period in October 2017 (Q4). Documented in 2017 Annual Review. However it is noted that a discrepancy between+E52 monitoring results presented in the 2017 Annual Review and Q4 Monitoring report (Global Acoustics Report 17424_R01) where no exceedance is recorded. - No exceedances recorded during 2018 period. - No exceedances recorded during the 2019 audit period (January - April 2019).	
28	<b>Security</b> (a) The single security in the sum of \$1,905,000 must be given and maintained with the Minister by the lease holder for the purpose of ensuring the fulfilment by the lease holder of obligations under CCL 719 and CCL 721. If the lease holder fails to fulfil any one or more of the obligations under this lease, then the security held may be applied at the discretion of the Minister towards the cost of fulfilling such obligations. For the purpose of this clause the lease holder shall be deemed to have failed to fulfil the obligations of the lease if the lease holder fails to comply with any condition or provision hereof, any provision of the Act or regulations made thereunder or any condition or direction imposed or given pursuant to a condition or provision hereof or of any provision of the Act or regulations made thereunder. (b) The lease holder must provide the security required by sub-clause (a) in one of the following forms: (i) cash, (ii) a security certificate in a form approved by the Minister and issued by an authorised deposit-taking institution	Compliant	Security deposit provided to SLR for this audit. Dated August 2018 with RCE value of \$3,109,607. Evidence of approval letter from Resources Regulator dated 19 October 2018.	
29	<b>Prescribed Dam</b> (a) Notwithstanding any Mining Operations Plan, the lease holder must not mine within any part of the lease area which is within the notification area of the Mannering Creek Ash Dam, Colongra Creek Ash Dam and Vales Point Ash Dam without the prior written approval of the Minister and subject to any conditions he may stipulate. (b) Where the lease holder desires to mine within the notification area he must: (i) at least twelve (12) months before mining is to commence or such lesser time as the Minister may permit, notify the Minister of the desire to do so. A plan of the mining system to be implemented must accompany the notice; and (ii) provide such information as the Minister may direct. (c) The Minister must not, except in the circumstances set out in sub-paragraph (ii), grant approval unless sub-paragraph (i) of this paragraph has been complied with. This sub-paragraph is complied with if: (i) the Dams Safety Committee as constituted by Section 7 of the Dams Safety Act 1978 and the owner of the dam have been notified in writing of the desire to mine referred to in paragraph (b). (ii) the notifications referred to in clause (a) are accompanied by a description or plan of the area to be mined. (iii) the Director-General has complied with any reasonable request made by the Dams Safety Committee or the owner of the dam for further information in connection with the mining proposal. (iv) the Dams Safety Committee has made its recommendations concerning the mining proposal or has informed the Minister in writing that it does not propose to make any such recommendations; and (v) where the Dams Safety Committee has made recommendations the approval is in terms that are: - in accordance with those recommendations; or - where the Minister does not accept those recommendations or any of them - in accordance with a determination under sub-paragraph (ii) of this paragraph. (vi) Where the Minister does not accept the recommendations of the Dams Safety Committee or where the Dams Safety Committee has failed to make any recommendations and has not informed the Minister in writing that it does not propose to make any recommendations, the approval shall be in terms that are, in relation to matters dealing with the safety of the dam: as determined by agreement between the Minister and the Minister administering the Dams Safety Act 1978; or - in the event of failure to reach such agreement - as determined by the Premier. (d) The Minister, on notice from the Dams Safety Committee, may at any time or times: (i) cancel any approval given where a notice pursuant to Section 18 of the Dams Safety Act 1978 is given. (ii) suspend for a period of time, alter, omit from or add to any approval given or conditions imposed.	Compliant	There are no prescribed dams.	
30	<b>Suspension of Mining Operations</b> The holder of a consolidated mining lease may not suspend mining operations in the mining area other than in accordance with the consent of the Minister.	Not Triggered		
31	<b>Cooperation Agreement</b> The licence holder must make every reasonable attempt, and be able to demonstrate their attempts, to enter into a cooperation agreement with the holder(s) of any overlapping petroleum title(s). The cooperation agreement should address but not be limited to issues such as:  - access arrangements - operational interaction procedures dispute resolution - information exchange well location - timing of drilling - potential resource extraction conflicts and rehabilitation issues.	Note		
<b>Special Conditions</b>				
32	<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 conduct mining operations on those parts of the subject area within the highwater level subsidence control zone defined:  (a) on the surface by the highwater level of Lake Macquarie and Pallamanaba Creek and a point 2.44 metres in elevation above that highwater level;  (b) in the seam by a line defined by an angle of draw of 35° drawn landwards from the line drawn vertically beneath a point 2.44 metres in elevation above the highwater level of Lake Macquarie and Pallamanaba Creek;  (c) in the seam by a line defined by an angle of draw of 35° drawn lakewards from the line drawn vertically beneath the highwater level of Lake Macquarie.	Compliant	Based on the information provided, mining has been completed within approved limits.	

Condition Number	Condition	Compliance Status	Evidence	Recommended Action
33	Any approval or consent given by the Minister including any approval or consent given pursuant to any condition or term contained in a lease consolidated into this lease to the effect that the lease holder may conduct mining operations on those parts of the subject area within the highwater level subsidence control zone as defined in Condition 32 shall be deemed to be a consent given for the purposes of the said Condition 32, subject to the same conditions of that approval or consent Provided however that this clause shall also apply to any barrier 60.35 metres wide within the said zone.	Compliant	Based on the information provided, mining has been completed within approved limits.	
34	The lease holder shall not work or cause to be worked any seam of coal within the subject area without leaving, if the Minister by order given in writing to the lease holder so directs, a barrier of such width or a protective pillar or pillars of such size or sizes as is specified in the order, against any surface improvements or any feature whether natural or artificial.	Compliant	Based on the information provided, mining has been completed within approved limits.	
35	Unless with the consent of the Minister first had and obtained, and subject to such conditions as he may impose, the lease holder shall not conduct mining operations on those parts of the subject area:  (a) beneath the main buildings of the Munmorah and Vales Point Power Stations constructed on the excepted surface of the subject area;  (b) within the marginal zone which is the area contained by an angle of draw of 35° measured outwards from the external walls of the main buildings of the Munmorah and Vales Point Power Station to the floor of the seam.	Compliant	Based on the information provided, mining has been completed within approved limits.	
36	Any approval or consent given by the Minister, including any approval or consent given pursuant to any condition or term contained in a lease consolidated into this lease, to the effect that the lease holder may conduct mining operations on those parts of the subject area within the barrier defined in Condition 35 shall be deemed to be a consent given for the purposes of the said Condition 35, subject to the same conditions of that approval or consent.	Compliant	Based on the information provided, mining has been completed within approved limits.	
37	The lease holder shall be limited to the following purposes and conditions within the specified areas described on Plan No. 06180 marked Plan 'B'. Condition 12 noted on Plan 'B' is replaced by Condition 37.	Compliant	Based on the information provided, mining has been completed within approved limits.	

Consolidated Coal Lease 707

Audit Period = 1 January 2016 – 5 April 2019

Condition Number	Condition	Compliance Status	Evidence	Recommended Action
<b>Mining Lease Conditions 2004</b>				
<b>Notice to Landholders</b>				
1	<p>Within a period of three months from the date of grant/renewal of this lease or within such further time as the Minister may allow, the lease holder must serve on each landholder of the land a notice in writing indicating that this lease has been granted/renewed and whether the lease includes the surface. An adequate plan and description of the lease area must accompany the notice.</p> <p>If there are ten or more landholders affected, 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 lease has been granted/renewed; state whether the lease includes the surface and must contain an adequate plan and description of the lease area.</p>	Not Triggered	Outside of the audit period.	
<b>Mining, Rehabilitation, Environmental Management Process (MREMP)</b>				
<b>2. Mining Operations Plan (MOP)</b>				
1	<p>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:-</p> <p>(a) ongoing mining operations and environmental management; and (b) ongoing monitoring of the project.</p>	Non-Compliant (Low Risk)	<p>Two MOPs provided for this audit.</p> <p>MOP 1 - 1 April 2015 - 31 March 2018.</p> <p>MOP 2 - 1 October 2018 - 31 December 2020.</p> <p>There appears to be a gap in the MOPs between March and October 2017. There has been no evidence of the reason why there was a gap and whether the site was approved to operate without a MOP in that period. As there is no information provided this condition is non-compliant. There is now an approved MOP therefore there is no further recommendation relating to this period of time.</p> <p>Both MOPs cover the required aspects of this condition.</p>	
2	The Plan must be prepared in accordance with the Director-General's guidelines current at the time of lodgement.		MOP prepared in accordance with the DPE - RR Guidelines.	
3	<p>A Plan must be lodged with the Director-General:-</p> <p>(a) prior to the commencement of mining operations (including mining purposes); (b) subsequently as appropriate prior to the expiry of any current Plan; and (c) in accordance with any direction issued by the Director-General.</p>		<p>Two MOPs provided for this audit.</p> <p>MOP 1 - 1 April 2015 - 31 March 2018.</p> <p>MOP 2 - 1 October 2018 - 31 December 2020.</p> <p>There appears to be a gap in the MOPs between March and October 2017. There has been no evidence of the reason why there was a gap and whether the site was approved to operate without a MOP in that period. As there is no information provided this condition is non-compliant. There is now an approved MOP therefore there is no further recommendation relating to this period of time.</p> <p>Both MOPs cover the required aspects of this condition.</p>	
4	<p>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:-</p> <p>(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) existing flora and fauna on the site; (f) progressive rehabilitation schedules; (g) areas of particular environmental, ecological and cultural sensitivity and measures to protect these areas; (h) water management systems (including erosion and sediment controls); (i) proposed resource recovery; and (j) 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.</p>		<p>Two MOPs provided for this audit.</p> <p>MOP 1 - 1 April 2015 - 31 March 2018.</p> <p>MOP 2 - 1 October 2018 - 31 December 2020.</p> <p>There appears to be a gap in the MOPs between March and October 2017. There has been no evidence of the reason why there was a gap and whether the site was approved to operate without a MOP in that period. As there is no information provided this condition is non-compliant. There is now an approved MOP therefore there is no further recommendation relating to this period of time.</p> <p>Both MOPs cover the required aspects of this condition. Conditions a-j.</p>	
5	The Plan when lodged will be reviewed by the Department.	Note		
6	The Director-General may within two (2) months of the lodgement of a Plan, require modification and re-lodgement.	Note		
7	(7) If (2) months of the lodgement of a Plan, the lease holder may proceed with implementation of the Plan.	Note		
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 outlined in clauses (5) - (7) above.	Note		
<b>3. 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	<p>Annual Reviews prepared and submitted for 2016, 2017, 2018.</p> <p>There are recommendations relating to the Annual Review from this audit which are covered within Schedule 6 Condition 4 of the Development Consent.</p>	
2	<p>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:</p> <p>(a) the accepted Mining Operations Plan; (b) development consent requirements and conditions; (c) Department of Environment and Conservation and Department of Planning 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.</p>	Administrative Non-Compliance	Annual Review covers conditions b-f. However there is minimal information regarding a review and forecast against the MOP.	Ensure the Annual Review reports on the progress of the operation against the MOP.

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.	Note		
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 and the local council.	Note		
<b>4. Subsidence Management</b>				
	<p>(a) The lease holder shall prepare a Subsidence Management Plan prior to commencing any underground mining operations which will potentially lead to subsidence of the land surface.</p> <p>(b) Underground mining operations which will potentially lead to subsidence include secondary extraction panels such as longwalls or miniwalls, associated first workings (gate roads, installation roads and associated main headings, etc.), and pillar extractions, and are otherwise defined by the Applications for Subsidence Management Approvals guidelines \ (EDG17)</p> <p>(c) The lease holder 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 New Subsidence Management Plan Approval Process - Transitional Provisions (EDP09).</p> <p>(d) Subsidence Management Plans are to be prepared in accordance with the Guideline for Applications for Subsidence Management Approvals.</p> <p>(e) Subsidence Management Plans as approved shall form part of the Mining Operations Plan required under Condition 2 and will be subject to the Annual Environmental Management Report process as set out under Condition 3. The SMP is also subject to the requirements for subsidence monitoring and reporting, set out in the document New Approval Process for Management of Coal Mining Subsidence - Policy.</p>	Compliant	<p>Subsidence Management Plans prepared prior to this audit period. Several Extraction Plans prepared during the audit period. They are prepared under a separate Extraction Plan Guideline and do not specifically need to cover this condition.</p> <p>No additional Subsidence Management Plans prepared in the audit period.</p>	<p>Discharge locations sighted in the field inspection.</p> <p>Records of discharge volume and water quality outlined in Annual Reviews.</p>
<b>5. Working Requirement</b>				
	<p>The lease holder must:</p> <p>(a) ensure that at least 43 competent people are efficiently employed on the lease area on each week day except Sunday or any week day that is a public holiday,</p> <p>OR</p> <p>(b) expend on operations carried out in the course of prospecting or mining the lease area, an amount of not less than \$752,500 per annum whilst the lease is in force.</p> <p>The Minister may at any time or times, by instrument in writing sensed on the lease holder, increase or decrease the expenditure required or the number of people to be employed</p>	Compliant	Operations meet sub condition a and b.	
<b>6. Control of Operations</b>				
	<p>(a) If an Environmental Officer of the Department believes that the lease holder is not complying with any provision of the Act or any condition of this lease relating to the working of the lease, he may direct the lease holder to:-</p> <p>(i) cease working the lease; or</p> <p>(ii) cease that part of the operation not complying with the Act or conditions;</p> <p>until in the opinion of the Environmental Officer the situation is rectified.</p> <p>(b) The lease holder must comply with any direction given. The Director-General may confirm, vary or revoke any such direction.</p> <p>(c) A direction referred to in this condition may be sensed on the Mine Manager.</p>	Not Triggered	Based on information provided to SLR this has not been triggered.	
<b>7. Reports</b>				
	<p>The lease holder must provide an exploration report, within a period of twenty- eight days after each anniversary of the date this lease has effect or at such other date as the Director-General may stipulate, of each year. The report must be to the satisfaction of the Director-General and contain the following:</p> <p>(a) Full particulars, including results, interpretation and conclusions, of all exploration conducted during the twelve months period;</p> <p>(b) Details of expenditure incurred in conducting that exploration;</p> <p>(c) A summary of all geological findings acquired through mining or development evaluation activities;</p> <p>(d) Particulars of exploration proposed to be conducted in the next twelve months period;</p> <p>(e) All plans, maps, sections and other data necessary to satisfactorily interpret the report.</p>	Administrative Non-Compliance	<p>Evidence of submission for 2016, 2017 and 2018 Group Exploration Reports.</p> <p>LakeCoal received a PIN from the Resources Regulator on 7 November 2017 for late lodgement.</p> <p>In the version supplied to SLR there are no figures.</p>	<p>Ensure Group Exploration Reports meet the required timeframe.</p> <p>Ensure figures are included in the reports.</p>
<b>8. Licence to Use Reports</b>				
	<p>(a) The lease holder grants to the Minister, by way of a non-exclusive licence, the right in copyright to publish, print, adapt and reproduce all exploration reports lodged in any form and for the full duration of copyright.</p> <p>(b) The non-exclusive licence will operate as a consent for the purposes of section 365 of the Mining Act 1992.</p>	Note		
<b>9. Confidentiality</b>				
	<p>(a) All exploration reports submitted in accordance with the conditions of this lease will be kept confidential while the lease is in force, except in cases where:</p> <p>(i) the lease holder has agreed that specified reports may be made non- confidential.</p> <p>(ii) reports deal with exploration conducted exclusively on areas that have ceased to be part of the lease.</p> <p>(b) Confidentiality will be continued beyond the termination of a lease where an application for a flow-on title was lodged during the currency of the lease. The confidentiality will last until that flow-on title or any subsequent flow-on title, has terminated.</p> <p>(c) The Director-General may extend the period of confidentiality.</p>	Note		
<b>10. Terms of the non-exclusive licence</b>				

	<p>The terms of the non-exclusive copyright licence granted under condition 8 (a) are:</p> <p>(a) the Minister may sub-licence others to publish, print, adapt and reproduce but not on-licence reports.</p> <p>(b) the Minister and any sub- licensee will acknowledge the lease holder's and any identifiable consultant's ownership of copyright in any reproduction of the reports, including storage of reports onto an electronic database.</p> <p>(c) the lease holder does not warrant ownership of all copyright works in any report and, the lease holder will use best endeavours to identify those parts of the report for which the lease holder owns the copyright.</p> <p>(d) there is no royalty payable by the Minister for the licence.</p> <p>(e) if the lease holder has reasonable grounds to believe that the Minister has exercised his rights under the non-exclusive copyright licence in a manner which adversely affects the operations of the lease holder, that licence is revocable on the giving of a period of not less than three months notice.</p>	Note		
<b>11. Blasting</b>				
	<p>(a) Ground Vibration</p> <p>The lease holder must ensure that the ground vibration peak particle velocity generated by any blasting within the lease area does not exceed 10 mm/second and does not exceed 5 mm/second in more than 5% of the total number of blasts over a period of 12 months at any dwelling or occupied premises as the case may be, unless determined otherwise by the Department of Environment and Conservation.</p> <p>(b) Blast Overpressure</p> <p>The lease holder must ensure that the blast overpressure noise level generated by any blasting within the lease area does not exceed 120 dB (linear) and does not exceed 115 dB (linear) in more than 5% of the total number of blasts over a period of 12 months, at any dwelling or occupied premises, as the case may be, unless determined otherwise by the Department of Environment and Conservation.</p>	Not Triggered	No above ground blasting has been undertaken during the audit period.	
<b>12. Safety</b>				
	Operations must be carried out in a manner that ensures the safety of persons or stock in the vicinity of the operations. All drill holes shafts and excavations must be appropriately protected, to the satisfaction of the Director-General, to ensure that access to them by persons and stock is restricted. Abandoned shafts and excavations opened up or used by the lease holder must be filled in or otherwise rendered safe to a standard acceptable to the Director-General.	N/A	This is not a safety audit.	
<b>13. Rehabilitation</b>				
	<p>(a) Land disturbed must be rehabilitated to a stable and permanent form suitable for a subsequent land use acceptable to the Director-General and in accordance with the Mining Operations Plan so that:-</p> <ul style="list-style-type: none"> <li>• there is no adverse environmental effect outside the disturbed area and that the land is properly drained and protected from soil erosion.</li> <li>• the state of the land is compatible with the surrounding land and land use requirements.</li> <li>• the landforms, soils, hydrology and flora require no greater maintenance than that in the surrounding land.</li> <li>• in cases where revegetation is required and native vegetation has been removed or damaged, the original species must be re- established with close reference to the flora survey included in the Mining Operations Plan. If the original vegetation was not native, any re-established vegetation must be appropriate to the area and at an acceptable density.</li> <li>• the land does not pose a threat to public safety.</li> </ul> <p>(b) Any topsoil that is removed must be stored and maintained in a manner acceptable to the Director-General.</p>	Not Triggered	No areas available for rehabilitation. Minimal disturbance required during the audit period.	
14	The lease holder must comply with any direction given by the Director-General regarding the stabilisation and revegetation of any mine residues, tailings or overburden dumps situated on the lease area.	Not Triggered	Based on information provided to SLR this has not been triggered. There are no tailings or overburden areas.	
<b>15. Exploratory Drilling</b>				
15	<p>(1) At least twenty eight days prior to commencement of drilling operations the lease holder must notify the relevant Department of Natural Resources regional hydrogeologist of the intention to drill exploratory drill holes together with information on the location of the proposed holes.</p> <p>(2) If the lease holder drills exploratory drill holes he must satisfy the Director- General that:-</p> <p>(a) all cored holes are accurately surveyed and permanently marked in accordance with Departmental guidelines so that their location can be easily established;</p> <p>b) all holes cored or otherwise are sealed to prevent the collapse of the surrounding surface;</p> <p>(c) all drill holes are permanently sealed with cement plugs to prevent surface discharge of groundwater's;</p> <p>(d) if any drill hole meets natural or noxious gases it is plugged or sealed to prevent their escape;</p> <p>(e) if any drill hole meets an artesian or sub-artesian flow it is effectively sealed to prevent contamination of aquifers.</p> <p>(f) once any drill hole ceases to be used the hole must be sealed in accordance with Departmental guidelines. Alternatively, the hole must be sealed as instructed by the Director-General.</p> <p>(g) once any drill hole ceases to be used the land and its immediate vicinity is left in a clean, tidy and stable condition.</p>	Not Triggered	Based on discussions with Environment and Community Co-ordinator there has been no exploration for several years. Nothing mentioned in the Annual Reviews.	
<b>16. Prevention of Soil Erosion and Pollution</b>				
	Operations must be carried out in a manner that does not cause or aggravate air pollution, water pollution (including sedimentation) or soil contamination or erosion, unless otherwise authorised by a relevant approval, and in accordance with an accepted Mining Operations Plan. For the purpose of this condition, water shall be taken to include any watercourse, waterbody or groundwater's. The lease holder must observe and perform any instructions given by the Director-General in this regard.	Compliant	The field inspection around the pit top and other areas did not identify any significant areas of erosion.	
<b>17. Transmission lines, Communication lines and Pipelines</b>				
	Operations must not interfere with or impair the stability or efficiency of any transmission line, communication line, pipeline or any other utility on the lease area without the prior written approval of the Director-General and subject to any conditions he may stipulate.	Not Triggered	Based on information provided to SLR this has not been triggered.	
<b>18. Fences, Gates</b>				

	(a) Activities on the lease must not interfere with or damage fences without the prior written approval of the owner thereof or the Minister and subject to any conditions the Minister may stipulate. (b) Gates within the lease area must be closed or left open in accordance with the requirements of the landholder.	Not Triggered	Based on information provided to SLR this has not been triggered.	
<b>19. Roads and Tracks</b>				
	a) Operations must not affect any road unless in accordance with an accepted Mining Operations Plan or with the prior written approval of the Director-General and subject to any conditions he may stipulate. (b) The lease holder must pay to the designated authority in control of the road (generally the local council or the Roads and Traffic Authority) the cost incurred in fixing any damage to roads caused by operations carried out under the lease, less any amount paid or payable from the Mine Subsidence Compensation Fund.	Not Triggered	Based on information provided to SLR this has not been triggered.	
20	Access tracks must be kept to a minimum and be positioned so that they do not cause any unnecessary damage to the land. Temporary access tracks must be ripped, topsoiled and revegetated as soon as possible after they are no longer required for mining operations. The design and construction of access tracks must be in accordance with specifications fixed by the Department of Natural Resources.	Compliant	Minimal tracks. Only around pit top and vent shaft area.	
<b>21. Trees and Timber</b>				
	The lease holder must not fell trees, strip bark or cut timber on the lease without the consent of the landholder who is entitled to the use of the timber, or if such a landholder refuses consent or attaches unreasonable conditions to the consent, without the approval of a warden.  The lease holder must not cut, destroy, ringbark or remove any timber or other vegetative cover on the lease area except such as directly obstructs or prevents the carrying on of operations. Any clearing not authorised under the Mining Act 1992 must comply with the provisions of the Native Vegetation Act 2003.  (c) The lease holder must obtain all necessary approvals or licences before using timber from any Crown land within the lease area.	Not Triggered	Based on information provided to SLR this has not been triggered.	
<b>23. Resource Recovery</b>				
	(a) Notwithstanding any description of mining methods and their sequence or of proposed resource recovery contained within the Mining Operations Plan, if at any time the Director-General is of the opinion that minerals which the lease entitles the lease holder to mine and which are economically recoverable at the time are not being recovered from the lease area, or that any such minerals which are being recovered are not being recovered to the extent which should be economically possible or (which for environmental reasons are necessary to be recovered, he may give notice in writing to the lease holder requiring the holder to recover such minerals. (b) The notice shall specify the minerals to be recovered and the extent to which they are to be recovered, or the objectives in regard to resource recovery, but shall not specify the processes the lease holder shall use to achieve the specified recovery. (c) The lease holder must, when requested by the Director-General, provide such information as the Director-General may specify about the recovery of the mineral resources of the lease area. (d) The Director-General shall issue no such notice unless the matter has firstly been thoroughly discussed with and a report to the Director-General has incorporated the views of the lease holder. (e) The lease holder may object to the requirements of any notice issued under this condition and on receipt of such an objection the Minister shall refer it to a Warden for inquiry and report under Section 334 of the Mining Act, 1992. (f) After considering the Warden's report the Minister shall decide whether to withdraw, modify or maintain the requirements specified in the original notice and shall give the lease holder written notice of the decision. The lease holder must comply with the requirements of this notice	Not Triggered	Based on information provided to SLR this has not been triggered.	
<b>24. Indemnity</b>				
	The lease holder must indemnify and keep indemnified the Crown from and against all actions, suits, claims and demands of whatsoever nature and all costs, charges and expenses which may be brought against the lease holder or which the lease holder may incur in respect of any accident or injury to any person or property which may arise out of the construction, maintenance or working of any workings now existing or to be made by the lease holder within the lease area or in connection with any of the operations notwithstanding that all other conditions of this lease shall in all respects have been observed by the lease holder or that any such accident or injury shall arise from any act or thing which the lease holder may be licensed or compelled to do.	Note		
<b>25. Single Security (extended)</b>				
	(a) The single security given and maintained with the Minister by the lease holder for the purpose of ensuring the fulfilment by the lease holder of obligations under Mineral Lease 1051 (Act 1906), Mineral Lease 1052 (Act 1906), Mineral Lease 1308 (Act 1906), Mining Purposes Lease 211 (Act 1906), Mining Purposes Lease 1349 (Act 1906), Mining Purposes Lease 1389 (Act 1906), Mining Purposes Lease 1400 (Act 1906), Consolidated Coal Lease 706 (Act 1973) and Mining Purposes Lease 337 (Act 1973) is extended to apply to this lease. (b) If the lease holder fails to fulfil any one or more of the obligations under this lease, then the security held may be applied at the discretion of the Minister towards the cost of fulfilling such obligations. For the purpose of this clause the lease holder shall be deemed to have failed to fulfil the obligations of the lease if the lease holder fails to comply with any condition or provision hereof, any provision of the Act or regulations made thereunder or any condition or direction imposed or given pursuant to a condition or provision hereof or of any provision of the Act or regulations made thereunder.	Compliant	Security deposit provided to SLR for this audit. Dated August 2018 with RCE value of \$3,109,607. Evidence of approval letter from Resources Regulator dated 19 October 2018.	
<b>28. Suspension of Mining Operations</b>				
	The holder of a consolidated mining lease may not suspend mining operations in the mining area other than in accordance with the consent of the Minister.	Note		
<b>29. Special Conditions - Road Transport</b>				
	Unless with the consent of the Minister first had and obtained and subject to such conditions as he may stipulate, the leaseholder shall not transport any coal, won from or conveyed through the subject area, by public road otherwise than in accordance with the document entitled 'Chain Valley Colliery, Road Transport Protocol' prepared by Planning NSW and dated 25 February 2003.	Note		

# APPENDIX C

## Audit Certification Form

Development Name	Chain Valley Colliery
Development Consent No.	SSD 5465
Description of Development	Underground Coal Mine
Development Address	Off Construction Road, Vales Point NSW 2259
Operator	Delta Coal
Operator Address	Off Construction Road, Vales Point NSW 2259
Title of Audit	Chain Valley Colliery 2019 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> <p><i>The Audit has been undertaken in accordance with relevant approval condition(s) and in accordance with the Auditing standard AS/NZS ISO 19011:2014 and Post Approval Guidelines – Independent Audits</i></p> <p><i>The findings of the Audit are reported truthfully, accurately and completely;</i></p> <p><i>I have exercised due diligence and professional judgement in conducting the Audit;</i></p> <p><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></p> <p><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></p> <p><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></p> <p><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></p> <p><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></p> <p>Note.</p> <p><i>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>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	Chris Jones
Address	10 Kings Road, New Lambton NSW 2305, Australia
Email Address	cjones@slrconsulting.com
Auditor Certification (if relevant)	Principal Environmental Auditor
Date:	24 June 2019

# APPENDIX D

Endorsement of SLR



Chris Armit  
Environment and Community  
Lake Coal  
PO Box 7115  
MANNERING PARK NSW 2259

Contact: Leah Cook  
Phone: 02 65753403  
Email: [leah.cook@planning.nsw.gov.au](mailto:leah.cook@planning.nsw.gov.au)  
[compliance@planning.nsw.gov.au](mailto:compliance@planning.nsw.gov.au)

**Chain Valley Colliery and Mannering Colliery  
2019 Independent Environmental Audit Scope and Team Endorsement**

Dear Mr Armit,

Thank you for providing a copy of SLR's Independent Environmental Audit (IEA) proposal for Chain Valley and Mannering Collieries, for endorsement of the team in accordance with SSD 5465, as modified and PA 06\_0311, as modified.

The Department has reviewed the information provided and endorses the scope of the IEA and proposed audit team with the following personnel:

- Chris Jones – Lead Auditor
- Tracey Ball – Senior Assistant Auditor
- Martin Davenport - Noise specialist

The Department has also requested that the audit team includes an independent subsidence specialist (endorsement pending) and their audit findings should be incorporated into the SLR report.

The Department expects that the audit will be conducted in accordance with the Independent Audit Guideline, October 2015. A copy of this guideline is available at:

<http://www.planning.nsw.gov.au/~media/Files/DPE/Guidelines/independent-audit-guideline-2015-10-23.ashx>

Please ensure that your audit team consults with relevant agencies to ascertain any aspects that the agencies wish the audit to address. Evidence of agency consultation and clear referencing to audit findings in relation to any agency request is to be provided in the audit report.

Please note that the Chain Valley approval has a tighter timeframe for delivery of the audit report and response to audit recommendations (RAR) (6weeks for the date of inspection, unless otherwise agreed). Please ensure that the RAR includes responses to all non-compliances and auditor recommendations with clear timeframes (dd-mm-yyyy) for implementation of the proposed corrective action.

Please contact me if you require any further clarification.

Yours sincerely,

Leah Cook  
**Team Leader - Compliance**  
*As Nominee of the Secretary*

Hi Chris

After due consideration, I, as nominee of the Secretary, approve an extension of time for the submission of the Chain valley IEA to 25th June 2019.

Any further concerns please contact the compliance team.

Regards,

**Leah Cook**

Team Leader - Compliance  
Department of Planning & Environment  
Suite 14, Level 1, 1 Civic Av  
PO Box 3145  
Singleton NSW 2330  
<http://www.planning.nsw.gov.au>  
E: [leah.cook@planning.nsw.gov.au](mailto:leah.cook@planning.nsw.gov.au)  
[compliance@planning.nsw.gov.au](mailto:compliance@planning.nsw.gov.au)  
P: 02 6575 3403 M: 0429 191 164



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**From:** Chris Armit <[CArmit@deltacoal.com.au](mailto:CArmit@deltacoal.com.au)>

**Sent:** Wednesday, 3 April 2019 3:54 PM

**To:** Leah Cook <[Leah.Cook@planning.nsw.gov.au](mailto:Leah.Cook@planning.nsw.gov.au)>; DPE PSVC Compliance Mailbox <[compliance@planning.nsw.gov.au](mailto:compliance@planning.nsw.gov.au)>; Joel Curran <[Joel.Curran@planning.nsw.gov.au](mailto:Joel.Curran@planning.nsw.gov.au)>

**Cc:** Christopher Jones <[cjones@slrconsulting.com](mailto:cjones@slrconsulting.com)>; Tracey Ball <[tball@slrconsulting.com](mailto:tball@slrconsulting.com)>

**Subject:** CVC IEA Reporting - Time Extension Request

Dear Leah,

We have commenced our CVC and Mannering IEA's this Tuesday, 3<sup>rd</sup> April 2019. I have been requested by Chris Jones (SLR Consulting) to seek from the secretary or secretary's nominee an extension of time required to submit a copy of the Chain Valley Independent Environmental Audit report to the proposed date of the 31st May 2019.

Currently, the 6 week due date would be 14<sup>th</sup> May, this is a proposed extension of approximately 2.5 weeks to account for personnel annual leave over the Easter/School holiday period. See below applicable CVC Mod 2 – IEA reporting condition.

10. Within 6 weeks of the completion of this audit, or as otherwise agreed by the **Secretary**, submit a copy of the audit report to the **Secretary**, together with its response to any contained in the audit report.

Chris Jones does not seek an extension for the Mannering IEA as it already has a 12 week completion period from audit start which gives an achievable report submission date of 25<sup>th</sup> June 2019 .

Regards,  
Chris

# APPENDIX E

Review of Subsidence (SCT 2019)

6 June 2019

Christopher Jones  
Associate – Env Man Permitting  
& Compliance  
SLR Consulting Australia Pty Ltd  
10 Kings Rd  
NEW LAMBTON NSW 2305

**HEAD OFFICE**  
Cnr Kembla & Beach Streets Wollongong NSW 2500 Australia  
PO Box 824 Wollongong NSW 2520 Australia  
Telephone +61 2 4222 2777 Fax: +61 2 4226 4884  
Email: sctnsw@sct.gs

**BRISBANE OFFICE**  
Telephone/Fax: 0428 318 009 (international +61 428 318 009)  
Email: p.cartwright@sct.gs

**BENDIGO OFFICE**  
Telephone: +61 3 5443 5941  
Email: s.macgregor@sct.gs

**CHA4988**

Dear Chris

### **Independent Audit of Subsidence Related Issues for Chain Valley Colliery 2016-2019**

Chain Valley Colliery (CVC) is an underground coal mine located at the southern end of Lake Macquarie approximately 40km south of Newcastle. CVC is required under Section 9 of Schedule 6 of Modification 2 of Development Consent SSD-5465 to undertake an Independent Environment Audit (IEA) by the end of February 2016 and every 3 years thereafter. CVC commissioned SLR Consulting Australia Pty Ltd (SLR) as the lead auditor for the 2019 IEA with SCT Operations Pty Ltd (SCT) providing an independent specialist review of subsidence related compliance as requested by the Department of Planning and Environment (DPE). This report presents the outcomes of our review of subsidence related compliance at CVC for the period 1 January 2016 to 5 April 2019 during which mining took place in Fassifern Seam miniwall panels MW10-12, MW5A, MW CVB1, N1 and S1.

Our review indicates that CVC is generally compliant or likely to be generally compliant with the development consent conditions and their commitments in relation to subsidence. There are multiple areas for improvement in monitoring systems and analysis and reporting of subsidence results. The monitoring systems in place for benthic and seagrass communities appear unlikely to be able to discriminate impacts to a level that would ensure subsidence related impacts are minor or negligible as required in the development consent conditions.

#### **1. SCOPE OF WORKS**

The scope of works as outlined in Jones (2019) requires the subsidence specialist to:

- Attend a one day site visit scheduled for 2 April 2019 to complete site inspections and review available information on site.

- Assess compliance for all subsidence related conditions in the Development Consent (SSD-5465), Consolidated Coal Leases and Statement of Commitments.

The outcomes of the one day site visit are presented in Section 3.

The following documents were reviewed as a basis to understand commitments made by LakeCoal Pty Ltd (LakeCoal) to manage subsidence impacts, regulatory requirements for management of subsidence impacts as conditions of approval and information provided by LakeCoal to confirm compliance or otherwise with these approval conditions.

### **Project Applications**

1. EMM 2015 Chain Valley Colliery – Modifications 2: Statement of Environmental Effects | Section 96 Modification to SSD-5465 prepared for LakeCoal Pty Limited by EMM dated 29 June 2015.
2. Chain Valley Colliery – Extraction Plan MW7 to MW12 prepared by Lake Coal dated 28 March 2013.
3. Chain Valley Colliery SMP Application - MW7 to MW12: Application for Subsidence Management Plan Approval – Written Report. Letter dated 3 March 2014.
4. Chain Valley Colliery Extraction Plan Miniwalls CVB1 to CVB3 prepared by Lake Coal ENV 00015 Rev 4 dated 28 June 2017.
5. Chain Valley Colliery Subsidence Monitoring Program Miniwalls CVB1 to CVB3 prepared by Lake Coal ENV 00014 dated 9 June 2017.
6. Chain Valley Colliery Extraction Plan Miniwalls S1 to N1 Prepared by Lake Coal Rev 1 dated 3 May 2018.

### **Project Approvals**

7. Mod 2 Consolidated Consent SSD-5465 December 2015 which includes:
  - a. Schedule 4: Environmental Conditions – Underground Mining Subsidence.
  - b. Appendix 9: Statement of Commitments in relation to Subsidence (Pg38) and Marine ecology (Pg39).
8. Chain Valley Colliery Extension Project (SSD 5465): Variation to Extraction Plan MW7-12 to include MW5A. Letter of Approval from DPE dated 13 February 2017.
9. Chain Valley Colliery Extension Project (SSD 5465): Extraction Plan Northern Mining Area Approval of Miniwalls N1 and S1. Letter of Approval from DPE dated 24 May 2018.

10. Chain Valley Colliery Extension Project (SSD 5465) Approval of First Workings for Northern Mining Area. Letter of Approval from DPE dated 20 July 2018.

### **Compliance Monitoring**

11. Chain Valley Colliery – Annual Review 2016: 1 January 2016 – 31 December 2016. Document reference RPT 00024 dated 28 April 2017.
12. Chain Valley Colliery – Annual Review 2017: 1 January 2017 – 31 December 2018. Document reference RPT 00041.
13. Chain Valley Colliery – Annual Review 2018: 1 January 2018 – 31 December 2018. Document reference RPT 00059.
14. DgS 2017 Subsidence Data Review for Proposed Miniwalls CVB1 to CVB3 at Chain Valley Colliery. A letter report prepared by Ditton Geotechnical Services Pty Ltd (DgS) addressed to Adrian Moodie and date 15 November 2017.

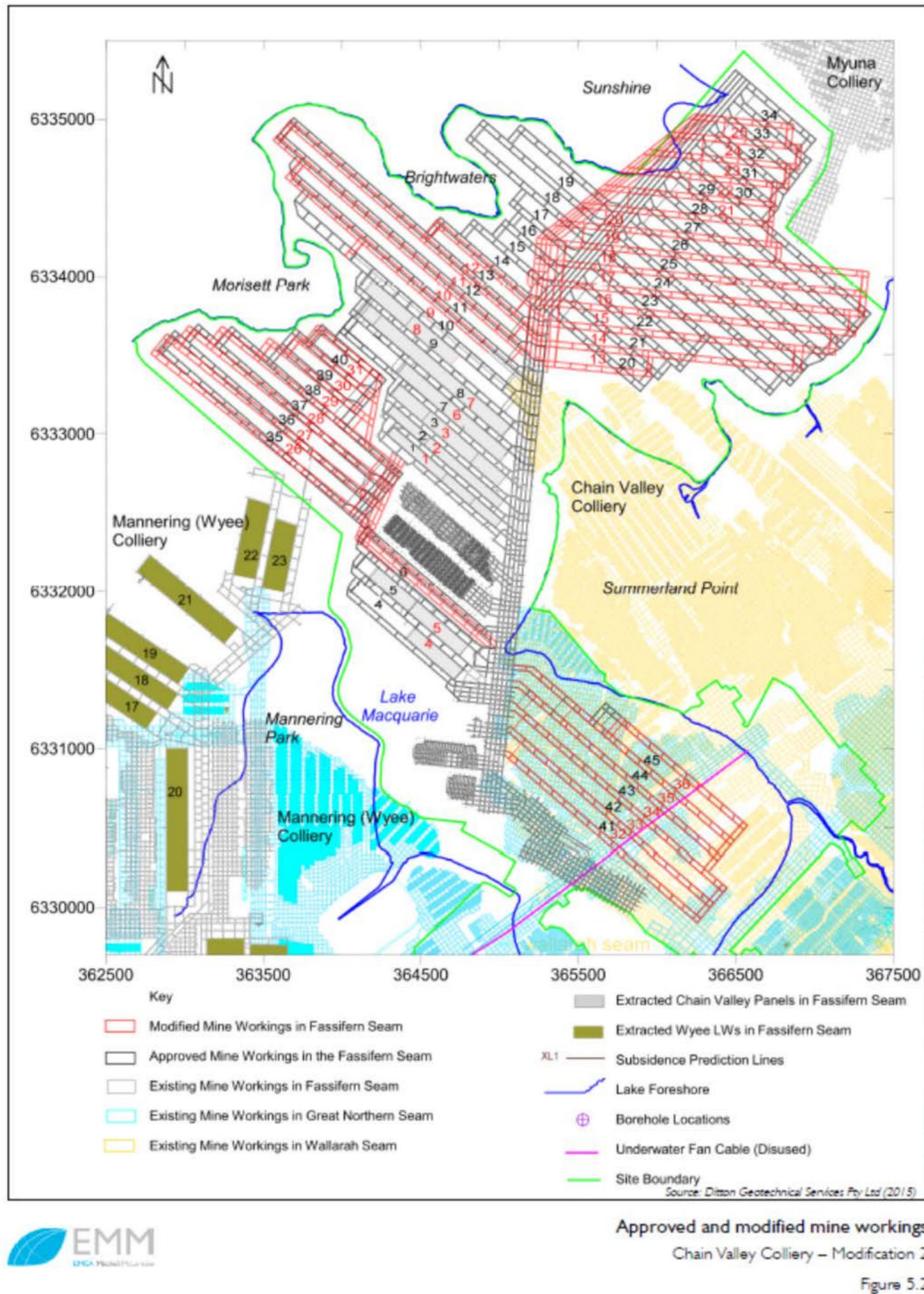
## **2. BACKGROUND**

This section brings together information available from a range of sources reviewed during the IEA as context for the audit.

CVC has been operating as an underground mine since 1962. The colliery has extracted coal from the Wallarah Seam, the Great Northern Seam and more recently the Fassifern Seam. Figure 1 reproduced from EMM (2015) shows the workings in the Wallarah and Great Northern Seams and Fassifern Seam to 2015 and the additional workings in the Fassifern Seam applied for under Modification 2 (MOD2) to SSD 5465.

All three coal seams dip gently to the southeast. The overburden depth to the uppermost Wallarah Seam ranges from approximately 80m in the north (Borehole EBU11) to 160m in the southeast. The Wallarah Seam is nominally 2.6m thick. The interburden to the Great Northern Seam comprises mainly conglomerate strata ranging in thickness from 10m in the north (EBU11) to 30m in the south. The Great Northern Seam and Fassifern Seam mining sections are nominally 3m thick although the Fassifern Seam is somewhat thicker. In places, the Fassifern Seam is separated from the Great Northern Seam by approximately 80m of interburden comprising predominantly conglomerate strata but this reduces to 30m in the south under Chain Valley Bay.

CVC mine the Wallarah Seam using bord and pillar mining over an area of approximately 12km<sup>2</sup> located mainly (80%) under the Gwandalan / Summerland Point peninsular and (20%) under Lake Macquarie (Chain Valley Bay). Full extraction is limited to the land areas. First workings and partial extraction mining extends below Summerland Point, the lakeshore and Chain Valley Bay. Mining in the Wallarah Seam ceased in 1997.



**Figure 1: Plan showing proposed mining layout (from MOD2 EA)**

The Great Northern Seam was mined over an area of approximately 4.5km<sup>2</sup>, half below Chain Valley Bay and half below the southern part of the Gwandalan / Summerland Point peninsular. There are areas of full extraction including under both the lake and the peninsular and a similar sized area of partial extraction. There are large areas of small standing pillars along the northern shore of Chain Valley Bay south of Summerland Point.

The Fassifern Seam has been mined since 2006 as a series of narrow panels, initially pillar extraction panels with place changing and then from the latter half of 2011 as miniwall panels. All the panels are located under Lake Macquarie in areas at least 26.5° angle of draw from the lakeshore.

Since 1979, CVC was operating under existing use right under the Mining Act 1992 until an Environmental Assessment process as required by a change in legislation was undertaken between 2009 and 2012 culminating in project approval MP 10\_0161 on 23 January 2012. A modification was approved on 30 August 2012. In December 2013, a development consent (SSD 5465) was received for the Chain Valley Extension Project under Section 89E of the Environmental Planning and Assessment Act 1979 for CVC to continue mining via miniwall methods to the north of a previously approved boundary. This consent was modified as Modification 1 in November 2014 and MOD2 in December 2015. The IEA is being undertaken to comply with Section 9 of Schedule 6 of MOD2 of Development Consent SSD-5465.

In 2006, CVC was operated by Lake Coal Pty Ltd on behalf of the Wallarah Coal Joint Venture with Lake Coal holding an 80% shareholding in the joint venture. In March 2011 the remaining 20% was acquired by a consortium of shareholders through the entity Fassi Coal Pty Ltd. On 3 October 2018, Lake Coal Pty Ltd and Fassi Coal Pty Ltd were placed into voluntary administration and subsequently purchased on 1 April 2019 by Great Southern Energy trading as Delta Coal.

### **3. SITE INSPECTION**

A site inspection was conducted by the author on 2 April 2018 as part of the IEA team to meet with CVC Environment and Community Coordinator, Mr Chris Armit, and to gain an understanding of:

- the history of mining at CVC
- the approvals under which the colliery is operating
- the monitoring data available
- the processes for reporting environmental impacts and
- conduct a surface inspection of the lakeshore at Summerland Point and Trinity Point.

The site visit was successful and informative. It was difficult to gain access to much of the foreshore areas, but the site inspection provided context for the audit.

Table 1 summarises the panels that were mined during each calendar year during the audit period from 1 January 2016 to 5 April 2019.

**Table 1: Panels mined during audit period**

<b>Year</b>	<b>Miniwalls</b>	<b>Extraction Plan</b>
2016	MW10, 11 & 12	Miniwalls 7-12 Extraction Plan (EP1)
2017	MW12	EP1
	MW5A	EP1 Miniwall 5A Modification (EP2)
	MWCVB1	Miniwalls CVB1-3 Extraction Plan (EP3)
2018	N1/S1	Miniwalls N1/S1 Extraction Plan (EP4)
2019	N1/S1	Miniwalls N1/S1 Extraction Plan (EP4)

The primary source of information of environmental impacts available for the audit were the three Annual Review (AR) reports for 2016, 2017 and 2018. No information was reviewed for the period 1 January 2019 to 5 April 2019.

#### **4. OUTCOMES OF REVIEW**

The issues identified in the consent conditions and repeated in the EA and various EPs and Subsidence Management Plans (SMPs) as requiring management of potential subsidence impacts include:

- Trinity Point Marina Development.
- Benthic communities on the floor of Lake Macquarie.
- Seagrass communities along the shore of Lake Macquarie.
- A requirement for long-term stable, non-subsiding first workings below any features requiring negligible environmental consequences.
- Second workings to be carried out in accordance with an approved EP.
- Other unspecified built features.
- Other unspecified threatened species or endangered populations.
- Negligible additional risk to public safety.

Given that subsidence from the mining undertaken during the IEA review period has been entirely under Lake Macquarie only the first five items are considered further in this audit review. The fifth item relating to second workings being carried out in accordance with an approved EP is the subject of this audit more generally.

Our review of the AR reports indicates that the monitoring to manage these features involves:

- monitoring of vertical subsidence along the lakeshore at selected sites
- annual bathymetric monitoring of the lake floor elevation
- surveys of benthic communities at multiple sites (the number varies) around the periphery of mining areas

- surveys of seagrass communities.

The following conclusions are drawn from the information presented in the AR reports and DgS (2017).

#### **4.1 Trinity Point Marina Development**

Lakeshore subsidence monitoring indicates that there was approximately 10mm of subsidence at Trinity Point during the mining of adjacent miniwalls. Such low levels of subsidence are not expected to be perceptible or to cause any significant impact to the built features of the Trinity Bay Marina. On this basis, the relevant consent condition is considered to have been met.

Improvements related to the presentation of survey data for the Trinity Point Marina Development and the survey technique have been identified during the audit and it is recommended that these improvements be included in future ARs.

The data from Trinity Point Marina Development is not presented in the 2016 AR despite being referenced as Table 3.7 (a table which appears in the report but presents Greenhouse Gas Emission data).

The survey data is presented in the 2017 AR but in tabular form. The location of the monitoring points is difficult to relate to the location on the ground and changes are difficult to discern from the tabular data. Graphical presentation of the data and a figure showing where the ground movements have occurred and during which period of mining would assist with drawing meaning from the results and managing the potential for impacts.

There was no surveying data presented in the 2018 AR as there was no mining nearby.

A recommendation for the presentation of all future survey data would be to include a thorough and comprehensive analysis of the subsidence monitoring undertaken and independently reported so that the data can be meaningfully interpreted and comprehended by anyone with an interest in the outcomes.

The data presented in the ARs is for vertical level only. Subsidence monitoring based on levelling alone as a measure of ground movements is at the very basic end of contemporary subsidence monitoring practice. Three dimensional surveying with total station survey technology and high quality GNSS (i.e. GPS) control is readily available and widely used for subsidence monitoring. The benefits in terms of understanding the nature and extent of ground movements are significant. Horizontal movements are typically greater than the vertical movements in areas beyond the immediate footprint of mining. To measure and report only vertical subsidence movements is to miss most of the ground movements.

For sensitive high value features such as the marina, real-time continuous GNSS monitoring is available at relatively low cost and can be used to provide high confidence subsidence monitoring in three dimensions. A significant upgrade of subsidence monitoring systems and reporting protocols at CVC is recommended.

## **4.2 Benthic Communities**

The development consent conditions for benthic communities require no more than minor environmental consequences, including minor changes to species composition and/or distribution. The ARs discuss the results of surveys being undertaken six monthly and annually during the audit period. There is no evidence of a 2019 survey yet, but it anticipated that this survey has been undertaken and will be included in the 2019 AR. SCT does not have expertise in benthic communities, but specialist survey reports included in the AR are interpreted as indicating mining subsidence has not had any significant impacts on the benthic communities. On this basis, the relevant consent condition is considered to have been met.

There are two issues that have been identified in the audit that are not critical but do suggest that the benthic community monitoring may not be able to deliver the outcomes anticipated in the development consent conditions.

The benthic communities appear to be being surveyed in areas outside the area where subsidence is greatest so the association between the survey data gathered and impacts from mining subsidence appears tenuous. These communities are noted in the AR as being insensitive to water depth so there may be no need to consider the effects of subsidence increasing water depth. If that is the case, it is difficult to understand why there is a need to undertake the monitoring at all.

Second, the surveying being undertaken appears to be of a nature that would make a definitive assessment of whether impacts were of “minor environmental consequences” somewhat challenging. The Benthic Communities Management Plan presents a statistical approach to quantifying the results that is to be conducted every three years. It is unclear whether this triennial statistical analysis has been completed. No results were found in the three ARs relating to the audit period. Even with statistical analysis, it is unclear how any quantitative changes that were able to be determined could be meaningfully linked to subsidence, especially give the spatial difference between the sampling and the areas of subsidence. The monitoring is interesting and may be useful in a broader sense, but it does not appear to be suitable as an auditable consent condition.

### **4.3 Seagrass Communities**

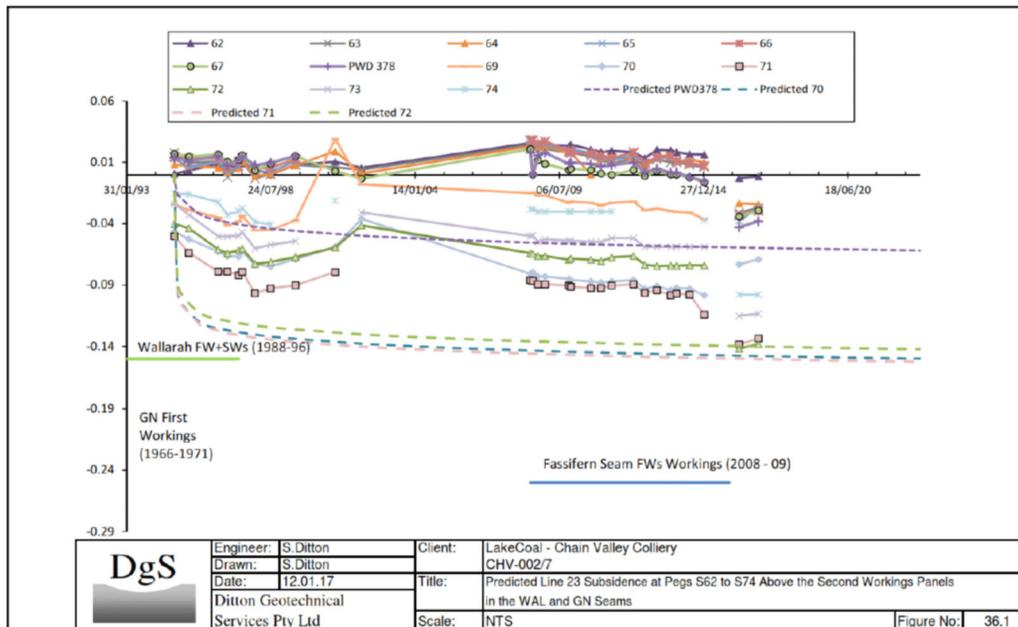
The approach that CVC has adopted to protect the seagrass communities is based on a Seagrass Protection Barrier (SPB) equivalent to 26.5° angle of draw from the edge of the seagrass beds or 35° angle of draw from the lakeshore whichever is greater so that there is no secondary extraction directly below the seagrass beds or even close to them. The survey data presented indicates that there may have been some movement on the northern lakeshore of Chain Valley Bay due to earlier mining, but the data does not appear to have been analysed with the rigour required to confirm or otherwise any impacts to the seagrass communities. On balance, the relevant consent condition is considered likely to have been met, but further work is recommended to confirm this to the level required in the consent conditions.

Where only one seam has been mined, the SPB approach is expected to limit subsidence to less than about 20mm at the edge of the seagrass beds and less than about 200mm at the edge of extraction. The bathymetric survey data from Miniwalls 7-12 supports this expectation.

In areas where more than one seam has been mined, a protection barrier based on angle of draw is likely to be less effective. The northern shore of Chain Valley Bay is an area where there is pre-existing mining in two seams below the lakeshore. Bathymetric surveying shows that the mining of Miniwall CVB1 caused subsidence of 300-350mm at 110m from the panel edge. This same surveying indicates that subsidence has reduced to low levels at 250m from the panel edge which is still well away from the edge of the seagrass beds and therefore there is unlikely to have been any impacts from mining Miniwall CVB1 at the edge of the seagrass beds.

The lakeshore subsidence monitoring on Line 23 indicates that there has been approximately 140mm of subsidence at Pegs 70 and 71 (Table 3.19) and Pegs 71 and 72 (Figure 3.18) since the line was installed in 1994. The apparent additional 20-40mm of subsidence during the period of mining Miniwall CVB1 is plotted in Figure 2 (reproduced from the 2017 AR and 2018 AR). The same figure is shown in both reports without any update during 2018.

The subsidence observed is in an area where the Great Northern Seam and Wallarah Seam were mined in a way that would only be expected to cause low level subsidence. An assumption is made in the 2017 AR that there has been some ongoing movement associated with this previous mining. This assumption may be true, but the IEA review could not find evidence in the data presented to confirm if there is an ongoing trend through 2018 (and 2019) or if the offset observed during the period of monitoring is due to a shift in the survey control or other similar effect. Such information would be necessary to inform an assessment of whether there had been any significant impact to the seagrass beds in the area.



**Figure 2: Line 23 subsidence monitoring (from 2017 & 2018 AERs)**

The explanation provided that the subsidence is not due to mining Miniwall CVB1 and relates to earlier mining may be reasonable but similarly there may be other explanations. The mismatch between the data for Pegs 70, 71 and 72 presented in the table and the figure and the general lack of focus on the detail of the data do not build confidence in the information presented or in the ability of the monitoring to identify if the seagrass communities have been protected as required. A thorough review of the survey data and the generation of a subsidence report is recommended as is ongoing monitoring of this lakeshore.

It is not clear that the development consent conditions relating to the seagrass communities exempt CVC from the impacts due to earlier mining and the related commitments for offsets and other management controls as has been assumed in the 2017 and 2018 ARs.

#### **4.4 Long-Term Stable First Workings**

The information presented in the reports reviewed does not allow the long-term stability of the first workings to be assessed with confidence because the bathymetric survey method used does not have a high enough resolution to be unequivocal and lakeshore survey monitoring data is not convincing. Nevertheless, long-term stability is considered likely given the mining geometries involved. The data presented in Figure 2 suggests the possibility of some lack of long-term stability in the overlying seams. A close and thorough examination of this survey data is recommended to confirm whether this is the case or a result of survey related issues.

The relevant consent condition is considered likely to have been met without there being clear evidence to support this.

#### **4.5 Second workings carried out in accordance with an approved EP**

The IEA review indicates that all the second workings undertaken during the review period were carried out under approved EPs. The review further indicates that the subsidence related components have been carried out in general accordance with the processes described in the EA and EP.

The adequacy of the approaches described in the approved EA and EP to resolve compliance or otherwise of the impacts on benthic communities and seagrass communities is considered questionable but the challenges of finding better methodologies is recognised.

Improvements are recommended in relation to ground surveying along the lakeshore. The survey data that has been collected does not appear to have been thoroughly analysed. Thorough analysis may confirm that there is not any ongoing subsidence on the northern shore of Chain Valley Bay. If there is ongoing subsidence, this should be being monitored on a regular and ongoing basis. The use of a three-dimensional, continuous reading GNSS monitoring station with real-time monitoring should be considered.

The annual bathymetric subsidence monitoring appears to have been too infrequent to monitor subsidence for the management of panel design that was outlined in the Miniwall 7-12 EA. There does not appear to have been a design response when changes in subsidence were observed. The estimates of maximum subsidence have been increased and then further exceeded, but there has been no change in design. It is unclear if the commitment to six monthly bathymetry surveys after the subsidence observed in the 2017 AR has been adhered to.

Table 4 of the 2013 Miniwalls 7-12 EA indicates maximum subsidence of 440mm. The EA explains the subsidence monitoring plan as including:

*In addition, regular and routine monitoring of the foreshore, lake bed, seagrass communities and benthic communities provide a means to verify and validate that predicted subsidence levels are not being exceeded, that the resultant levels of subsidence are not resulting in excessive impacts beyond those predicted. The mine design can then be adapted and refined as required if exceedances occur or are likely to occur.*

*Annual bathymetric surveys of the lake bed will be used to validate and confirm the predicted vertical subsidence around the miniwall panels. In addition ongoing surveys of benthic and seagrass communities will ensure that the resultant vertical subsidence levels are not resulting in more significant impacts than predicted. Appendix 2 and 3 contain the mines Benthic Community and Seagrass Management Plans.*

The 2015 MOD2 subsidence assessment notes that the May 2015 bathymetric survey showed maximum subsidence of 570mm above Miniwalls 3-6. The MOD2 subsidence assessment updates the maximum subsidence predictions from 0.62m to 0.78m. The earlier 2013 predictions for Miniwalls 7-12 were 0.44m. These were updated to 0.72m. The associated assessments that rely on maximum predicted subsidence are considered in the MOD2 assessment.

Miniwall 12 was completed early in 2017. The 2017 AR reports maximum subsidence of 800-1100mm indicated by the bathymetric survey conducted in October 2017. The reference to subsidence exceeding predictions by approximately 430mm is not clear given that maximum subsidence of 1100mm exceeding predictions by 430mm would imply a prediction of 670mm. Nevertheless, maximum subsidence is significantly (250%) greater than the 440mm maximum subsidence predicted in the 2013 EA and 50% higher than the 720mm maximum subsidence predicted in the 2015 MOD2 assessment for the area above Miniwalls 7-12 (as per Figure 3a in DgS (2017)).

The sequence of significantly higher than predicted subsidence levels does not appear to have caused impacts greater than predicted, notwithstanding the absence of convincing assessment methodologies or that results for 2019 are not available. However, a more conservative approach to assessing future impacts from further mining is recommended to build confidence that the subsidence processes in play are understood and impacts that rely on the subsidence impacts can be suitably assessed prior to mining.

#### **4.6 Other Issues**

A range of other subsidence related compliance issues are presented in the IEA matrix. These are discussed in that matrix.

### **5. RECOMMENDATIONS**

Recommendations from the IEA subsidence review are consolidated in this section.

A more conservative approach to assessing future impacts from further mining is recommended to build confidence that the subsidence processes in play are understood and impacts that rely on the subsidence impacts can be suitably assessed prior to mining.

A significant upgrade of subsidence monitoring systems and reporting protocols at CVC is recommended.

Presentation of all future survey data in ARs would benefit from a thorough and comprehensive analysis of the subsidence monitoring being undertaken by an external consultant so that the data can be meaningfully interpreted and is comprehensible by anyone with an interest in the outcomes.

The use of three dimensional surveying with total station survey and high quality GNSS (GPS) control is recommended. This technology is readily available and widely used for subsidence monitoring in NSW.

For sensitive high value features such as the marina or similar features, real-time continuous GNSS monitoring is available at relatively low cost and can be used to provide high confidence subsidence monitoring in three dimensions.

A review of benthic and seagrass community monitoring systems is recommended to confirm that the monitoring is capable of discriminating minor and negligible impacts as required by the development consent conditions.

A thorough review of the survey data and monitoring approach for Line 23 along the northern lakeshore of Chain Valley Bay is recommended.

If you have any queries or require further clarification of any of these issues, please don't hesitate to contact me directly.

Yours sincerely



Ken Mills  
Principal Geotechnical Engineer

## **References**

DGS 2017 Subsidence Data Review for Proposed Miniwalls CVB1 to CVB3 at Chain Valley Colliery. A letter report prepared by Ditton Geotechnical Services Pty Ltd (DgS) addressed to Adrian Moodie and date 15 November 2017.

EMM 2015 Chain Valley Colliery – Modifications 2: Statement of Environmental Effects | Section 96 Modification to SSD-5465 prepared for LakeCoal Pty Limited by EMM dated 29 June 2015.

Jones C. 2019, email 4 March 2019.

## ASIA PACIFIC OFFICES

### BRISBANE

Level 2, 15 Astor Terrace  
Spring Hill QLD 4000  
Australia  
T: +61 7 3858 4800  
F: +61 7 3858 4801

### MACKAY

21 River Street  
Mackay QLD 4740  
Australia  
T: +61 7 3181 3300

### SYDNEY

2 Lincoln Street  
Lane Cove NSW 2066  
Australia  
T: +61 2 9427 8100  
F: +61 2 9427 8200

### AUCKLAND

68 Beach Road  
Auckland 1010  
New Zealand  
T: +64 27 441 7849

### CANBERRA

GPO 410  
Canberra ACT 2600  
Australia  
T: +61 2 6287 0800  
F: +61 2 9427 8200

### MELBOURNE

Suite 2, 2 Domville Avenue  
Hawthorn VIC 3122  
Australia  
T: +61 3 9249 9400  
F: +61 3 9249 9499

### TOWNSVILLE

Level 1, 514 Sturt Street  
Townsville QLD 4810  
Australia  
T: +61 7 4722 8000  
F: +61 7 4722 8001

### NELSON

6/A Cambridge Street  
Richmond, Nelson 7020  
New Zealand  
T: +64 274 898 628

### DARWIN

5 Foelsche Street  
Darwin NT 0800  
Australia  
T: +61 8 8998 0100  
F: +61 2 9427 8200

### NEWCASTLE

10 Kings Road  
New Lambton NSW 2305  
Australia  
T: +61 2 4037 3200  
F: +61 2 4037 3201

### GOLD COAST

Ground Floor, 194 Varsity Parade  
Varsity Lakes QLD 4227  
Australia  
M: +61 438 763 516

### PERTH

Ground Floor, 503 Murray Street  
Perth WA 6000  
Australia  
T: +61 8 9422 5900  
F: +61 8 9422 5901