



# Report

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<b>Site:</b>	<b>Chain Valley Colliery</b>
<b>Department:</b>	<b>Technical Services</b>
<b>Report Title:</b>	<b>Monthly Environmental Report - January 2018</b>
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<b>Distribution:</b>	<b>Chain Valley Colliery website</b>

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### Introduction

LakeCoal Pty Ltd (LakeCoal) operates the Chain Valley Colliery, an underground coal mine at the southern end of Lake Macquarie.

Chain Valley Colliery operates under the following regulatory instruments;

- A Development Consent, SSD-5465 (as modified) issued under the Environmental Planning and Assessment Act, 1979.
- An Environment Protection Licence (1770) issued under the Protection of the Environment Operations Act, 1997.
- A groundwater bore licence (20BL173107) issued under the Water Act, 1912.

The above development consent/approval and licences require various monitoring and reporting to be undertaken by LakeCoal for Chain Valley Colliery.

This report provides environmental monitoring data from Chain Valley Colliery for the period 1 January 2018 to 31 December 2018.

Details of the Chain Valley Colliery EPL 1770 are provided below.

Chain Valley Colliery Information	
Premises name	Chain Valley Colliery
Address	Construction Road, Chain Valley Bay, NSW, 2259
Licensee	LakeCoal Pty Ltd
EPL #	1770
EPL location	<a href="http://www.epa.nsw.gov.au/prpoeoapp/ViewPOEOLicence.aspx?DOCID=50980&amp;SYSUID=1&amp;LICID=1770">http://www.epa.nsw.gov.au/prpoeoapp/ViewPOEOLicence.aspx?DOCID=50980&amp;SYSUID=1&amp;LICID=1770</a>

The overall purpose of this report is to keep stakeholders informed of the environmental monitoring results at Chain Valley Colliery and maintain a transparent and accountable reporting system.

### Scope

This report presents the results from the various environmental monitoring programs undertaken for Chain Valley Colliery.

Results in this report are typically only a single month of data, which is due to a legislative requirement introduced by the *Protection of the Environment Legislation Amendment Act 2011*, which requires publishing data publically within 14 days. As LakeCoal is required to undertake monitoring on a monthly basis, each report generally cover a single month of environmental monitoring data.

Where applicable, the results of the monitoring programs are compared with the relevant criteria (from the EPL or Development Consent) to determine compliance.

Monitoring results presented include;

- Water – quality
- Water – volume
- Depositional dust
- Operational noise
- Weather data

### Definitions

dB– decibels

dB(A) – noise level measurement units are decibels (dB). The A-weighting scale is used to approximate human perception of noise

g/m<sup>2</sup>/month – grams per square metre per month

kL– kilolitres

L<sub>Aeq</sub>–the average A-weighted noise energy (in dB) for a measurement period

mg/L – milligrams per litre

µg/L – micrograms per litre

µS/cm – microSiemens per centimetre

### References

ALS Group - Monthly Water Monitoring Results January 2018 – (Work Order ES1801411)

ALS Water - Report of Analysis (WN1800142)

Steel River Testing - Dust Deposition Report January 2018 (Report 15185-0)

Development Consent SSD-5465 (as modified)

Environment Protection Licence 1770 (Licence version date: 8 June 2016)

### Monitoring Results

#### Water – Quality

January 2018			
EPL	1770		
Licensee	LakeCoal Pty Ltd		
Premises	Chain Valley Colliery		
Date Sampled	09-Jan-18		
Date Obtained	16-Jan-18		
Date Reported	Refer report date		
Sampling Point	1		
Parameter	Units	Limit	Result
Biochem. Oxygen Demand	mg/L	-	<2
Enterococci	col/100mL	-	460
Faecal Coliforms	CFU/100mL	200	11
pH	pH	6.5-8.5	7.73
Total Sus. Solids	mg/L	50	19

There was no exceedance of water quality criteria during the month.

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### Water – Volume

January 2018	
EPL	1770
Licensee	LakeCoal Pty Ltd
Premises	Chain Valley Colliery
Date Sampled	Daily
Date Reported	Refer report date
Discharge volume limit	12161 kilolitres per day
Sampling Point	1

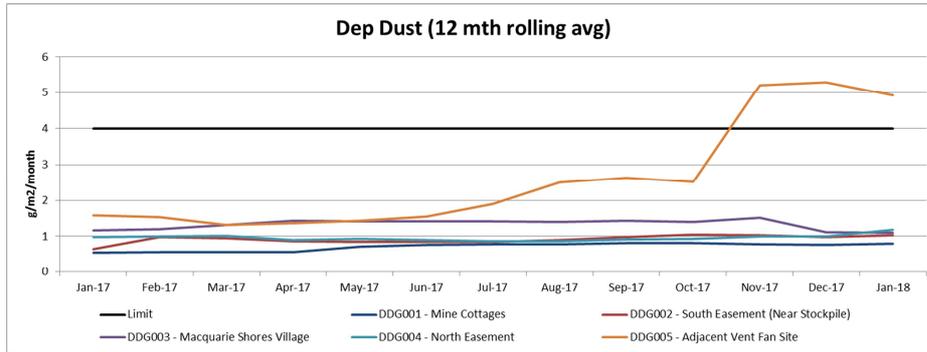
Date (24 hour period)	Unit	Volume
01/12/2017	kL	6654
02/12/2017	kL	6553
03/12/2017	kL	4963
04/12/2017	kL	3065
05/12/2017	kL	3057
06/12/2017	kL	5141
07/12/2017	kL	6276
08/12/2017	kL	6348
09/12/2017	kL	6188
10/12/2017	kL	6413
11/12/2017	kL	6608
12/12/2017	kL	6563
13/12/2017	kL	6391
14/12/2017	kL	5999
15/12/2017	kL	6372
16/12/2017	kL	5722
17/12/2017	kL	6013
18/12/2017	kL	4731
19/12/2017	kL	4555
20/12/2017	kL	5712
21/12/2017	kL	6560
22/12/2017	kL	6282
23/12/2017	kL	6183
24/12/2017	kL	6244
25/12/2017	kL	6928
26/12/2017	kL	6671
27/12/2017	kL	6466
28/12/2017	kL	6432
29/12/2017	kL	6378
30/12/2017	kL	6376
31/12/2017	kL	6291

There were no exceedances of the volumetric limits at the Licenced Discharge Point during the month.

### Depositional Dust

January 2018		
Sampling Date	15/12/2017	to 15/01/2018
Site	Insoluble Matter (g/m2/month)	
DDG001	1.1	
DDG002	1.0	
DDG003	0.8	
DDG004	2.8	
DDG005	1.2	
Notes:		

## CVC Monthly Environmental Report



There were no exceedances of the annual average air quality limits during the reporting period.

### Operational Noise

There was no noise monitoring undertaken during the month.

### Weather Data

A summary of weather data recorded by an adjacent site meteorological monitoring station at the Colliery is presented below for the year to date.

Monthly Weather Data			
<b>2018</b>			
EPL		191	
Licensee	LakeCoal Pty Ltd		
Premises	Manning Colliery		
Location	W1 (on-site weather station)		
Date published:	Refer report date		
Date sampled:	Daily		
Date obtained:	15/02/2018		
Month	Total Rainfall / Month (mm)	Minimum Temperature (oC)	Maximum Temperature (oC)
Jan-18	23.4	13.8	42.5
Feb-18			
Mar-18			
Apr-18			
May-18			
Jun-18			
Jul-18			
Aug-18			
Sep-18			
Oct-18			
Nov-18			
Dec-18			